

OFFICIAL  
EXHIBITS

FILED  
January 13, 2016  
INDIANA UTILITY  
REGULATORY COMMISSION

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF AMERICAN SUBURBAN UTILITIES, )  
INC. FOR (1) AUTHORITY TO INCREASE ITS )  
RATES AND CHARGES FOR SEWER UTILITY ) CAUSE NO. 44676  
SERVICE, (2) APPROVAL OF NEW SCHEDULES OF )  
RATES AND CHARGES APPLICABLE THERETO )

IURC  
PUBLIC'S  
EXHIBIT NO. 2  
DATE 3-15-16 REPORTER AT

TESTIMONY OF

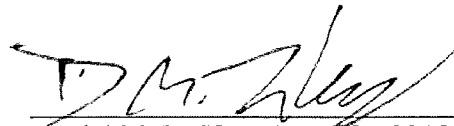
JAMES T. PARKS – PUBLIC'S EXHIBIT NO. 2

ON BEHALF OF THE

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

JANUARY 13, 2016

Respectfully submitted,



Daniel M. Le Vay, Atty. No. 22184-49  
Deputy Consumer Counselor

**TESTIMONY OF OUCC WITNESS JAMES T. PARKS**  
**CAUSE NO. 44676**  
**AMERICAN SUBURBAN UTILITY, INC.**

**I. INTRODUCTION**

1   **Q:   Please state your name and business address.**

2   A:   My name is James T. Parks, P.E., and my business address is 115 West  
3       Washington Street, Suite 1500 South, Indianapolis, Indiana 46204.

4   **Q:   By whom are you employed and in what capacity?**

5   A:   I am employed by the Indiana Office of Utility Consumer Counselor ("OUCC")  
6       as a Utility Analyst II in the Water/Wastewater Division.

7   **Q:   Please describe your educational background and experience.**

8   A:   In 1980 I graduated from Purdue University, where I received a Bachelor of  
9       Science degree in Civil Engineering, having specialized in Environmental  
10      Engineering. I then worked with the Peace Corps for two years serving in  
11      Honduras as a municipal engineer and as a project engineer on self-help rural  
12      water supply and sanitation projects funded by the U.S. Agency for International  
13      Development (U.S. AID). In 1984 I earned a Master of Science degree in Civil  
14      Engineering, also in Environmental Engineering, from Purdue University. I have  
15      been a Registered Professional Engineer in the State of Indiana since 1986. In  
16      1984, I accepted an engineering position with Purdue University, assigned to  
17      work as a process engineer with the Indianapolis Department of Public Works at  
18      the City's Advanced Wastewater Treatment Plants. I left Purdue and  
19      subsequently worked for Engineering Consulting firms first as a Project Engineer  
20      for Process Engineering Group of Indianapolis and then as a Project Manager for

1 the consulting firm HNTB in Indianapolis. In 1999 I returned to the Indianapolis  
2 Department of Public Works as a Project Engineer working on planning projects,  
3 permitting, compliance monitoring, wastewater treatment plant upgrades, and  
4 combined sewer overflow control projects.

5 **Q: Have you previously testified before the Commission?**

6 A: Yes.

7 **Q: What relief does American Suburban Utilities, Inc. seek in this Cause?**

8 A: American Suburban Utilities, Inc. ("ASU" or "Petitioner") asks the Indiana Utility  
9 Regulatory Commission ("IURC" or "Commission") for authority to increase its  
10 rates and charges for sewer service in this cause with two additional phases to  
11 include in rate base two projects yet to be completed, both of which would exceed  
12 the expenditures pre-approved in Cause No. 44272.

13 **Q: Please describe the review and analysis you conducted to prepare your**  
14 **testimony.**

15 A: I read the Petition and Petitioner's case-in-chief. I reviewed the Direct  
16 Testimonies of Mr. Edward J. Serowka and Mr. John R. Skomp including  
17 attachments. I prepared discovery and reviewed Petitioner's responses. I  
18 reviewed the Commission's Docket Entry questions and ASU's responses. I  
19 visited ASU's wastewater facilities including the Carriage Estates Wastewater  
20 Treatment Plant ("Carriage Estates WWTP" or "CE WWTP"), the County Home  
21 Wastewater Treatment Plant ("County Home WWTP" or "CH WWTP"), the  
22 Willowbrook Lift Station, and the Copper Beech Lift Station. I visited the Big 3  
23 Sewer project area and drove through the Big Oaks, Kimberley Estates, Hadley  
24 Moors, Shepherd's Point, and Hawthorne Ridge subdivisions and the locations of

1 the Hawthorne Ridge, Big Oaks, and Kimberley Estates Lift Stations that were to  
2 have been eliminated by the Big 3 Sewer project. I also reviewed ASU's service  
3 area consisting of trailer parks, apartments, businesses, and residential  
4 subdivisions.

5 I read the Commission's Final Orders from prior ASU rate and CTA  
6 cases. I reviewed ASU's Petition, Direct Testimonies, Rebuttal Testimonies, and  
7 Supplemental Rebuttal Testimonies, the OUCC's Testimonies, and Supplemental  
8 Testimonies from Cause No. 44272 that involved pre-approval of \$13,625,000 in  
9 capital costs for ASU's four proposed wastewater projects. These projects were  
10 the Carriage Estates Wastewater Treatment Expansion (\$10,000,000), the Big 3  
11 Sewer (\$2,100,000), the Klondike Road Sewer (\$725,000), and the Cumberland  
12 Road Sewer (\$800,000).

13 I reviewed ASU's one-page Master Plan for wastewater facilities prepared  
14 by Hawkins Environmental in May 2002 and ASU's one-page Master Plan  
15 prepared by Vester and Associates, Inc. in 2006.

16 I reviewed public documents on IDEM's website pertaining to ASU's  
17 wastewater facilities that consisted of correspondence, inspection reports,  
18 enforcement actions, Agreed Orders, wasteload allocations, NPDES permits,  
19 Construction Permit applications, Deficiency Notices from IDEM plan reviewers,  
20 bypass/sanitary sewer overflow notices, sludge disposal reports, and Monthly  
21 Reports of Operation ("MROs") for both wastewater plants. I met and discussed  
22 with IDEM Engineers the Big 3 Sewer project and the Klondike Road –



1 Cumberland Road sewer project. I also discussed 2030 and 2040 population  
2 numbers and the design flows and loadings for the CE WWTP with IDEM staff.

3 I reviewed comments from ASU's customers submitted to the OUCC and  
4 attended the Public Field Hearing at Harrison High School on November 16,  
5 2015. All customers who commented opposed the rate increase. I reviewed  
6 ASU's responses to OUCC discovery questions to determine whether ASU is  
7 taking any actions to identify and remove infiltration and inflow ("I&I") from  
8 their sewage collection system. I reviewed U.S. Census data and population  
9 forecasts prepared by the Indiana Business Research Center and prepared flow  
10 estimates using standard Facility Planning procedures. I reviewed updated  
11 housing forecasts by the Tippecanoe County Planning Department detailed in *The*  
12 *Metropolitan Transportation Plan 2040* for Tippecanoe County dated June 2012.  
13 I analyzed ASU's assumptions about population and sewage flow increases. I  
14 read portions of the *Recommended Standards for Wastewater Facilities* ("Ten  
15 State Standards"), 2012 Edition. I also reviewed design of the Klondike Road  
16 Sewer project and design and construction of the Big 3 Sewer project, which  
17 ASU's affiliate First Time Development Corporation completed in August 2015.

18 **Q: What is the purpose of your testimony?**

19 A: The purpose of my testimony is to address Petitioner's proposal to include in rate  
20 base pre-approved expenditures and expenditures in excess of the pre-approved  
21 amounts ("excess expenditures") related to the Big 3 Sewer Project, the Klondike  
22 Road Project, and improvements to the Carriage Estate WWTP. I express  
23 concerns with the proposed overcapacity of the Carriage Estates WWTP

1 expansion and explain why certain excess expenditures should be disallowed from  
2 rate base. I express concerns with the Big 3 Sewer Project and, in particular, the  
3 more than \$1 million of unsupported dewatering costs and inadequately explained  
4 easement acquisition costs. I also discuss ASU's I&I problems identifying the  
5 scope of the problem, indicating the need for ASU to improve its efforts to  
6 address I&I, and explaining how the significant I&I has adversely increased the  
7 requested size of the Carriage Estates WWTP project. I also make  
8 recommendations with respect to ASU's operations including proposing ASU  
9 establish an accurate Continuing Property Record ("CPR") system for its assets in  
10 service and perform an I&I study.

11 **Q: Does your testimony address whether the excess expenditures should be**  
12 **included in rate base?**

13 **A:** Yes. Evaluating for inclusion in rate base utility plant that has not yet been built  
14 presents many challenges, particularly when the projects are estimated to exceed  
15 the maximum amount of expenditures that were pre-approved. In his testimony,  
16 OUCC witness Chuck Patrick explains the OUCC's proposed mechanism for  
17 phasing-in the projects. The mechanism would require ASU to present its case  
18 justifying the excess expenditures once the plant is placed in service and allow the  
19 OUCC to conduct discovery and prepare testimony at that time. The OUCC's  
20 proposed mechanism is consistent with the Stipulation and Settlement  
21 Agreements, which anticipated Petitioner would prove the reasonableness and  
22 prudence of any excess expenditures *after* the expenditures were made and the  
23 plant placed in service. Only one of the pre-approved projects, the Big 3 Sewer,  
24 has been built. In effect, Petitioner is asking in this case for *pre-approval* of the

1 excess expenditures, i.e. expenditures that exceed the limits for pre-approval set in  
2 Cause No. 44272. To the extent the Commission is considering pre-approval of  
3 any of ASU's excess expenditures in this phase of the case, I recommend denial  
4 of such pre-approval.

## II. ASU WASTEWATER SYSTEM DESCRIPTION

5 **Q: Please describe Petitioner's wastewater treatment plants.**

6 A: According to its 2014 IURC Annual Report, ASU serves 2,471 residential and  
7 commercial customers in primarily unincorporated areas of Tippecanoe County  
8 north and west of West Lafayette, Indiana. Petitioner owns and operates three  
9 wastewater treatment plants located at two separate sites. The Carriage Estates  
10 WWTP, the largest of the three WWTPs, is a continuous sequencing batch reactor  
11 ("CSBR") plant constructed in 2000 to treat a daily average flow of 1.5 million  
12 gallon per day ("MGD") and a peak hourly flow of 4.5 MGD. These design flows  
13 were for the 2010 design year. Historically, 94% of ASU's customers, as  
14 measured by connected housing units, discharge to the Carriage Estates WWTP's  
15 collection sewers. After construction of the Big 3 Sewer Project in 2015, which  
16 diverted flow away from the Carriage Estate WWTP, it currently serves  
17 approximately 84% of ASU's customers.

18 The County Home WWTP currently has two separate operating treatment  
19 facilities; County Home 2 ("CH-2"), which is a 0.1 MGD extended aeration  
20 process constructed in 2000, and County Home 3 ("CH-3"), which is a 1.0 MGD  
21 sequencing batch reactor ("SBR") plant constructed in 2006. ASU indicates that

1 the smaller 0.100 MGD CH-2 plant will be converted to sludge digestion tanks in  
2 the future.

3 ASU designed the 1.0 MGD CH-3 in 2004 and constructed it in  
4 anticipation of customer growth from developments that did not materialize.  
5 ASU's affiliated construction company, First Time Development Corporation  
6 ("FTDC"), completed the CH-3 plant in 2006, but because sewage flows  
7 remained low ASU did not put the plant in service. Except for aerating sludge at  
8 times, CH-3 has remained empty for nearly 10 years until fall 2015 when ASU  
9 placed two of the four cells in service. The remaining two of the four SBR tanks  
10 (the north tanks) are not fully equipped and are not available for service.

11 **County Home WWTP Capacity**

12 **Q: Did Petitioner's Big 3 Sewer Project propose to eliminate three (3) lift**  
13 **stations, eliminate a sewer line and divert sewage flows to the County Home**  
14 **WWTPs?**

15 A: Yes. On page 8 of his testimony, Mr. Serowka said the Big 3 Sewer Project,  
16 which was completed in August 2015, was built to eliminate three lift stations and  
17 a 40-year old sewer that was deteriorated, and to reroute flow to the County Home  
18 plant. The three lift stations served four subdivisions. The sewage flow from the  
19 Big Oaks Lift Station and the Kimberley Estates Lift Station was diverted from  
20 the Carriage Estates WWTP to the County Home WWTP. The sewage from the  
21 Hawthorne Ridge Lift Station was already being pumped to the County Home  
22 WWTP.

23 **Q: How many single family homes does Petitioner serve in the Big Oaks,**  
24 **Kimberley Estates, Hadley Moors and Hawthorne Ridge subdivisions?**

25 A: In response to OUCC Data Request No. 1-8 in Cause No. 44272, Petitioner

1 indicated that 482 single family homes were being served in the Big Oaks,  
2 Kimberley Estates, and Hadley Moors subdivisions. The Hawthorne Ridge  
3 subdivision has approximately 27 single-family customers. Attachment JTP-1  
4 contains ASU's responses to OUCC data requests under Cause No. 44272 that  
5 relate to my testimony.

6 **Q: Please explain how much flow Petitioner's Big 3 Sewer Project diverted to**  
7 **the County Home WWTP.**

8 A: On page 13 of his testimony, Mr. Serowka estimates the Big 3 Sewer Project  
9 diverts 150,000 gallons per day from the Carriage Estates WWTP to the County  
10 Home WWTP. He determined that flow figure by multiplying 482 single family  
11 homes times 310 gallons per day per home. Due to I&I from these older  
12 subdivisions, the actual diverted flows could be higher.

13 **Q: How much flow was going to the County Home WWTP before the diversion?**

14 A: On page 6 of his testimony, Mr. Serowka said "Before the diversion of flows, the  
15 average daily flows to County Home were already at 190,000 GPD." This rate of  
16 flow is nearly twice the CH-2 WWTP capacity, which is rated at 100,000 GPD.  
17 Therefore, the CH-2 WWTP has been hydraulically overloaded in 2015 per IDEM  
18 standards.

19 **Q: How could Petitioner meet its CH-2 NPDES Permit effluent limits if it was**  
20 **treating almost twice the flow (0.190 MGD) as its rated capacity (0.100**  
21 **MGD) prior to the diversion?**

22 A: Based on my engineering experience, I believe there is significant I&I or clear  
23 water included in the flows reaching the CH-2 plant. However, pollutant  
24 concentrations are lower than typical and the County Home plant's wastewater is  
25 considered weak. This means the organic load is below the design parameters.

1 Therefore, Petitioner can still meet its NPDES Permit effluent limits because the  
2 organic load is diluted.

3 **Q: Do you have any recommendations regarding the County Home WWTPs?**

4 A: Yes. Petitioner should perform an I&I study to determine sources of clear water  
5 for both the County Home and Carriage Estates Wastewater Plants. The cost  
6 effective removal of excessive I&I will free up needed capacity.

### III. ASU'S COLLECTION SYSTEM

7 **Q: Please describe ASU's collection system.**

8 A: Petitioner's wastewater collection system has approximately 58.6 miles of gravity  
9 sewer mains and interceptor sewers, 13,650 feet of sewer force main from two  
10 remaining lift stations; the Copper Beach and the Willowbrook lift stations.<sup>1</sup>  
11 Completion of Petitioner's Big 3 Sewer Project, eliminated the need for three (3)  
12 lift stations (Big Oaks, Kimberley Estates and Hawthorne Ridge). Each  
13 remaining lift station has a back-up generator to provide electric power for the lift  
14 station pumps should power be lost. ASU's collection system is a 100% separate  
15 sanitary sewer system by design with no permitted sanitary sewer overflow (SSO)  
16 points or permitted bypass locations.

17 **Q: Is there some discrepancy in the lengths and size of mains in service,**  
18 **depending on the source of information?**

19 A: Yes. In response to OUCC Data Request No. 5-2, ASU stated it had 266,017 feet  
20 of all PVC sewer but in OUCC Data request No. 12-3, ASU stated it had 309,611

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<sup>1</sup> Information about Petitioner's sewer system was obtained from Petitioner's responses to OUCC DR 5-2 and 12-3 and from ASU's Annual IURC Reports for 2011 – 2014. The force main length does not include the 3,600 LF force main from the Kimberley Estates Lift Station, which was to have been eliminated by the Big 3 Sewer project.

feet of gravity sewer including PVC, clay pipe and truss sewer pipe. ASU's responses to OUCC discovery under this Cause are presented in Attachment JTP-2. ASU has reported different sewer pipe lengths in its Annual IURC Reports, in response to OUCC discovery under both Cause No. 44272 and this Cause, and in its Emergency Response Guide dated March 13, 2015 submitted to IDEM under ASU's Agreed Order. In response to OUCC Data Request No. 5-5 in Cause No. 44272, ASU reported having approximately 200,000 linear feet of sewer line composed of 1% Truss pipe, 19% clay pipe, and 80% PVC pipe. These various reported sewer lengths are tabulated in Table 1 below:

| Table 1 - Variations in Reported Sewer Diameters and Sewer Length, Feet |                    |                        |                                                                                             |                       |                                  |
|-------------------------------------------------------------------------|--------------------|------------------------|---------------------------------------------------------------------------------------------|-----------------------|----------------------------------|
| Sewer Size, Inches                                                      | 2011 Annual Report | 2012-14 Annual Reports | 2015 ASU Emergency Response Guide (3/13/2015)                                               | 2015 DR 5-2 (all PVC) | 2015 DR 12-3 (PVC, clay & truss) |
| 6                                                                       |                    |                        | Carriage Est. WWTP Service Area: 209,000 ft. of 8-to 30-inch gravity sewers / 600 manholes. | 1,289.0               | 1,289.0                          |
| 8                                                                       | 106,168            | 169,471                |                                                                                             | 151,010.5             | 176,092.0                        |
| 10                                                                      | 28,696             | 35,567                 |                                                                                             | 33,105.5              | 37,535.0                         |
| 12                                                                      | 16,965             | 24,042                 |                                                                                             | 26,798.0              | 24,042.0                         |
| 14                                                                      | 7,915              | 21,168                 |                                                                                             | 7,562.5               | 21,168                           |
| 15                                                                      | 6,750              |                        | 16,350.5                                                                                    | 16,350.5              |                                  |
| 18                                                                      | 15,730             |                        | 10,600.5                                                                                    | 16,136.0              |                                  |
| 21                                                                      | 2,095              |                        | 12,835.0                                                                                    | 7,091.0               |                                  |
| 24                                                                      | 229                |                        | 229                                                                                         | 453.0                 | 229.0                            |
| 27                                                                      | 3,619              | 7,266                  | 80 manholes                                                                                 | 3,600.0               | 7,266.0                          |
| 30                                                                      | 3,647              |                        |                                                                                             | 2,412.5               | 2,412.5                          |
| Total                                                                   | 191,814            | 276,974                | 235,800                                                                                     | 266,017.0             | 309,611.0                        |
| Miles                                                                   | 36.3               | 52.5                   | 44.7                                                                                        | 50.4                  | 58.6                             |

1   **Q:   Are you concerned that Petitioner's information about its collection system**  
2   **contains discrepancies?**

3   A:   Yes. The discrepancies in the amount and type of collection system facilities  
4       suggests that Petitioner does not have an accurate Continuing Property Record  
5       ("CPR") system for its assets in service. Petitioner should have an accurate asset  
6       inventory, which includes for each asset a description, installation year, location,  
7       and proper documentation of installed cost. Documentation of installed cost  
8       should include invoices for purchased materials, invoices or time sheets for  
9       capitalized labor, capitalized equipment and rental costs associated with the  
10      project, and other permanent records of physical property that are in service. The  
11      American Water Works Association ("AWWA") publication, Financial  
12      Management for Water Utilities: Principles of Finance, Accounting, and  
13      Management Controls, establishes that maintenance of a CPR system is one  
14      component of the proper accounting of utility plant assets :

15               Proper accounting for utility plant assets includes the maintenance  
16               of a CPR system. As discussed earlier, a CPR system involves the  
17               maintenance of a separate record for each unit of utility property.  
18               A "unit of property" (or CPR unit) is defined as an item of  
19               property that can be readily identified and accounted for by itself.

20               (page 199)

21   **Q:   Do you have any recommendations about Petitioner's maintenance of**  
22   **accurate property records?**

23   A:   Yes. I recommend that the Commission order Petitioner to maintain an accurate  
24       Continuing Property Record system in accordance with generally accepted  
25       accounting practices.



**IV. ASU'S KNOWLEDGE OF ITS CUSTOMER COUNTS**

1   **Q:   Please describe the composition of ASU's customers.**

2   A:   ASU's provides sewer services primarily to residential customers who live in  
3       single-family homes, multi-family units such as apartments and condominiums,  
4       and mobile homes. ASU has about 50 commercial customers such as restaurants  
5       and stores and reports having no industrial customers who discharge industrial  
6       wastewaters. The following table summarizes housing units connected to each of  
7       ASU's treatment plant locations for 2014 and 2015. The numbers of multi-family  
8       and mobile home housing units has remained fairly unchanged for the last five  
9       years. Attachment JTP-3 shows the housing units, design flows, and base sanitary  
10      sewage flows connected to each treatment plant from 2010 to October 2015.

11   **Q:   Does ASU maintain accurate customer counts?**

12   A:   No. There are discrepancies in ASU's responses to OUCC Discovery regarding  
13      connected housing units, which the OUCC could not reconcile. For example,  
14      ASU stated that the Big 3 Sewer Project allowed sewage from 482 single-family  
15      homes to be disconnected from the Carriage Estates WWTP and re-routed to the  
16      County Home WWTP. However, ASU's response to OUCC DR 6-6 only shows  
17      a reduction of 289 homes. This means that 193 new single-family customers  
18      would have had to have been added to the Carriage Estates WWTP system in the  
19      first 10 months of 2015. However, in response to OUCC DR 9-17, ASU projects  
20      adding homes only at the rate of 35 new homes annually for 2016, 2017, and  
21      2018. Similarly, the single-family residential count for the County Home WWTP  
22      only shows addition of 396 homes instead of the expected 482 homes. For single-

1 family home numbers submitted by ASU to be correct, 83 homes would have had  
2 to be disconnected from the County Home WWTP. I have summarized the  
3 discrepancies in Table 2 and Table 3 below:

**Table 2: ASU HOUSING UNITS BY WASTEWATER PLANT-2014 AND 2015**

|                             | 2014 (as of 12/31/14) |            |       | 2015 (as of 10/31/15) |            |       |
|-----------------------------|-----------------------|------------|-------|-----------------------|------------|-------|
| Housing Units/Customers     | CE<br>WWTP            | CH<br>WWTP | Total | CE<br>WWTP            | CH<br>WWTP | Total |
| Residential (homes)         | 1,684                 | 487        | 2,171 | 1,395                 | 883        | 2,278 |
| Multi-Family (units)        | 2,667                 | -          | 2,667 | 2,694                 | -          | 2,694 |
| Mobile Homes (units)        | 571                   | -          | 571   | 575                   | -          | 575   |
| Service Station             | 1                     | -          | 1     | 1                     | -          | 1     |
| Schools (Students & Staff)* | 1,569                 | 3,361      | 4,930 | 1,529                 | 3,489      | 5,018 |
| Metered customers           | 48                    | 2          | 50    | 48                    | 2          | 50    |
| Total Customers             | 4,973                 | 492        | 5,465 | 4,715                 | 888        | 5,603 |

\* People at 2 and 3 schools respectively

**Table 3: CHANGES IN SINGLE FAMILY RESIDENCES 2014-2015**

|                                        | CE<br>WWTP | CH<br>WWTP | TOTAL |
|----------------------------------------|------------|------------|-------|
| 2014 Residential (Single Family) Homes | 1,684      | 487        | 2,171 |
| Big-3 Sewer - Homes Removed / Added    | (482)      | 482        | -     |
| 2015 New Homes                         | 193        | (86)       | 107   |
| 2015 Single Family Homes               | 1,395      | 883        | 2,278 |

4 **Q: Do you have any recommendations regarding the number of customers that**  
5 **Petitioner serves?**  
6 **A:** Yes. Petitioner should have an accurate account of the total number and type of  
7 customers it serves. For operational purposes, Petitioner should determine the  
8 number and type of customers served by each wastewater treatment plant as part

1 of its I&I control efforts in order to estimate base sanitary sewage.

**V. INFILTRATION AND INFLOW**

2 **Q: Why are you discussing I&I?**

3 A: The purpose of this discussion is two-fold. First, well-run utilities address I&I to  
4 avoid various costs and prevent prohibited sanitary sewage overflows (SSOs) and  
5 bypassing. The existence of excessive I&I calls into question Petitioner's  
6 collection system maintenance practices. Second, the level of I&I in Petitioner's  
7 collection system has unduly affected the size and cost of ASU's proposed  
8 Carriage Estates WWTP expansion.

9 **Q: What is infiltration and inflow?**

10 A: I&I is clear water (either rainwater or groundwater) that enters the collection  
11 system and flows along with sewage to the treatment plant. Clear water does not  
12 require treatment, but consumes capacity in the sewers and WWTPs. Inflow  
13 enters the collection system through illegal sump pump connections, downspout  
14 connections, area drains, foundation drains, and entry of ponded water through  
15 missing or defective manhole lids. Inflow sources cause spikes in peak flows  
16 within the entire wastewater system. Groundwater infiltration occurs when clear  
17 water enters the sewer system through pipe cracks, defective pipes, defective  
18 manholes, and leaking sewer pipe joints. Infiltration occurs continuously day and  
19 night adding to base flow. Infiltration volume increases with high groundwater  
20 levels because higher hydraulic pressures force even more clear water into the  
21 sewers. According to the United States Environmental Protection Agency  
22 ("USEPA") Guide for Estimating Infiltration and Inflow (June 2014), "infiltration

1 and inflow may be considered excessive when it is the cause of overflows or  
2 bypasses, or the cost to transport and treat exceeds the cost to eliminate it.”

3 In addition, the USEPA existing guidance indicates that if the average dry  
4 weather flow, which includes wastewater and I&I, exceeds 120 gallons per person  
5 per day (“gppd”) then excessive I&I is occurring. This guidance document was  
6 published in 1985 when 3.5 gallons per flush toilets were standard in the U.S. An  
7 USEPA Outreach brochure – “Guide for Estimating Infiltration and Inflow” is  
8 shown in Attachment JTP-4. Since then, the Energy Policy Act of 1992 required  
9 that toilets installed in new construction be low flow (1.6 gallons per flush).

10 **Q: What type of sewage collection system does ASU have?**

11 A: ASU’s collection system is one hundred percent (100%) separate sanitary by  
12 design, all bypassing and overflows are strictly prohibited and would be a  
13 violation of both the ASU NPDES permits and the Clean Water Act. ASU’s  
14 sewer system has no permitted overflow or bypass points.

15 **Q: Does Petitioner’s collection system suffer from excessive I&I?**

16 A: Yes. In several National Pollutant Discharge Elimination System (“NPDES”)  
17 Wastewater Facility Inspection Reports, the Indiana Department of  
18 Environmental Management (“IDEM”) indicates that Petitioner has continuing  
19 excessive I&I in the collection system. On July 26, 2012, IDEM inspected the  
20 Carriage Estates WWTP. In the “Detailed Area Evaluations” section of this  
21 inspection report, it states the following:

22 Maintenance was rated marginal due to the facility continuing to  
23 have excessive Infiltration and Inflow (I&I) in the collection  
24 system. Part II. B. 1. e of the permit which states, in part, that the  
25 facility shall have an ongoing preventative maintenance program

1 for the sanitary sewer system. During the review of the last six  
2 months of MRO's, two of those months were above the 100%  
3 capacity of the plants design, especially in Jan. 2012. (141%) The  
4 facility needs to continually investigate sources of I&I, document  
5 known sources and repair if feasible.

6 For the County Home WWTP, IDEM's inspection from July 25, 2011 indicates  
7 the following:

8 Maintenance was rated as unsatisfactory due to inadequate  
9 maintenance of collection system. The facility needs to  
10 continually investigate sources of Infiltration and Inflow (I&I),  
11 document known sources and repair if feasible. This is a violation  
12 of Part II. B. 1 of the permit which states, in part, that all waste  
13 collection, control, treatment, and disposal facilities shall be  
14 operated and maintained as efficiently as possible and in a manner  
15 which will minimize upsets and discharges or excessive pollutants.  
16 Wet weather this spring was the apparent cause of effluent limit  
17 violations, indicating inadequate maintenance of the collection  
18 system.

19 IDEM's July 31, 2012 inspection report for County Home WWTP documents the  
20 same unsatisfactory rating for maintenance of collection system. Attachment  
21 JTP-5 contains copies of the IDEM Inspection Reports for both wastewater plants.

22 **Q: Has Petitioner conducted an I&I study in the last five years?**

23 A: No. In Data Request No. 5-27, the OUCC asked the following:

24 Has an infiltration and inflow (I&I) study been conducted by or on  
25 behalf of ASU in the last five years? If so, please state who  
26 conducted the I&I Study and provide a copy of the study. If no  
27 studies were conducted, so state.

28 Petitioner indicated that "No studies have been conducted within the last five (5)  
29 years."

30 **Q: Has Petitioner performed any smoke testing of its sewers to locate inflow**  
31 **sources in the last three years?**

32 A: No. In Data Request No. 5-5, the OUCC asked the following:

1 Does ASU conduct smoke testing of its sewers to locate inflow  
2 sources? If so, please indicate how many feet of sewer were  
3 smoke tested in 2013, 2014, and 2015 to date. If no smoke testing  
4 was done over the 2013 – 2015 time period, so state.

5 Petitioner responded that “No smoke testing was done 2013-2015.”

6 **Q: Has Petitioner installed any temporary flow meters in the collection system**  
7 **to record wastewater flows during the last five years?**

8 A: No. In Data Request No. 5-28, the OUCC asked the following:

9 Have temporary flow meters been installed in the collection system  
10 by or on behalf of ASU in the last five years? If so, please indicate  
11 the monitoring location(s). If no flow meters were installed, so  
12 state.

13 Petitioner responded as follows:

14 No flow meters have been installed in the collection system within  
15 the last five (5) years

16 **Q: Has Petitioner conducted an influent flow study for the Carriage Estates and**  
17 **the County Home WWTPs?**

18 A: No. In Data Request No. 5-29, the OUCC asked the following:

19 Has an influent flow study been conducted by or on behalf of ASU  
20 in the last five years for the Carriage Estates and County Home  
21 wastewater plants? If so, please state who conducted the Influent  
22 Flow Studies and provide a copy of the studies. If no studies were  
23 conducted, so state.

24 Petitioner responded as follows:

25 No influent flow studies have been conducted for either the  
26 Carriage Estates II or the County Home II Wastewater Treatment  
27 Plant.

28 **Q: Has Petitioner conducted an influent flow study for individual lift stations?**

29 A: No. In Data Request No. 5-29, the OUCC asked the following:

30 Has an influent flow study been conducted by or on behalf of ASU  
31 in the last five years for individual lift stations? If so, please state  
32 who conducted the Lift Station Influent Flow Studies and provide a  
33 copy of the studies. If no studies were conducted, so state.

Petitioner responded as follows:

No influent flow studies have been conducted for any lift stations within the ASU Collection System.

**Q: Has Petitioner identified any defects in specific manholes and sewer locations where infiltration and inflow is entering the Petitioner's collection system?**

A: No. In Data Request No. 5-33, the OUCC asked the following:

Please state whether ASU has identified defects in specific manholes and sewer locations where infiltration and inflow is entering ASU's collection system.

Petitioner responded that "There are none."

**Q: Does Petitioner have any plans to identify and reduce I&I in the next five years?**

A: No. In Data Request No. 5-32, the OUCC asked the following:

Please state whether ASU has any plans to identify and reduce I&I in the next five years, including proposed annual budgets for I&I reduction.

Petitioner responded as follows:

There are no plans or budgets to identify I&I sources over the next five (5) years because ASU's collection system is 80% PVC pipe and most of it is less than ten (10) years old and in good condition.

**Q: Is Petitioner currently operating under an Agreed Order with IDEM?**

A: Yes. IDEM brought an enforcement action against ASU and Petitioner entered into an Agreed Order on September 22, 2014.<sup>2</sup> (See Attachment JTP-6) This Agreed Order documents sanitary sewer overflows caused by excessive I&I. Section 12 of the Agreed Order states the following:

Pursuant to Part II.B.2.g of the Permit, any overflow or release of sanitary wastewater from the wastewater treatment facility or

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<sup>2</sup> IDEM Agreed Order, Case No. 2013-21924-W

1 collection system into the environment which is not specifically  
2 authorized by the Permit is expressly prohibited.

3 Pursuant to 327 IAC 5-2-8(10) and Part II.C.3 of the Permit,  
4 Respondent is required to report to IDEM information of any  
5 discharge from the sanitary sewer system within 24 hours from the  
6 time Respondent becomes aware of such noncompliance.

7 On April 19, 2013, a resident of the area served by Carriage  
8 Estates WWTP submitted videos of sanitary sewer overflows  
9 (SSOs) from 3 different sanitary sewer manholes of the Carriage  
10 Estates sewer collection system that occurred on April 18, 2013, to  
11 the Office of Utility Consumer Counselor (OUCC). In connection  
12 with the Indiana Utility Regulatory Commission case (Cause No.  
13 44272), the OUCC asked Respondent several questions related to  
14 the SSOs, including whether the SSO's were reported to IDEM. In  
15 answers to these OUCC questions, Respondent admitted that  
16 Respondent had not reported these SSOs to IDEM.

17 The SSOs that occurred from 3 manholes on April 18, 2013, were  
18 in violation of Part II.B.2.g of the Permit, and 327 IAC 5-2-8(1)  
19 and Part II.A.1 of the Permit

20 Respondent's failure to report the SSOs that occurred from 3  
21 manholes on April 18, 2013, was in violation of 327 IAC 5-2-8(10)  
22 and Part II.C.3 of the Permit, and 327 IAC 5-2-8(1) and Part II.A.1  
23 of the Permit.

24 **Q: Has Petitioner experienced additional sanitary sewer overflows in 2014 and**  
25 **2015?**

26 **A:** Yes. In Data Request 5-23, the OUCC asked the following:

27 How many sanitary sewer overflows (SSOs) occurred in ASU's  
28 collection system from Jan 1, 2009 to 2015 to date? Please also  
29 indicate the causes(s) of the SSOs.

30 Petitioner indicated that it suffered three (3) SSOs in 2015 and three (3) SSOs in  
31 2014 in the collection system of Carriage Estates. Petitioner also indicated that  
32 the SSOs were the result of either a power failure, pump malfunction or a 500  
33 year storm event. (See Attachment JTP-2)



1   **Q:   Are Sanitary Sewer Overflows the only indication or evidence of excessive**  
2   **I&I?**

3   A:   No. There are additional ways to determine whether Petitioner has excessive I&I.  
4       High influent flows at the wastewater treatment plants indicate excessive I&I as  
5       well as low pollutant concentrations diluted by I&I.

6   **Q:   Is ASU's excessive levels of I&I a recent development?**

7   A:   No. In Cause No. 44272, OUCC witness Larry W. McIntosh provided testimony  
8       on pages 10 – 11 stating that ASU has excessive I&I. Also, in 1999 in Cause  
9       No. 41254 the OUCC and IDEM both identified excessive I&I as an issue.

10   **Q:   Besides the environmental contamination caused by bypassing and SSOs,**  
11   **what problems do high levels of I&I create for ASU's ratepayers?**

12   A:   Clear water entry consumes wastewater system capacity that would otherwise be  
13       available to convey and treat sewage from customers. Clear water increases  
14       pumping and treatment costs and can overload sewers and treatment plants.  
15       Without a program to regularly identify and remove I&I, clear water entry will get  
16       worse. Another major problem with excessive I&I is that it consumes system  
17       capacity, which could unnecessarily increase the plant's design size. Controlling  
18       I&I delays the need for costly treatment plant expansions that require capital  
19       investment and cause higher rates. The scope and cost of ASU's treatment plant  
20       expansion could be decreased if ASU developed and implemented an effective  
21       I&I control program.

22   **Q:   Do you recommend the IURC require ASU to remove all I&I from its**  
23   **collection system?**

24   A:   No. It is an impossible standard to locate and remove *all* I&I. Every sewer  
25       system has varying amounts. But ASU has excessive I&I, which can be reduced.

1 By undertaking reasonable repair and maintenance practices, ASU can reduce its  
2 excessive I&I. I recommend the IURC order ASU to improve upon the minimal  
3 levels of collection system maintenance and management through the formal  
4 development and implementation of an ongoing I&I reduction program to identify  
5 I&I sources and address those sources in a cost effective manner.

6 **Q: Has ASU removed any sources of I&I in the past?**

7 A: Yes. In Direct Testimony in 1998 under Cause No. 41254 (pages 6-16), Mr.  
8 Serowka described ASU's I&I efforts that "found and eliminated many sources of  
9 I&I." Mr. Serowka said ASU eliminated close to 750,000 gallons per day of  
10 infiltration on peak days.

11 In Direct Testimony under Cause No. 44272, OUCC witness, Larry  
12 McIntosh, testified about sewer replacement work ASU performed, which  
13 stopped a major infiltration source:

14 The late spring and summer of 2012 was one of the driest in recent  
15 years. The unusually dry spring and summer reduced inflow and  
16 infiltration (I&I). I&I is surface water from snow melt or rain that  
17 seeps into broken and cracked sewer mains or broken and cracked  
18 manholes. During my recent site visit, Mr. Scott Lods, Owner of  
19 ASU, explained that ASU replaced a section of pipe through a low  
20 area during the dry weather. Petitioner stated that after the pipe  
21 was replaced that area began to stay wet after a rain event, whereas  
22 previously the area would dry up. This change suggests that the  
23 replaced section of pipe was probably a major source of I&I for the  
24 Carriage Estates plant.

25 ASU reported success in finding and removing I&I over fifteen years ago, but  
26 ASU now needs to restart I&I efforts by developing and then implementing a  
27 program to locate and remove I&I in its sewers.

1    **Q:    In his case-in-chief testimony, Mr. Serowka references his 2013 rebuttal**  
2       **testimony in Cause No. 44272 regarding I&I. What did he say then about**  
3       **ASU's I&I program?**

4    A:    Responding to OUCC Witness Larry McIntosh's statement that ASU suffered  
5       from high I&I levels, Mr. Serowka asserted ASU had an effective I&I inspection  
6       program (Cause No. 44272, page R-18). He stated ASU was televising 15% of  
7       collection sewers annually and inspecting three manholes per day. Specifically,  
8       he asserted the following on the question of whether ASU should continue  
9       televising 15% of its lines each year.

10               Yes. Even though we have shown that the Carriage Estates sewer  
11               collection system does not have an excessive I&I problem, it is  
12               important for ASU to maintain its current program of televising  
13               approximately 15% of its sewer lines every year and checking  
14               three (3) manholes per day. There is no such thing as an I&I proof  
15               gravity sewer collection system and therefore it is important for the  
16               utility to keep its program. Fortunately, ASU has established a  
17               very effective sewer inspection system and even has the ability to  
18               televis its sewer lines. Televising the sewer lines is the best  
19               method available to determine the condition of the sewer lines.

20               ASU however does not feel it is necessary or economical to  
21               generate reports and studies based on its sewer system inspections.  
22               The ASU method is not only straight forward but also cost  
23               effective. When it finds a problem which it considers significant,  
24               it fixes it rather than generate a report. This is confirmed by the  
25               results of ASU's program - which is a tight system using the EPA  
26               standards.

27    **Q:    What does ASU say about its' I&I control program in its' Case-In-Chief?**

28    A:    In his Direct Testimony (pages 22 and 23), Mr. Serowka again claims ASU has an  
29       established regular maintenance program for I&I (emphasis added):

30               I&I requires a continuous effort and ASU is still addressing I&I as  
31               previously explained in my testimony for Cause No. 44272 to  
32               locate and eliminate these I&I flows by various repair and  
33               replacement methods and a *diligent, continuous maintenance*  
34               *program.*

1 Two great examples of the replacement method are the Big Three  
2 and Klondike Road Sewer Projects. These projects are replacing  
3 40 year old sewers which were a significant source of I/I due to the  
4 sewer pipe construction and bedding methods.

5 A sewer system cannot be rehabilitated once and then be expected  
6 to never develop additional points of infiltration/inflow.  
7 Therefore, ASU has established a regular preventive maintenance  
8 program along with a high standard for accepting new sewer  
9 systems in order to control extraneous water flows.

10 **Q: Do you agree with Mr. Serowka that ASU has deployed a “diligent,**  
11 **continuous maintenance program” to address I&I?**

12 A: No. It does not appear ASU has any active or effective program to identify and  
13 remove I&I from its sewers.

14 **Q: Has ASU's I&I affected its plans to build additional treatment capacity?**

15 A: Yes. Rather than address I&I and double the Carriage Estates WWTP's capacity  
16 to OUCC's recommended 3.0 MGD under Option 2, ASU has chosen to continue  
17 ignoring I&I and build Option 4 instead, which quadruples the treatment tanks  
18 and piping to handle 6.0 MGD and installs equipment and pumps for 4.0 MGD.  
19 ASU's proposed capacity will increase capital costs and customer rates  
20 unnecessarily. The OUCC believes that ASU has a primary duty under a  
21 reasonable standard of care to effectively address I&I in its sewers rather than  
22 ignore I&I. With I&I controlled, ASU can then plan for and prudently expand the  
23 wastewater plants on the basis of sound population forecasts.

24 **Q: Do you agree with Mr. Serowka's suggestion that ASU's sewer projects are**  
25 **for I&I control?**

26 A: I disagree with Mr. Serowka's statement that the Big 3 and Klondike Road Sewer  
27 projects are “*great examples of the replacement method*” for I&I control.  
28 (Serowka, p. 22-23.) ASU did not pursue either of these projects to remove I&I.

1 The primary driver forcing the Klondike Road Sewer project is that Tippecanoe  
2 County is widening Klondike Road in 2018 and ASU has no choice but to  
3 relocate its sewer.<sup>3</sup>

4 Likewise, the Big 3 Sewer was not for I&I control and is not a great  
5 example of the replacement method for I&I control. No sewers were even  
6 replaced. (Attachment JTP-2 - OUCC DR 4-39) While it was unclear at the time  
7 of Cause No. 44272, it is now clear the true nature of the Big 3 Sewer is that it is  
8 primarily an interceptor to serve future customers, which eliminated three lift  
9 stations while also diverting Carriage Estates WWTP flows to the County Home  
10 WWTP.

11 ASU also justified the Big 3 Sewer project saying it would replace 2,400  
12 feet of 10-inch diameter sewer along N CR 50 W that ASU stated was  
13 deteriorated. However, this sewer remains in service today (Attachment JTP-2 -  
14 OUCC DR 4-39). In response to discovery, ASU acknowledged the condition of  
15 the 10-inch sewer has not been evaluated, televised, or documented (Attachment  
16 JTP-2 - OUCC DR 11-2 and 11-3). I found no indication that ASU took steps to  
17 design its replacement. It certainly appears it was never part of the Big 3 Sewer  
18 project. In response to discovery, ASU stated its "plan is to replace this line as  
19 soon as it can" (Attachment JTP-2 - OUCC DR 11-5) but later stated "ASU is  
20 now in the position to remove this sewer from service when the Shepherds Point  
21 sewer system can be redirected through development" (Attachment JTP-2 -

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<sup>3</sup> Per a 12/21/15 telephone conversation with Opal Kuhl, Executive Director of the Tippecanoe County Highway Department who stated the County hopes to bid the Klondike Road Widening project in the 3<sup>rd</sup> Quarter of 2017 with construction in 2018.

1 OUCC DR 12-22). In response to discovery (OUCC 16-13), ASU gave another  
2 explanation saying:

3 The Hawthorne Gravity Sewer Line was lowered 2'-0" in order to  
4 serve future development east of County Road 50 West which  
5 includes the Shepards Subdivision which currently discharges to  
6 the old 10" sewer located under County road 50 West.

7 ASU gives no timetable when the Shepherds Point sewer system can be  
8 redirected. ASU also lacks any study or measure of I&I in the 10-inch sewer and  
9 in the 8-inch sewers from the Shepherds Point subdivision that feed into it.

10 **Q: Does ASU implement an effective I&I program that can identify and remove**  
11 **I&I from the sewers?**

12 **A:** No. While ASU claims it inspects three manholes per week, it does little to  
13 document its efforts or make those efforts part of a larger I&I control scheme.  
14 For instance, ASU has no inspection form for manholes. If manholes are  
15 inspected, the staff person merely makes a handwritten note on the back of the  
16 Daily Activity sheet. Attachment JTP-7 shows examples of ASU Daily Activity  
17 sheets.

18 ASU also does not appear to have the staff or outside consultants tasked  
19 with I&I reduction. ASU's responses to OUCC discovery regarding manholes  
20 and I&I control actions are provided in Attachment JTP-2 and summarized in the  
21 following Table 4.

| <b>Table 4 -ASU I&amp;I Identification and Reduction Actions</b> |                                |                                                                                                                           |
|------------------------------------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>I&amp;I Control Element</b>                                   | <b>OUCG Discovery</b>          | <b>ASU Response or Action</b>                                                                                             |
| Identification of current I&I volumes?                           | 5-3, 5-4, 12-6, 12-7, and 16-5 | ASU did not state volumes saying I&I can only be estimated.                                                               |
| Identification of I&I in the 2030 design average flow?           | 5-3, 12-6                      | ASU did not provide design volumes allocated to I&I.                                                                      |
| Smoke testing                                                    | 5-5, 5-6                       | ASU last conducted smoke testing in 1999-2000.                                                                            |
| Annual televising of 15% of the collection system                | 5-7 to 5-19                    | Limited televising is done by ASU's affiliate, FTDC, but FTDC does not televise 15% of ASU's sewers annually.             |
| Sewer televising                                                 | 12-9                           | Currently there is no one employed by FTDC who can televise.                                                              |
| Annual televising of 15% of the collection system?               | 12-11                          | Sewer televising of 15% of the sewers was last done in 2003.                                                              |
| Customer Education about clear water connections?                | 5-20                           | ASU does not have a program to educate customers.                                                                         |
| Collection system repairs for I&I reduction?                     | 5-22                           | ASU has not conducted any I&I removal projects in 2013 – 2015.                                                            |
| Infiltration and Inflow (I&I) studies in the last 5 years?       | 5-27                           | No studies have been conducted.                                                                                           |
| Sewer system flow monitoring in last 5 years?                    | 5-28                           | No flow meters have been installed.                                                                                       |
| WWTPs influent flow studies?                                     | 5-29                           | No influent flow studies have been conducted at the WWTPs.                                                                |
| Lift station influent flow studies?                              | 5-30                           | No influent flow studies have been conducted at lift stations.                                                            |
| Identification of sewer segments that surcharge?                 | 5-31                           | The three (3) manholes prior to the CE WWTP will surcharge and overflow with rain events greater than the 100 year storm. |
| Manhole inspections?                                             | 5-8 under Cause No. 44272      | ASU inspects 3 manholes a day and repairs as needed.                                                                      |
| Manhole inspections? (per                                        | 6-13                           | ASU field staff must fill out a                                                                                           |

|                                                                           |                           |                                                                                                                                                                  |
|---------------------------------------------------------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ASU's 11/30/11 letter to IDEM stating 3 manholes are inspected each week) |                           | "daily activity sheet" and if they inspect any manholes these must be listed on the back of the sheet.                                                           |
| Manhole assessments in the last 5 years?                                  | 6-17                      | No reports or studies have been prepared for ASU's manholes.                                                                                                     |
| Manhole repairs?                                                          | 5-8 under Cause No. 44272 | ASU does not track manhole repairs.                                                                                                                              |
| Manhole rehabilitation?                                                   | 6-15                      | Manhole repairs are not a separate budget item. Manhole repairs are not recorded separately but included in collection maint..                                   |
| Plans and budgets for I&I reduction for the next 5 years?                 | 5-32                      | There are no plans or budgets to identify I&I sources because ASU's collection system is 80% PVC and most of it is less than 10 years old and in good condition. |
| Identification of MH and sewers where I&I enters?                         | 5-33                      | None                                                                                                                                                             |

1    **Q:    Did you perform other evaluations of ASU's infiltration and inflow problem?**

2    A:    Yes. I reviewed influent pollutant concentrations and flows reported by ASU on  
3    the Monthly Reports of Operation (MRO) for the Carriage Estates WWTP.

4    **Q:    What do the influent pollutant concentrations indicate about ASU's**  
5    **wastewater system and the extent of ASU's I&I problem?**

6    A:    In addition to indicating the extent of I&I in a sewer system, pollutant  
7    concentrations can help estimate connected populations based on population  
8    equivalents, expressed as pounds of a pollutant per person per day.    The first  
9    thing I noticed in reviewing ASU's actual pollutant data was the weak  
10    concentrations that are half the typical sewage concentrations. These pollutants  
11    include carbonaceous Biochemical Oxygen Demand (cBOD<sub>5</sub>), total suspended  
12    solids (TSS), and ammonia-nitrogen (NH<sub>3</sub>-N). The total pounds of pollutants



suggest that only about 10,000 to 11,000 people are currently connected to ASU's Carriage Estates WWTP. The weak pollutant concentrations confirm that ASU's sewage is diluted by clear water. This supports my belief that I&I constitutes about half of the wastewater currently entering the Carriage Estates WWTP.

**Q: Why didn't ASU use actual pollutant concentrations to determine the design pollutant loads to be treated at the expanded Carriage Estates WWTP?**

A: The OUCC issued discovery asking why ASU did not use actual pollutant concentrations in determining the design pollutant loads to be treated at the expanded Carriage Estates WWTP. ASU responded that the IDEM engineer reviewing ASU's design objected to ASU using actual data because the concentrations were significantly lower than normal (Attachment JTP-2 - OUCC DR 16-45). However, the pollutant concentrations ASU used in its design matches the higher pollutant concentrations it has used historically except for ammonia. ASU *lowered* the ammonia concentration from 25 mg/l to 15 mg/l. I summarize the historical pollutant concentrations reported by ASU on its MROs, the actual data ASU provided in response to OUCC DR 16-45, the ASU design concentrations, and pollutant concentrations for normal sewage in Table 5:

| Table 5 Influent Pollutant Conc. (mg/l) at the CE WWTP 2012-2015 |                         |             |             |             |                          |            |
|------------------------------------------------------------------|-------------------------|-------------|-------------|-------------|--------------------------|------------|
| Pollutant                                                        | Typical Domestic Sewage | Actual 2012 | Actual 2013 | Actual 2014 | Actual per OUCC DR 16-45 | ASU Design |
| CBOD <sub>5</sub>                                                |                         | 113         | 111         | 112         | 88.0                     |            |
| BOD <sub>5</sub>                                                 | 200                     | 129         | 130         | 131         |                          | 200.0      |
| TSS                                                              | 200                     | 121         | 110         | 111         | 140.0                    | 200.0      |
| NH <sub>3</sub> -N                                               | 25                      | 9.8         | 9.0         | 16.0        | 11.0                     | 15.0*      |

\* Originally, ASU assumed a 25 mg/l concentration for NH<sub>3</sub>-N (ammonia)

1   **Q:   What does your review of Carriage Estates WWTP flow data show?**

2   A:   My flow calculations support the conclusion that I&I (clear water) currently  
3       accounts for about half of all Carriage Estates WWTP flow. On peak wet weather  
4       flow days, the I&I can be more than 75% of influent flow.

5               I tabulated ASU's reported flow data for the Carriage Estates WWTP and  
6       prepared a graph showing the ASU reported daily flows, the base sanitary flows  
7       calculated as 70 gallons per capita per day plus school flows and metered  
8       customer flows. I then subtracted base sanitary flows from ASU's reported  
9       treatment plant flows to give the infiltration and inflow. I present this flow  
10      information in Attachment JTP-8.

11   **Q:   In his case-in-chief testimony in Cause No. 44272 (page 17), Mr. Serowka**  
12       **stated "it is necessary to treat a reasonable level of I&I at the CEII WWTP."**  
13       **Mr. Serowka explained the expanded CEIII WWTP is sized to accept and**  
14       **treat the storm water which enters the sanitary sewer system as the result of**  
15       **I&I. Did ASU ever provide estimates of the current and assumed future I&I**  
16       **flows in its sewer system?**

17   A:   No. Mr. Serwoka's statement suggests ASU had some knowledge of its I&I  
18       levels when it sized its CE-III WWTP upgrade. But ASU has never provided a  
19       current or design estimate for I&I it included in the Design Average Flows. The  
20       OUCC asked ASU several times for the reasonable level of I&I it assumed for the  
21       CE-III WWTP expansion, but ASU has not provided that information. See  
22       Attachment JTP-9 for ASU responses to OUCC DR 5-3, 5-4, 12-6, 12-7, 16-5.

23   **Q:   Did you perform your own estimate of I&I flows?**

24   A:   Yes. Using standard sanitary engineering methods, I estimated I&I accounts for  
25       half of ASU's CE WWTP flow based on annual average flows and spikes during  
26       wet weather as shown graphically in Attachment JTP-7.

1    **Q:    Did you estimate the current I&I level in the CE WWTP influent?**

2    A:    Yes. One way to estimate I&I is to subtract base sanitary sewage flows (water  
3           usage) from reported wastewater treatment plant influent flows. To estimate base  
4           sanitary sewage, I estimated population in the CE WWTP service area from 2010  
5           Census data shown on a map provided by Kathleen Lind, Senior Planner and  
6           Linda Eastman, GIS Specialist with the Tippecanoe County Area Plan  
7           Commission. I then examined the Indiana Business Research Center's ("IBRC")  
8           annual population forecasts for 2011 to 2014 for Wabash Township and  
9           Tippecanoe County and the IBRC forecasts for Tippecanoe County through 2050  
10          in five-year increments.

11                 ASU's CE WWTP service area lies entirely within Wabash Township. In  
12                 2010 Wabash Township accounted for 34% of Tippecanoe County's population.  
13                 Because the IBRC forecasts population beyond 2014 only at the County level, I  
14                 applied an increasing percent share of County population to Wabash Township  
15                 starting at 34% in 2010 and rising in 0.5% increments to 37.5% by 2040 to  
16                 calculate Wabash Township's share of the Tippecanoe County population. I  
17                 conservatively assigned almost all of Wabash Township's population growth to  
18                 the CE WWTP service area. I assumed 75% of the growth would be in the CE  
19                 WWTP service area because Wabash Township includes the City of West  
20                 Lafayette and Purdue University, both of which are outside ASU's service area.  
21                 In addition, some ASU customers in Wabash Township are in the County Home  
22                 WWTP service area and some residents are on private septic. The 75% allocation  
23                 of population growth to the CE WWTP service area is a reasonable estimate.

I then calculated base sanitary flows by multiplying the population estimate by 70 gallons per capita per day ("gpcd") water usage and adding in flows from metered commercial customers and schools on the basis of 15 gpcd. The 70 gpcd reflects USEPA data on typical per capita water usage. For current and future base sanitary flows, I used the same 70 gpcd because the majority of ASU service area homes are newer and built with fixtures meeting USEPA water efficiency standards. The calculations described above yield base sanitary flows. I used the 70 gpcd value to calculate base sanitary flows in order to estimate I&I. Whereas 100 gpcd is appropriate for determining design flow, 70 gpcd is appropriate for calculating base sanitary flow. I explain this point in more detail in my discussions on population forecasts and design flows.

I then tabulated the daily influent flows for the Carriage Estates WWTP that ASU reported to IDEM and subtracted the base sanitary sewage flows. This yields the I&I volumes per day. I summarize my estimates of the current I&I in the Carriage Estates sewer system in the following Table 6.

| <b>Table 6</b><br><b>Summary of the OUCC's Estimate of Infiltration and Inflow at the Carriage Estates WWTP – Jan. 1, 2012 to June 12, 2015</b> |                                                                 |                                                                    |                                                                      |                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------|------------------------------------------------------------------|
| <b>Year</b>                                                                                                                                     | <b>ASU<br/>Reported CE<br/>WWTP<br/>Influent Flow<br/>(MGD)</b> | <b>OUCC<br/>Estimate of<br/>Base Sanitary<br/>Sewage<br/>(MGD)</b> | <b>OUCC<br/>Calculated<br/>Infiltration<br/>and Inflow<br/>(MGD)</b> | <b>I&amp;I Flow as<br/>a Percent of<br/>CE WWTP<br/>Flow (%)</b> |
| 2012*                                                                                                                                           | 1.26                                                            | 0.79                                                               | <del>0.47</del> 0.36                                                 | <del>37%</del> 29%                                               |
| 2013                                                                                                                                            | 1.41                                                            | 0.91                                                               | 0.50                                                                 | 35%                                                              |
| 2014                                                                                                                                            | 1.80                                                            | 0.92                                                               | 0.88                                                                 | 49%                                                              |
| 2015**                                                                                                                                          | 1.81                                                            | 0.87                                                               | 0.94                                                                 | 52%                                                              |

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1       \* Severe drought year

2       \*\* Flow data is only through June 12, 2015. After this date, ASU flow meter  
3 readings are unreliable according to ASU and are being estimated by ASU for  
4 IDEM reporting purposes. The influent flow meter was later removed by ASU.

5       **Q: Did you make estimates of the future I&I in the 2030 design flow?**

6       A: Yes. Using my forecast of 20,322 people connected to Carriage Estates WWTP,  
7 which would produce an annual average daily flow of 2.66 MGD, I estimate I&I  
8 in 2030 will be 1.23 MGD. This assumes that ASU continues ignoring I&I in  
9 their existing sewer system, but that it does not get worse.

10       **Q: Does ASU's policy of eliminating lift stations exacerbate its infiltration**  
11 **problems?**

12       A: ASU reports having a policy of eliminating lift stations by replacing them with  
13 deep gravity sewers.<sup>4</sup> This policy, besides increasing sewer construction costs,  
14 unfortunately places ASU's sewers into and below the water table where sewer  
15 pipe and manhole defects, leaks or breaks present clear water entry points.

16               **VI. POPULATION FORECASTS AND DESIGN FLOWS**

17       **Q: Why are you discussing population forecasts in ASU's service territory?**

18       A: In Cause No. 44272, ASU was authorized to incur expenditures up to \$10,000,000  
19 for improvements to its Carriage Estates WWTP (the CE-III Project). In Cause  
20 No. 44676, ASU states it plans to expend funds to expand the capacity of its 1.5  
21 MGD Carriage Estates treatment plant to 4.0 MGD with additional tankage to  
22 allow expansion to 6.0 MGD. (Serowka, p. 16.) ASU advised its anticipated  
23 expenditures will be more than double the amount pre-approved in Cause No.  
24 44272. To support the future capacity needs, ASU relies on the number of

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<sup>4</sup> ASU response to OUCC DR 4-40

housing units that have connected to ASU's treatment plants from December 2004 through August 2015 to calculate ASU's Carriage Estates WWTP future capacity needs over the next decades. (Serowka Direct Testimony, pages 17-18, and Exhibit EJS-2)

**Q: Do you agree with ASU's methodology for justifying its capacity needs and scope of treatment plant expansion?**

A: No. ASU's methodology for justifying its future capacity needs is not appropriate, does not conform to acceptable methodologies for projecting future plant needs, and significantly overstates the future capacity Carriage Estates needs.

**Q: Would you characterize the project as proposed as an expansion to a 4.0 MGD wastewater treatment plant?**

A: No. ASU will be constructing the major structures of a 6.0 MGD plant under its current IDEM construction permit. (See Attachment JTP-20) These include treatment tanks and piping sized for 6.0 MGD as the Design Average Flow with a peak flow of 12.0 MGD. Some aeration equipment and pumps are being left out so that the near term capacity will be 4.0 MGD.

**Q: Does the OUCC agree it is appropriate for ASU to construct a 6.0 MGD wastewater treatment plant at this time?**

A: No.

**Q: Does the OUCC agree it is appropriate for ASU to construct a 4.0 MGD wastewater treatment plant at this time?**

A: No.

**Q: For purposes of establishing necessary capacity of plant additions, what is an appropriate methodology?**

A: The Ten State Standards provide that "the sizing of wastewater facilities receiving flows from new wastewater collection systems shall be based on an average daily

1 flow of 100 gallons per capita plus wastewater flow from industrial plants and  
2 major institutional and commercial facilities unless water use data or other  
3 justification upon which to better estimate flow is provided.”<sup>5</sup> “Per capita” means  
4 a utility considering its capacity requirements should look at the number of people  
5 (connected population) it serves, not simply the number of households it serves.  
6 To determine the necessary flow capacity of a plant expansion, utilities like ASU  
7 should forecast the population increase over the planning period, calculate  
8 additional flows for the increased population at 100 gallons per capita per day  
9 (“gpcd”) and add these new flows to the historic flow.

10 **Q: Did ASU present any population forecasts in this case or in Cause No. 44272**  
11 **to support increasing the Carriage Estates WWTP’s capacity?**

12 A: No. ASU did not rely on any population projections in this case to justify  
13 increasing the plant’s treatment capacity. Instead, ASU relied on ASU’s history  
14 of housing unit connections.

15 **Q: What methodology did ASU follow to estimate its future capacity needs at**  
16 **the Carriage Estates Treatment Plant?**

17 A: Mr. Serowka described ASU’s method for setting the design flow on pages 17-18  
18 of his testimony referring to Attachment EJS-2. He states he used ASU supplied  
19 customer counts made up of single-family homes, apartments, and mobile homes.  
20 These numbers are for the total housing units from December 2004 through

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<sup>5</sup> Section 11.243 Hydraulic Capacity for Wastewater Facilities to Serve New Collection Systems, *Recommended Standards for Wastewater Facilities* (Ten States Standards), 2014 Edition, by the Great Lakes – Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers.

1 August 2015. Mr. Serowka asserted that if ASU continues to grow at that rate  
2 over the next twenty years, the 4.0MGD is needed.

3 **Q: Do you agree that this methodology has accurately predicted Petitioner's**  
4 **capacity needs?**

5 A: No. ASU gave no rationale supporting why this time period should be  
6 representative of future growth. Moreover, connected population projections and  
7 not extensions of customer counts is the appropriate basis to estimate a utility's  
8 capacity needs. Mr. Serowka's method has the effect of overstating Petitioner's  
9 future capacity needs.

10 **Q: How does Mr. Serowka's conclusion overstate future capacity needs?**

11 A: Mr. Serowka's analysis does not recognize that a significant portion of the  
12 wastewater entering the plant is a result of I&I that ASU can and should reduce  
13 through a reasonable I&I elimination program. Moreover, Mr. Serowka's  
14 computation also does not recognize that the new lines connecting additional  
15 customers will be much less subject to I&I than ASU's existing lines, many of  
16 which are made of clay.

17 **Q: Did you perform an analysis of Petitioner's capacity needs for the Carriage**  
18 **Estates WWTP?**

19 A: Yes. Using population projections, I estimated ASU's Carriage Estates WWTP  
20 capacity needs for the 2030 design year.

21 **Q: Please describe the method you followed to estimate ASU's capacity needs.**

22 A: To calculate the design average flow, I took the design year population I projected  
23 and subtracted the current year population to determine the population increase. I  
24 then multiplied the increase in population by 100 gpcd in accordance with Ten



1 States Standards<sup>6</sup> to calculate the flow increase for the population growth, which  
2 is then added to actual flows (historical data). Forecasted flows from major  
3 institutional and commercial facilities are added in the same way.

4 **Q: Were you able to rely on ASU to provide current year and the design year**  
5 **populations for purposes of your analysis?**

6 **A:** No. While ASU has a customer count, ASU does not know the actual number of  
7 people it serves. In OUCC DR 6-8, the OUCC asked ASU to state the current  
8 (2015) connected population and to provide supporting documentation for the  
9 current and forecasted populations. ASU replied that it "ASU does not know the  
10 current connected population." ASU has listed the Carriage Estates WWTP's  
11 current connected population (for 2012 to 2015) as:

- 12 • 12,900 people in Serowka Rebuttal Testimony, Cause No. 44272, page R-10,
- 13 • 20,000 people in the original Design Summary - Permit application,
- 14 • 15,000 people in the revised Design Summary - Permit application,
- 15 • 18,000 people in 4,000 connections (housing units) in the Emergency
- 16 Response Guide,<sup>7</sup> submitted to IDEM under ASU's latest Agreed Order,<sup>8</sup>
- 17 • 18,200 people in the Direct Testimony of Edward J. Serowka, pages 3-4.

18 This conforms to my experienced opinion that ASU's current connected  
19 population estimates have not been consistent.

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<sup>6</sup> Section 11.243 Hydraulic Capacity for Wastewater Facilities to Serve New Collection Systems, Ten States Standards.

<sup>7</sup> Emergency Response Guide for the ASU Wastewater Facilities, page 1-A-1-1, dated Dec.10, 2014 as part of ASU's Agreed Order.

[https://ecm.idem.in.gov/cs/idcplg?IdcService=GET\\_FILE&dID=80053292&dDocName=80053712&Render=web&allowInterrupt=1&noSaveAs=1&fileName=80053712.pdf](https://ecm.idem.in.gov/cs/idcplg?IdcService=GET_FILE&dID=80053292&dDocName=80053712&Render=web&allowInterrupt=1&noSaveAs=1&fileName=80053712.pdf)

<sup>8</sup> Agreed Order Case No. 2013-21924-W.

1   **Q:   Why is it important to have accurate current populations?**

2   A:   It is important to know the current population in order to make reasonable  
3       population forecasts. If your starting point is inaccurate, forecasts will be  
4       similarly inaccurate.

5   **Q:   Did ASU make any representations as to its current connected population in**  
6       **its 2013 Construction Permit application for the Carriage Estates WWTP**  
7       **expansion?**

8   A:   Yes. As the list above shows, ASU showed the current (2013) population as  
9       20,000 people in the initial Design Summary submitted to IDEM, later lowering it  
10      to 15,000 and indicating the revised estimate was based on Census data.<sup>9</sup>

11   **Q:   Did you find support for the 15,000 population ASU attributed to Carriage**  
12       **Estates WWTP in its Construction Permit Application?**

13   A:   No. I did not locate any U.S. Census, IBRC, or Tippecanoe County information  
14       that supports 15,000 people being currently connected to the Carriage Estates  
15       WWTP.

16   **Q:   What do you consider to be the current population sending wastewater to the**  
17       **Carriage Estates WWTP?**

18   A:   Based on my analysis that included a review of census data, 11,756 people are  
19       connected to the Carriage Estates WWTP. Those people would occupy about  
20       4,845 housing units including single family homes, apartments, and mobile  
21       homes.

22   **Q:   How did you determine the design year population?**

23   A:   I used standard population forecasting data (2010 US Census data, Indiana  
24       Business Research Center, Tippecanoe County Planning Department, Tippecanoe  
25       County Transportation Plan) to forecast the population for a 20-year planning

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<sup>9</sup> ASU Design Summary for the Carriage Estates III Wastewater Treatment Plant Expansion, IDEM Construction Permit No. 20788, dated February 21, 2014.

1 period.<sup>10</sup> I then subtracted the current population from this forecasted design year  
2 population to get the population increase. I concluded that ASU's population  
3 connection to the Carriage Estates WWTP will increase by 7,726 people between  
4 2013 and 2030 and another 4,656 by 2040.

5 **Q What is the normal planning period for wastewater facilities?**

6 A: Under the *Recommended Standards for Wastewater Facilities* commonly referred  
7 to as the Ten States Standards, a standard planning period is 20 years.<sup>11</sup> I have  
8 included the specific language from Section 11.23 below:

9 Present and predicted population shall be based on a 20 year planning  
10 period. Phased construction of wastewater facilities should be considered  
11 in rapid growth areas. Sewers and other facilities with a design life in  
12 excess of 20 years should be designed for the extended period.

13 **Q: What planning period does ASU use?**

14 A: ASU has chosen to construct Option 4 where all the treatment tanks and piping  
15 are sized for 6.0 MGD as the Design Average Flow with a peak flow of 12.0  
16 MGD. (Some aeration equipment and pumps are being left out so that the near  
17 term capacity will be 4.0 MGD. However, ASU is constructing the major  
18 structures of the 6.0 MGD plant now.) Thus, while ASU referred to 2030 as its  
19 design year in its Construction Permit application, ASU has effectively used 2040  
20 as its design year, which is 27 years from its application date of 2013. In its  
21 application, ASU called 2040 its "Future Year." In my experience, future years  
22 are not identified in design summaries provided to IDEM. Treatment plant sizing  
23 is based on design year flows for a 20-year planning period.

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<sup>10</sup> Section 11.23 Population Projection and Planning Period, *Recommended Standards for Wastewater Facilities* (Ten States Standards), 2014 Edition, by the Great Lakes - Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers

<sup>11</sup> *Id.*

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people

1 Q: How many ~~customers~~ do you project will be served by ASU's Carriage  
2 Estates WWTP in 2030?

3 A: I prepared an Excel spreadsheet to answer that question. I started with the current  
4 population for the Carriage Estates WWTP based on Census data and IBRC  
5 forecasts. This spreadsheet is shown in Attachment JTP-11. I project that the  
6 Carriage Estates WWTP's connected population will rise from the OUCC's  
7 estimated 11,756 people in 2015 to approximately 20,322 people in 8,473 housing  
8 units in 2030. The 2030 housing density of 2.4 people per dwelling is consistent  
9 with Census data and Tippecanoe County Planning Department estimates. The  
10 2030 population reflects an annual average growth of 3.7% per year for the 17-  
11 year period between 2013 and 2030 and is more than three times Tippecanoe  
12 County's annual average growth rate of 1%.<sup>12</sup>

13 Q: Did ASU make any representations as to its projected connected population  
14 in its 2013 construction permit application for the Carriage Estates WWTP  
15 expansion.

16 A: Yes. ASU listed the 2030 Design Year and 2040 Future Year populations as  
17 40,000 and 60,000 people respectively. ASU submitted to IDEM for the  
18 treatment plant expansion, ASU listed the design flows as follows:

| Table 7 – ASU Listed Populations and Flows |              |             |             |
|--------------------------------------------|--------------|-------------|-------------|
| Criteria                                   | Current Year | Design Year | Future Year |
| Year                                       | 2013         | 2030        | 2040        |
| Population                                 | 15,000       | 40,000      | 60,000      |
| Design Avg. Flow (MGD)                     |              | 4.0         | 6.0         |

<sup>12</sup> The 1% population growth rate for Tippecanoe County is from the Metropolitan Transportation Plan 2040, page 20.

1   **Q:   Do you consider those population projections to be accurate and reliable?**

2   A:   No. I believe those projections for 2030 and 2040 significantly overstate the  
3       expected populations. The addition to its population of 25,000 people between  
4       2013 and 2030 suggested by ASU in its construction permit application exceeds  
5       the population forecast by the Indiana Business Research Center for *all* of  
6       Tippecanoe County. Tippecanoe County has 13 townships. ASU's Carriage  
7       Estates WWTP lies entirely within only one of these townships (Wabash  
8       Township). Likewise, the addition of another 20,000 people that ASU claims will  
9       be added to its system between 2030 and 2040 also exceeds the IBRC population  
10      growth forecast for *all* of Tippecanoe County for that 10-year period.

11   **Q:   Did IDEM make any finding that those population projections were accurate**  
12      **and reliable?**

13   A:   No. I communicated with Dale T. Schnaith, Chief of IDEM's Facility  
14       Construction & Engineering Support Section about ASU's design summary for  
15       the Carriage Estates WWTP. Mr. Schnaith said IDEM did not verify the  
16       populations listed by ASU.

17   **Q:   Did you perform any research or analysis to verify the 2013, 2030 and 2040**  
18      **population numbers ASU listed in its Construction Permit Application?**

19   A:   Yes. I researched U.S. Census data, housing units, and population forecasts for  
20       Tippecanoe County prepared by the IBRC and available on-line through the Stats  
21       Indiana website.<sup>13</sup> This website shows census data and five year population  
22       forecasts for Indiana Counties through 2050 and annual forecasts for Indiana  
23       Counties, Cities, and Townships for 2011 through 2014. I reviewed the 2040

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<sup>13</sup> Stats Indiana <http://www.stats.indiana.edu/topic/population.asp>

1 housing forecast in *The Metropolitan Transportation Plan 2040* prepared by the  
2 Area Plan Commission of Tippecanoe County in June 2012 (pages 20 and 21). I  
3 also contacted the Tippecanoe County Planning Department to understand its long  
4 term 2040 housing forecast for ASU's service area. I found no studies or other  
5 source documents that yielded the ASU's population projections.

6 **Q: How did ASU estimate a 2030 population of 40,000 people and a 2040**  
7 **population of 60,000 people for the CE WWTP expansion?**

8 A: It appears ASU simply backed into these populations by starting with its desired  
9 flows and dividing by 100 gpcd. If so, ASU's method is backward and would  
10 lead to erroneous unfounded population projections to support its plant expansion.

11 **Q: What kind of population growth rates would be required for ASU to hit its**  
12 **assumed 2030 connected population of 40,000 people and the 2040 connected**  
13 **population of 60,000 people?**

14 A: I prepared an Excel spreadsheet to answer that question and to estimate how many  
15 housing units ASU's population would require at between 2.38 and 2.43 people  
16 per housing unit. This spreadsheet is shown in Attachment JTP-11. Starting with  
17 ASU's 15,000 population count in 2013 and ending with 40,000 people in 2030  
18 and 60,000 people in 2040, ASU would need an annual growth rate of 5.9%  
19 between 2013 and 2030 and a 4.1% growth rate for 2031 to 2040. These growth  
20 rates exceeds ASU's stated 3.9% growth rate in Mr. Serowka's testimony. ASU's  
21 growth projections would also require over 10,000 new housing units to bring the  
22 total housing units to 16,667 in 2030. This represents an average build of over  
23 600 new housing units per year.

24 To reach ASU's growth projections for the year 2040, an additional 8,533  
25 new housing units would be needed to bring the total housing units to 25,210 in

2040. This represents an average build of over 850 new housing units per year over the 2031 to 2040 period.

**Q: Did the OUCC's calculations account for I&I flows in the design average flow?**

A: Yes. I assumed that ASU's current I&I flows remain in the system and that I&I increases with new sewer construction at a rate of 30 gpcd. The 30 gpcd volume represents the difference between the 100 gpcd design flow requirement under the Ten States Standards and the 70 gpcd average water consumption I used to calculate the base sanitary flow.

**Q: Can you summarize the population and design average flows you calculated for the Carriage Estates WWTP and explain how this compares with the projections made by ASU?**

A: Yes. My calculations for populations and design flows is compared to ASU's calculation in the following table.

| <b>Table 8 – Comparison of Design Average Flows</b> |                   |                         |
|-----------------------------------------------------|-------------------|-------------------------|
|                                                     | <b>ASU Design</b> | <b>OUCC Calculation</b> |
| 2013 Current Population                             | 15,000            | 12,596*                 |
| 2030 Design Population                              | 40,000            | 20,322                  |
| 2030 Design Average Flow                            | 4.0 MGD           | 2.66 MGD                |
| 2040 Future Population                              | 60,000            | 24,978                  |
| 2040 Design Average Flow                            | 6.0 MGD           | 3.12 MGD                |

\*Population shown is before ASU diverted flows from 482 homes to the County Home WWTP in 2015.

## **VII. CARRIAGE ESTATES WWTP EXPANSION**

**Q: Please describe the Carriage Estates Wastewater Treatment Plant.**

A: The existing Carriage Estates WWTP is a Continuous Sequencing Batch Reactor ("CSBR") system with mixed filling, aeration, settling, and decanting functions

1 performed in the same tank. Influent flows continuously to each of the four tanks.  
2 There are no separate clarifiers or effluent filters and no grit removal or primary  
3 treatment before the SBR tanks that are typical for municipal WWTP's that could  
4 reduce pollutant loads and decrease the CSBR tanks' volume.

5 The original plant was constructed in 1966 to serve a new subdivision  
6 known as Carriage Estates. A 1986 expansion raised the design average flow  
7 from 0.423 MGD to 0.76 MGD and the peak hourly flow to 1.14 MGD. The  
8 design average flow is the average of daily flows in the design year.<sup>14</sup> The plant  
9 expansion in 2000 doubled capacity to 1.5 MGD with one of the four SBRs off-  
10 line for maintenance. This was the firm rated capacity until the fall of 2014.  
11 Each SBR tank can process 0.5 MGD. The SBR plant was rated for a peak hourly  
12 flow of 4.5 MGD.

13 The influent is pumped to a manually cleaned bar screen and then  
14 distributed to all four SBR tanks. Treatment is cyclical in each tank and consists  
15 of mixed filling, aeration, settling, and decanting. ASU routinely operates all four  
16 SBR tanks. Disinfection is by chlorination / dechlorination prior to discharge to  
17 Indian Creek. Aerobic digesters provide sludge stabilization. The sludges are  
18 neither pre-thickened prior to digestion nor mechanically dewatered after  
19 digestion. These processes would significantly reduce the required volume of the  
20 sludge digestion tanks and the sludge volume hauled off-site. Merrell Brothers  
21 hauls the dilute liquid digested sludge off-site in tankers for land application.

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<sup>14</sup> Design Average Flow: The design average flow is the average of the daily volumes to be received for a continuous 12 month period expressed as a volume per unit time. Section 11.241 a. in *Recommended Standards for Wastewater Facilities*, commonly known as the Ten States Standards, 2014 Edition.



1    **Q:    Has ASU modified the four existing CSBR tanks?**

2    A:    Yes. In response to high influent flows that ASU blamed for 20 ammonia  
3       discharge violations beginning in late August and continuing through October  
4       2014, ASU modified the CSBR process from a four tank configuration to a two  
5       tank configuration (Attachment JTP-2, OUCC DR 16-50). This was done by  
6       drilling a hole in the common walls between tanks one and two and between  
7       tanks three and four. ASU also removed inlet valves to more evenly distribute  
8       flow and increased aeration. ASU made these modifications without notifying  
9       IDEM until after the tanks were modified. ASU's change to a two tank system  
10      reduced the firm rated capacity of the CE WWTP from 1.5 MGD to 1.0 MGD.

11   **Q:    Please discuss ASU's plans to expand the Carriage Estates WWTP.**

12   A:    IDEM brought an enforcement action against ASU in 2009 for operation,  
13      maintenance and discharge violations including bypassing and overflows. ASU  
14      entered into an Agreed Order with IDEM in April 2011 to resolve the  
15      enforcement action.<sup>15</sup> In 2011, ASU attempted to re-rate the CE WWTP to 2.0  
16      MGD on the basis of operating all four tanks and submitted a construction permit  
17      application to IDEM on June 27, 2011. IDEM refused ASU's request to re-rate  
18      the plant capacity on paper since it involved no construction (Petitioner's Exhibit  
19      EJS-6, Cause No. 44272). ASU withdrew the application in December 2011.

20   **Q:    What did ASU do next?**

21   A:    In 2012 ASU still needed to expand the Carriage Estates WWTP because  
22      customer growth and I&I were high enough that ASU feared IDEM would impose

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<sup>15</sup> Agreed Order 2009-18688-W, dated April 18, 2011 brought by the Indiana Department of Environmental Management against American Suburban Utilities, Inc.

1 a sewer ban on the Utility. (Direct Testimony of Serowka, page 9, Cause No.  
2 44272) A sewer ban would halt construction of new developments within ASU's  
3 service area until ASU added capacity for the higher flows.

4 ASU decided to expand the Carriage Estates WWTP from 1.5 MGD to 6.8  
5 MGD. ASU also chose to change the process from the existing CSBR system to  
6 extended aeration activated sludge because ASU claimed in response to OUCC  
7 discovery under Cause No. 44272 (DR 1-10 and 4-3) that "IDEM changed its  
8 design criteria for CSBR and SBR systems which resulted in these types of  
9 systems no longer being cost effective." ASU justified the switch to extended  
10 aeration by saying:

11 IDEM would require a spare aeration tank which would reduce the  
12 average design flow by 25.0 percent using the existing tankage and  
13 by 15.0 percent with the existing and new tankage. Therefore,  
14 ASU wanted to make full use of all its existing tankage and  
15 facilities in order to keep the construction costs as reasonable as  
16 possible." (OUCC DR 1-10, Cause No. 44272)

17 The expanded plant's peak hourly flow would be 13.6 MGD. Expansion  
18 plans included modifications and upgrades required by the Agreed Order with  
19 IDEM. ASU submitted its expansion plans for funding preapproval by the IURC  
20 under Cause No. 44272 on December 19, 2012.

21 **Q: How did ASU determine that the capacity needed to jump from the existing**  
22 **1.5 MGD to 6.8 MGD for the CE WWTP?**

23 **A:** In Direct Testimony under Cause No. 44272 (pages 13-15), Mr. Serowka stated  
24 that based on the Tippecanoe County 2030 Transportation Plan (dated 2006)  
25 approximately 3,000 to 3,500 additional housing units would be constructed in the  
26 area serviced by the CE WWTP between 2012 and 2030. In response to OUCC

1 discovery under Cause No. 44272 (Attachment JTP-1, OUCC DR 6-11), ASU  
2 claimed all 3,000 to 3,500 additional housing units would be in the CE WWTP  
3 system and none would be in the County Home WWTP system. Mr. Serowka  
4 calculated flows from these new housing units would range between 1.10 MGD  
5 and 1.30 MGD based on 310 to 350 GPD per unit. These new flows added to the  
6 CE WWTP's January 2009 to June 2012 average 1.43 MGD flow would total  
7 between 2.53 and 2.73 MGD and fall far short of ASU's proposed 6.8 MGD  
8 capacity expansion. ASU did not identify sources for the missing 4.07 to 4.27  
9 MGD needed to reach its desired 6.8 MGD capacity and dropped further  
10 discussion of new housing units.

11 ASU claimed Carriage Estates flows had doubled in ten years and stated if  
12 design was based on doubling flows every ten years, then the plant capacity at the  
13 end of the 20-year planning would have to be 6.0 MGD, a quadrupling of the  
14 existing 1.5 MGD capacity. However, actual flow data shown in EJS Workpaper  
15 1, page A-1 under this Cause does not show a flow doubling every ten years.

16 **Q: How did ASU arrive at a design flow of 6.8 MGD?**

17 A: The 6.8 MGD design flow seems to have been chosen to maximize the use of  
18 existing tanks. ASU did not provide facilities planning establishing population  
19 growth, expansion needs, required upgrades, alternatives identified and evaluated,  
20 life cycle costs, or cost effective analysis of alternatives. Such analyses are  
21 normally done for large capital projects such as wastewater plants. The 6.8 MGD  
22 flow does not appear to be based on any standard engineering calculation used to  
23 forecast population growth and size expansion of wastewater plants.

1   **Q:   What was ASU's original estimated cost to expand the Carriage Estates**  
2   **WWTP to 6.8 MGD?**

3   A:   In his Direct Testimony under Cause No. 44272 (page 21, lines 3-7 and  
4       Petitioner's Exhibit EJS-7, Part A), Mr. Serowka estimated costs at  
5       \$11,596,820.00 to expand and upgrade the CE WWTP to 6.8 MGD with a peak  
6       flow of 13.6 MGD. ASU proposed constructing the complete 6.8 MGD plant  
7       with no phasing.

8   **Q:   Did ASU revise its preapproval request for the CE WWTP?**

9   A:   Yes. In his Rebuttal Testimony dated April 9, 2013 under Cause No. 44272, Mr.  
10       Serowka responded to OUCC testimony that (1) agreed ASU needed a plant  
11       expansion, (2) the design capacity was too large, and (3) ASU's estimated costs  
12       were inflated. Mr. Serowka proposed building all major structures and piping  
13       upfront for a 6.5 MGD design average flow and a 13.0 MGD peak hourly flow  
14       (Rebuttal Testimony Cause No. 44272, page Serowka – R-19). He concluded his  
15       rebuttal testimony with the following recommendations:

16               I recommend that CEIITP be immediately expanded to 4.0 MGD  
17               ADF with 8.0 MGD PWWF by the addition of a 2.0 MGD ADF  
18               parallel treatment system for the estimated cost of \$7,931,185.00  
19               and consisting of the equipment/structures shown in magenta on  
20               Lakeland InnovaTech Drawing Number 12-036-02, revision 3  
21               dated April 5, 2013 and listed in the component schedule in  
22               Petitioner's Exhibit EJS-R3.

23               I recommend that the two (2) additional 1.0 million gallon concrete  
24               aeration tanks and two (2) additional 60'-0" diameter concrete final  
25               clarifier tanks be constructed with the parallel system for an  
26               additional estimated cost of \$2,390,220.00 in order to take  
27               advantage of the economies of scale and be prepared for further  
28               growth.

29               Serowka – R-36 and R-37

1 ASU essentially stayed with the same size expansion (6.5 MGD revised versus  
2 6.8 MGD original) with minor changes. Mr. Serowka's revised estimate totaled  
3 \$10,321,405.00.

4 **Q: Did ASU's expansion plans and costs change again?**

5 A: Yes. In his Supplemental Testimony under Cause No. 44272 (page Serowka- S3),  
6 Mr. Serowka stated ASU had received notice in late April 2013 from IDEM  
7 imposing new phosphorus limits that would require ASU to substantially revise  
8 the CE-III Project.

9 **Q: What were the changes ASU proposed in response to the phosphorus limits?**

10 A: ASU dropped the extended aeration plant design and retained the existing  
11 Continuous Sequencing Batch Reactor process because CSBR plants can also  
12 biologically remove phosphorus. In the current revised design, major treatment  
13 tanks and piping remain about the same size as before but the future stated  
14 capacity has been decreased slightly to 6.0 MGD with a peak hourly flow of 12.0  
15 MGD. Design average flow for the 2030 design year remains at 4.0 MGD with  
16 the peak hourly flow at 8.0 MGD. ASU's estimated cost for the current proposed  
17 expansion was \$19,938,273, but this cost did not include costs for a standby  
18 chemical phosphorus removal system.

19 The proposed expansion will include new parallel influent lifts station,  
20 replacement of the existing manhole, and addition of a Macerator station to grind  
21 up solids and replace the manually cleaned bar screen, which will be removed.  
22 The biological treatment system is the Continuous Sequence Batch Reactor  
23 ("CSBR") System designed for nitrification and to also biologically remove

1       phosphorus with a back-up system to chemically remove phosphorus. Design  
2       also includes UV disinfection, post aeration and effluent metering before  
3       discharge to Indian Creek. A new blower and control laboratory building was  
4       also included.

5       **Q: Were options developed by ASU for the Carriage Estates WWTP?**

6       A: Yes. In response to OUCC opposition to the overstated design flows and costs,  
7       ASU developed three other expansion options in addition to their preferred  
8       Option 4 to expand the plant to 6.0 MGD / 12.0 MGD. ASU presented these  
9       options and ASU's estimated costs in Supplemental Rebuttal Testimony of Mr.  
10      Serowka under Cause No. 44272 (pages 12-17). These options were as follows:

11           Option 1 – Re-rate the plant to 2.0 MGD and make upgrades needed to  
12           replace deteriorated equipment causing operational problems.

13           Option 2 – Upgrade and expand the plant to a capacity of 3.0 MGD

14           Option 3 – Upgrade and expand the plant to 4.0 MGD, but do not install  
15           the additional tanks that would permit the plant to be readily  
16           expanded to treat 6.0 MGD.

17           Option 4 - Upgrade and expand the plant to 4.0 MGD, and install the  
18           additional tanks that would permit the plant to be readily  
19           expanded to treat 6.0 MGD. This option is really a 6.0 MGD  
20           plant because nearly all major structures and piping are  
21           constructed upfront with some process equipment for one  
22           CSBR Tank and one influent lift station pump not installed.

23

1   **Q:   Has ASU's desired plant capacity changed?**

2   A:   ASU initially requested expanding the 1.5 MGD plant to 6.8 MGD. More  
3       recently, ASU has chosen Option 4, which is for a 6.0 MGD plant. It appears that  
4       ASU is now requesting rate relief to expand the Carriage Estates plant to 6.0  
5       MGD notwithstanding the OUCC's position in Cause No. 44272 that the 6.0  
6       MGD size is unwarranted based on housing growth and as shown in my testimony  
7       is not supported by population growth.

8   **Q:   Can you summarize the changes to the design capacity and estimated costs**  
9       **for the Carriage Estates WWTP expansion?**

10  A:   Yes. ASU's design flows are only slightly smaller than ASU's original request to  
11       build a 6.8 MGD plant. Costs however, have gone up significantly to almost  
12       twice the initial estimated amount. ASU appears to be still designing for the  
13       approximate doubling of flows every 10 years as originally proposed under Cause  
14       No. 44272. I summarize ASU's changing design flows and costs for the  
15       expansion of the CE WWTP in the following table.

| <b>Table 9 – Summary of Proposed Design Changes</b> |                                                                      |                                           |                           |                                                      |
|-----------------------------------------------------|----------------------------------------------------------------------|-------------------------------------------|---------------------------|------------------------------------------------------|
| <b>Year</b>                                         | <b>2030 Design Flows Avg./ Peak (MGD)</b>                            | <b>2040 Future Flows Avg./ Peak (MGD)</b> | <b>ASU Estimated Cost</b> | <b>Biological Tank Volume (1,000 ft<sup>3</sup>)</b> |
| 2011                                                | Re-rate the 1.5 MGD plant to 2.0 MGD based on all 4 tanks in service |                                           |                           |                                                      |
| 2012                                                | 6.8 / 13.6                                                           | NA                                        | \$11,596,820              | 579 (3)                                              |
| 2013                                                | 4.0 / 8.0                                                            | 6.5 / 13.0                                | \$10,321,405              | 619 (3)                                              |
| 2014                                                | 4.0 / 8.0                                                            | 6.0 / 12.0                                | \$19,938,273              | 704 (4)                                              |
| 2014 Options – cost estimates are by ASU            |                                                                      |                                           |                           |                                                      |
| 1                                                   | 2.0                                                                  | NA                                        | \$12,700,000              | 240 (4)                                              |
| 2                                                   | 3.0 / 6.0                                                            | NA                                        | \$15,500,000              | 369 (4)                                              |
| 3                                                   | 4.0 / 8.0                                                            | NA                                        | \$18,100,000              | 500 (4)                                              |
| 4                                                   | 4.0 / 8.0                                                            | 6.0 / 12.0                                | \$19,938,273 (1)          | 704 (4)                                              |
|                                                     |                                                                      |                                           |                           |                                                      |
| 2015                                                | 4.0 / 8.0                                                            | 6.0 / 12.0                                | \$21,488,273 (2) (5)      | 704 (4)                                              |

(1) Includes \$1,500,000 for standby chemical phosphorus removal facilities.

(2) Includes \$1,778,400 for standby chemical phosphorus removal facilities. (OUCC DR 16-52)

(3) Extended aeration plant – volume shown does not include the four final clarifiers

(4) Continuous Sequencing Batch Reactor plant consisting of four tanks.

(5) Only includes costs for three CSBR Tanks

**Q: What option did the OUCC recommend under Cause No. 44272?**

**A:** In testimony the OUCC recommended a 3.9 MGD flow, but later revised the recommended expansion to 3.0 MGD design average flow / 6.0 MGD peak hourly flow under Option 2. This option would be sufficient for housing growth to the 2030 Design Year used by ASU. As shown in my earlier testimony on population growth, the 3.0 MGD design average flow capacity will be adequate for the next 20-years to 2035. If ASU undertakes an I&I identification and reduction program to remove infiltration and inflow sources, the 3.0 MGD capacity would be adequate for additional years beyond 2035.



1   **Q:    What option has ASU chosen to build?**

2   A:    ASU selected Option 4 and is building all major structures and piping to treat the  
3         2040 future flows of 6.0 MGD and 12.0 MGD.

4   **Q:    Was the expansion of the Carriage Estates WWTP opposed by any**  
5         **ratepayers?**

6   A:    Yes.   Several groups of ASU customers opposed the expansion and filed an  
7         appeal of the CE WWTP construction permit in 2014 with IDEM.  I understand  
8         the appeal is being reviewed by IDEM's Office of Environmental Adjudication,  
9         but a ruling has not yet been issued.<sup>16</sup>

10  **Q:    Do you have concerns about ASU choosing to build for the higher flows of**  
11         **Option 4?**

12  A:    Yes.  ASU's chosen design is for flows that are twice that needed for population  
13         growth over a 20-year planning period.  ASU did not derive design flows from  
14         any population forecast but instead from ASU's claim of flows doubling every 10  
15         years.  The doubling of flows every 10 years takes ASU's current 1.5 MGD  
16         capacity to 6.0 MGD.  Since ASU's estimated flows are not based on population  
17         served, its design flows are therefore fundamentally flawed and will lead to the  
18         construction of unneeded and costly treatment tanks.

19                 ASU appears to be repeating the same overdesign mistake it made with the  
20         County Home WWTP expansion it undertook without Commission review in  
21         2004.  The 1.0 MGD County Home SBR plant has sat idle for nearly a decade and  
22         was only put in partial operation when half of the SBR plant was placed in service

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<sup>16</sup> Cause No. 14-W-J-4710, Objection to the Issuance of Wastewater Treatment Plant Expansion Construction permit Approval No. 20788 for Carriage Estates III to American Suburban Utilities, Inc., before the Indiana Office of Environmental Adjudication

1 in 2015 (Attachment JTP-2,- OUCC DR 4-36, 4-37, 11-28). In addition, nearly  
2 50 percent of the sewage that the County Home WWTP receives is sewage  
3 diverted away from the Carriage Estates WWTP in 2015 by the Big 3 Sewer  
4 Project.

5 **Q: You show that Option 4 for the Carriage Estates WWTP is oversized for**  
6 **flow. Is it oversized for other design parameters as well?**

7 A: Yes. In addition to flow oversizing, which directly increases the size and  
8 capacities of the influent pump station, pumps, piping, and the UV disinfection  
9 system because of peaking factor requirements, the CSBR tanks are also  
10 oversized for organic loading. ASU summarized historical pollutant  
11 concentrations, but instead of using them to establish historical pollutant loadings  
12 and then adding pollutant load from population growth, ASU applied normal  
13 (higher) sewage concentrations to the entire overstated design average flow. This  
14 compounds the overdesign problem because two overstated design parameters,  
15 flow and pollutant concentrations (particularly BOD<sub>5</sub>), are multiplied by each  
16 other to calculate the pollutant load in pounds per day. The pollutant load  
17 (pounds per day) determines the IDEM required volume of the CSBR tanks on the  
18 basis of 15 lbs. of BOD<sub>5</sub> per day per 1,000 cubic feet of CSBR volume.

19 **Q: Can you summarize how much of an increase in CSBR tank volume ASU is**  
20 **proposing to construct?**

21 A: Yes. ASU has four existing CSBR tanks with a combined 240,464 cubic feet of  
22 volume. In ASU's proposed design under Option 4, the combined tank volume  
23 for four CSBR tanks is 704,000 cubic feet. This is almost a three-fold increase in  
24 treatment tank volume.

1    **Q:    Are ASU's existing CSBR tanks overloaded organically?**

2    A:    No. ASU's existing CSBR Tanks are designed for a BOD<sub>5</sub> pollutant load of  
3           2,502 pounds per day but have averaged only 1,834 lbs./day over 2013-2015. The  
4           tanks are therefore operating at 73% of the organic loading capacity.

5    **Q:    What BOD<sub>5</sub> loadings does ASU claim are needed for the 2030 Design Year**  
6           **and the 2040 Future Year?**

7    A:    Under Option 4, ASU is designing for a BOD<sub>5</sub> load of 6,676 lbs./day in 2030 and  
8           10,008 lbs./day in 2040.

9    **Q:    Have you estimated the BOD<sub>5</sub> design loads for the same years?**

10   A:    Yes. I calculated the organic loadings based on actual flows and CBOD<sub>5</sub>  
11       pollutant concentrations reported by ASU for 2013 to 2015 to which I added  
12       additional flow and BOD<sub>5</sub> load from the forecasted population increases. My  
13       calculations are shown in Attachment JTP-16 and summarized in the following  
14       tables.

| <b>Table 10 - Current Available Organic Capacity of CE WWTP</b> |                                          |
|-----------------------------------------------------------------|------------------------------------------|
| <b>Period</b>                                                   | <b>BOD<sub>5</sub> Loading (lbs.day)</b> |
| 1999 Design (Existing)                                          | 2,502                                    |
| Avg. Load 2013-2015 (Actual)                                    | 1,834                                    |
| Available Organic Capacity                                      | 668 (27%)                                |
| OUCC Est. 2016 Load with Flow Diverted to County Home WWTP      | 1,635                                    |
| Available 2016 Organic Capacity                                 | 827 (35%)                                |

| <b>Table 11 - Comparison of OUCC and ASU Organic Load Estimates</b> |                  |                              |                     |
|---------------------------------------------------------------------|------------------|------------------------------|---------------------|
|                                                                     | <b>OUCC Est.</b> | <b>ASU Design (Option 4)</b> | <b>Oversizing %</b> |
| 2030 Design Year                                                    | 3,091            | 6,676                        | 216%                |
| 2040 Future Year                                                    | 3,883            | 10,008                       | 260%                |

1 Actual operating data shows the Carriage Estates WWTP has remaining organic  
2 treatment capacity that increased when flow was diverted to the County Home  
3 WWTP with the Big 3 Sewer project. The loading summary for design shows  
4 that ASU is oversizing the CSBR tanks by a factor of two in 2030 and even more  
5 in 2040.

6 **Q: What size expansion does the OUCC recommend for the Carriage Estates**  
7 **WWTP?**

8 A The OUCC continues to recommend ASU pursue Option 2, which doubles the CE  
9 WWTP capacity to 3.0 MGD by constructing two additional CSBR tanks of the  
10 same size as the current four CSBR tanks. This expansion would be sufficient to  
11 treat future flows and loadings over the next 20 years. ASU's chosen Option 4  
12 will not be prudent because it will construct treatment tanks that will not be used  
13 and useful.

14 **Q: Do you have concerns about ASU's construction cost estimate?**

15 A: Yes. The construction costs are inflated for the cost of labor, the required labor  
16 hours, and particularly for the concrete. ASU estimated the concrete cost at \$900  
17 per cubic yard in 2012 regardless of whether it is in a wall or a tank bottom slab.  
18 Concrete costs vary considerably depending on where the material is to be placed.  
19 Since minimal forming and bracing is required for bottom slab concrete, it  
20 presents the lowest concrete cost. Moreover, ASU's concrete costs per cubic yard  
21 are significantly above the National Average costs presented in the Heavy  
22 Construction Cost Data book, 2016 Edition, published by RS Means ("Means  
23 Manual"). For concrete walls ASU's cost is nearly twice as high as the RS

Means' cost. For the concrete bottom slab, ASU's costs per cubic yard placed is more than four times the RS Means' cost.

**Q: Can you summarize the differences in the estimated concrete costs between ASU and the Means Manual?**

**A** Yes. The following table compares cost components between ASU's estimated \$900 per cubic yard price from 2012 (Rebuttal Testimony under Cause No. 44272, pages Serowka -- R-32 and R-33) and the Means Manual prices for walls and slabs for 2016.

| <b>Table 12 – Comparison of Concrete Costs</b>        |                                                                               |                                                             |
|-------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------|
| <b>Cost Component</b>                                 | <b>2016 RS Means<br/>Estimated Unit Cost<br/>(\$/Cubic Yard)<sup>17</sup></b> | <b>2012 ASU Estimated<br/>Unit Cost (\$/Cubic<br/>Yard)</b> |
| <b>Concrete Walls (24 feet tall and 2 feet thick)</b> |                                                                               |                                                             |
| Concrete Delivered                                    |                                                                               | \$112.00                                                    |
| Reinforcing Bars                                      |                                                                               | \$75.00                                                     |
| Form Rental                                           |                                                                               | \$27.00                                                     |
| Miscellaneous Items                                   |                                                                               | \$10.00                                                     |
| Materials                                             | \$160.00                                                                      |                                                             |
| Labor                                                 | \$193.00                                                                      | \$648.00                                                    |
| Equipment                                             | \$15.00                                                                       |                                                             |
| Overhead & Profit (32%)                               | \$117.00                                                                      | Not reported                                                |
| Estimated Cost per -<br>Installed Cubic Yard          | \$485.00 (Round up to<br>\$500.00)                                            | \$900.00                                                    |
| <b>Concrete Bottom Slab (2 feet thick)</b>            |                                                                               |                                                             |
| Concrete Delivered                                    |                                                                               | \$112.00                                                    |
| Reinforcing Bars                                      |                                                                               | \$75.00                                                     |
| Form Rental                                           |                                                                               | \$27.00                                                     |

<sup>17</sup> Cost shown have been adjusted for the taller and thicker walls ASU designed and for a City Cost Index of 81.4 % of the National Average for concrete in Lafayette Indiana per the Heavy Construction Cost Data, 2016 Edition by RS Means

|                                              |                                    |              |
|----------------------------------------------|------------------------------------|--------------|
| Miscellaneous Items                          |                                    | \$10.00      |
| Material                                     | \$136                              |              |
| Labor                                        | \$41.00                            | \$648.00     |
| Equipment                                    | 1.00                               |              |
| Overhead & Profit (22%)                      | \$39.00                            | Not reported |
| Estimated Cost per -<br>Installed Cubic Yard | \$217.00 (Round up to<br>\$220.00) | \$900.00     |

1    **Q:    Does the Means Manual list costs for a 24 feet tall, two feet thick wall and a**  
2    **two feet thick slab?**

3    A:    No. However, RS Means does list costs for a 15-inch thick, 18 feet tall wall and a  
4    6-inch thick slab. I increased both costs to account for more reinforcing steel that  
5    would be required and for the added labor and bracing for taller walls. For the  
6    walls I added 20% to the RS Means prices and for the slab I added 35% for  
7    materials and equipment and adjusted the labor cost by 10%.

8    **Q    What are the major differences in the concrete costs used by ASU and the**  
9    **concrete cost database published by RS Means?**

10   A:    Nearly all of the cost difference appears to be in labor. In its Rebuttal Testimony  
11   under Cause No. 44272, ASU did not identify overhead and profit as a separate  
12   item. Therefore, it appears ASU is representing the \$900 price for concrete as its  
13   cost before overhead and profit. ASU's cost estimate lists a separate 8%  
14   contractor profit on the estimated construction costs for the entire Carriage Estates  
15   project, which adds another \$72 bringing ASU's total concrete cost to at least  
16   \$972 per cubic yard.

17   **Q:    What do you recommend regarding the Carriage Estates WWTP expansion?**

1 A: I recommend the Commission deny Petitioner's request for approval of  
2 expenditures in excess of the pre-approved amount associated with the Carriage  
3 Estates Wastewater Treatment Plant expansion.

4 I also recommend that First Time Development Corporation and ASU  
5 keep records of all costs incurred during construction of the Carriage Estates  
6 expansion project for materials, labor, equipment, engineering, and project  
7 management.

#### **VIII. BIG 3 SEWER PROJECT**

8 **Q: What is Petitioner's Big 3 Sewer Project?**

9 A: As Petitioner represented in its request for approval under IC § 8-1-2-23, Cause  
10 No. 44272, Petitioner's Big 3 Sewer Project would consist of constructing a new  
11 gravity sewer main to convey wastewater flows to the County Home WWTP  
12 eliminating three lift stations, the three associated force mains, and the 2,400 feet  
13 long 10-inch gravity sewer along N CR 50 W. In that cause, its witness, Timothy  
14 A. Beyer, provided the following description of the Big 3 Sewer Project on page  
15 10 of his testimony:

16 The existing lift stations and old sewer are proposed to be replaced  
17 by approximately 11,500 feet of 12-inch and 18-inch PVC SDR-26  
18 sewer that begins at County Road 50 West and just west of the  
19 County Home Treatment Plant and runs southwesterly along Cole  
20 Ditch.

21 One of Mr. Beyer's exhibits in that cause (Exhibit TAB-3: Big 3 Sewer  
22 Construction Cost) gave more specific breakdown indicating Petitioner would  
23 install 1,462 feet of 12" PVC SDR-26 and 9,922 feet of 18" PVC SDR-26 sewer  
24 main.

1    **Q: Did Petitioner seek pre-approval of the Big 3 Sewer Project in Cause No.**  
2    **44272?**

3    A: Yes. In Cause No. 44272, Petitioner sought Commission approval of  
4    expenditures for construction of additions and improvements to its wastewater  
5    utility properties and confirmation that such approved improvements will be  
6    included in Petitioner's rate base in future rate cases once they have been placed  
7    in service. The Big 3 Sewer Project was one of four capital improvement projects  
8    included in Cause No. 44272.

9    **Q: Was Petitioner authorized relief under IC § 8-1-2-23 with respect to the Big 3**  
10   **Sewer Project?**

11   A: Yes. The OUCC and ASU entered into a Stipulation and Settlement Agreement  
12   authorizing up to \$2,100,000 to be included in rate base for construction costs not  
13   including costs for dewatering, easement acquisition, and engineering. In the  
14   final order in Cause No. 44272, the Commission approved ASU's request for  
15   approval of expenditures for the Big 3 Sewer Project "up to \$2,100,000." The  
16   Commission also stated that reasonable costs for dewatering, easement acquisition  
17   and other rate base additions will be addressed in the same manner as rate base  
18   additions that have not been pre-approved. In other words, Petitioner would have  
19   the "burden to demonstrate the excess was reasonable and was prudently  
20   incurred." Stipulation and Settlement Agreement Between ASU, Inc. and the  
21   OUCC, p. 3.

22   **Q: What cost for the Big 3 Sewer Project is Petitioner seeking to include in rate**  
23   **base?**

24   A: On pages 9 – 10 of his testimony in this Cause, Mr. Serowka indicated the Big 3  
25   Sewer Project was completed in August, 2015 at a total cost of \$3.5 million.



Petitioner proposes to include the entire amount of \$3.5 million in its Step I rate base. This exceeds the pre-approved amount by \$1.4 million. Petitioner's calculation of rate base, which includes the Big 3 Sewer Project, is located on Petitioner's Exhibit No. 2, pages 13-14.

**Q: What information did Petitioner provide to support the total cost of \$3.5 million for the Big 3 Project?**

A: In Attachment EJS-3, Petitioner provided a document titled "Proposal (or Bid)" prepared by ASU's affiliate, First Time Development Corporation dated January 13, 2014. The "Total for Proposal (Base Bid)" amount indicated in the document is \$3,499,226. This amount is identical to the preliminary cost estimate presented as Exhibit TAB-3 under Cause No. 44272.

**Q: Did Mr. Serwoka indicate in his testimony why the cost of the Big 3 Project exceeded the maximum pre-approved amount of \$2.1 million?**

A: Yes. On page 10 of his testimony, Mr. Serowka explained the cost difference relates to the two excluded items - easement acquisition and dewatering costs.

**Q: What information did Mr. Serowka provide to support the easement acquisition costs?**

A: On page 10 of his testimony, Mr. Serowka noted that the additional cost related to easement acquisition was \$173,691 (See Petitioner's Attachment EJS-4). Mr. Serowka attached a spreadsheet to his testimony indicating dollar figures for easements on approximately twelve (12) parcels. The spreadsheet indicates Petitioner paid the following costs associated with each easement, including: (1) permanent easement costs, (2) temporary easement costs, (3) appraisal costs, (4) final settlement costs, (5) legal costs, and (6) miscellaneous fees.

1    **Q: Did Mr. Serowka explain what “Final Settlement” costs Petitioner incurred**  
2    **while obtaining easements?**

3    A: No. Petitioner’s case-in-chief includes no explanation of the “Final Settlement”  
4    costs of \$75,645.

5    **Q: Do you agree some amount of easement acquisition costs would reasonably**  
6    **have been incurred?**

7    A: Yes. I agree that Petitioner would have incurred costs to obtain an appraisal,  
8    incurred legal costs, incurred miscellaneous fees, paid for a temporary easement  
9    and paid for the permanent easement. However, the “Final Settlement” costs of  
10   \$75,645 should not be included in rate base since there is no explanation of that  
11   cost. That category is in addition to temporary easement costs, permanent  
12   easement costs, appraisal costs, legal costs, and miscellaneous fees, all of which  
13   are being included in rate base.

14   **Q: What amount of easement acquisition costs should be included in rate base?**

15   A: Petitioner should be authorized to include \$98,046 (\$173,691- \$75,645) in rate  
16   base for easement acquisition costs, which includes all temporary easement costs,  
17   permanent easement costs, appraisal costs, legal costs, and miscellaneous fees  
18   Petitioner identified.

19   **Q: In this cause, does Petitioner state its Big 3 Sewer Project dewatering cost as**  
20   **a standalone amount?**

21   A: No. However, that amount may be deduced by the explanation Mr. Serowka  
22   offered on page 10 of his testimony regarding the \$1.4 million difference between  
23   the \$3.5 million and the \$2.1 million pre-approved amount may be attributed to  
24   easement acquisition and dewatering costs. Since Petitioner asserts easement  
25   acquisition costs total \$173,691, this means Petitioner seeks to include in rates

1 dewatering costs of approximately \$1.225 million.

2 **Q: Were dewatering cost expenditures associated with the Big 3 Project**  
3 **approved by the Commission in Cause No. 44272?**

4 A: No. For the Big 3 Project, only \$2.1 million in expenditures were approved and  
5 that amount explicitly excluded dewatering costs. As such, Petitioner has the  
6 burden to demonstrate dewatering costs were reasonable and were prudently  
7 incurred.

8 **Q: What support did Mr. Serowka offer to support the dewatering costs?**

9 A: On page 11 of his testimony, Mr. Serowka stated that First Time Development  
10 Corporation ("First Time" or "FTDC") obtained cost estimates from two sources  
11 to provide dewatering services, which were included in Attachment EJS-6, pages  
12 1 - 9. Those estimates were only for dewatering a 500 feet long sewer segment  
13 shown on Plan Sheet C111 and were from Patriot Pumps and Mersino  
14 Dewatering, Inc. ASU obtained dewatering proposals in mid July 2014 after  
15 construction was underway.

16 **Q: What were the cost estimates from Patriot Pumps and Mersino?**

17 A: On pages 11 – 12 of his testimony, Mr. Serowka stated that the "Mersino cost  
18 estimate would have been \$2,141,967.88 and the Patriot estimate would have  
19 been \$1,123,233.91."

20 **Q: Did Mersino and Patriot Pumps provide the cost estimates quoted by Mr.**  
21 **Serowka on pages 11 and 12 of his testimony?**

22 A: No. Mr. Serowka extrapolated certain cost figures in the Mersino and Patriot  
23 Pumps proposals to calculate theoretical cost estimates. On page 12 of his  
24 testimony, Mr. Serowka explained that the "two cost estimates were divided into a  
25 cost per foot and then applied to the total linear feet of required dewatering." His

1 calculations are set forth in Attachment EJS-7.

2 **Q: Is Mr. Serowka's methodology of calculating an estimated dewatering cost**  
3 **representative of the cost of dewatering the entire project?**

4 A: No. ASU received proposals for dewatering based on a line length of only 500  
5 feet, not the entire project of more than 12,000 feet. To receive accurate and valid  
6 cost estimates, First Time should have had Patriot Pumps and Mersino make a  
7 proposal, bid, or quote for the whole project (12,000 feet), not just 500 feet  
8 (1/24<sup>th</sup>) of the project. Mr. Serowka's method of extrapolating costs over-  
9 estimates the total dewatering costs. It is not appropriate to obtain a cost estimate  
10 for less than five percent of the project and assume that cost can be extrapolated  
11 to apply for the entire project.

12 **Q: Did First Time incur any costs using Patriot Pumps or Mersino to perform**  
13 **dewatering services?**

14 A: No. Neither First Time nor ASU used either contractor to perform any  
15 dewatering for the Big 3 Sewer Project. (See Attachment JTP-17, Responses to  
16 OUCC DR 4.32 and 11-27) Patriot Pumps and Mersino merely submitted  
17 proposals for dewatering a 500 feet segment of sewer for a one-month period,  
18 which Mr. Serwoka extrapolated to calculate what First Time's charge to ASU  
19 would have been had the dewatering been done using Patriot Pumps. There is no  
20 evidence that any of the costs Mr. Serowka used in his estimate were actually  
21 incurred by First Time. Unless it has been shown that First Time actually  
22 incurred the costs, Petitioner should not be allowed to include any of these costs  
23 in rate base.

24 **Q: Who performed the dewatering for the Big 3 Sewer Project?**

25 A: First Time performed dewatering.

1   **Q: Did First Time perform dewatering in the manner that Patriot Pumps or**  
2   **Mersino proposed for their estimate?**

3   A: No. Mr. Serowka indicated in his testimony that First Time did not perform the  
4   dewatering in the manner proposed by either Patriot Pumps or Mersino. On page  
5   12 of Mr. Serowka's testimony, he stated the following:

6               First Time did not drill wells that Patriot Pumps and Mersino  
7               Dewatering included in its quotes but instead ran its pumps to  
8               divert the water to ditches and ponds.

9   **Q: Why did ASU only request proposals for dewatering the 500 feet of sewer**  
10   **shown on Plan Sheet C111 from Patriot Pumps and Mersino?**

11   A: In response to OUCC Data Request No. 11-27 , ASU stated:

12               FTDC was doing the dewatering themselves so it was sent to  
13               Patriot and Mersino to determine if an outside agency could be  
14               more cost effective to dewater the next 500 feet.

15   Since ASU did not hire Patriot Pumps for dewatering, the OUCC concludes this  
16   means that Patriot's costs were not cost effective. Yet, ASU seeks to be allowed  
17   to include dewatering costs in rate base on the basis of the Patriot proposal.

18   **Q: What dewatering cost were actually incurred by First Time?**

19   A: The OUCC attempted to determine this without success. In Data Request No.  
20   4.31, the OUCC asked for documentation of actual costs. The OUCC asked  
21   Petitioner for documentation about the number and size of pumps used and the  
22   hours they were being operated:

23               Please provide documentation, including costs supporting FTDC's  
24               dewatering operation, which shows how many pumps were used  
25               for dewatering, the size of each pump, how each pump was  
26               powered (electric, gas, or diesel) and the total operation hours for  
27               each pump.

28   Petitioner provided the following response:

29               No actual records were maintained concerning the dewatering

1 equipment because this was an ongoing operation for the entire  
2 project with various size and type of pumps being utilized. Photos  
3 depicting the dewatering operation are attached.

4 **Q: Is it reasonable for First Time or Petitioner to not maintain records of the**  
5 **actual costs incurred for dewatering?**

6 A: No. First Time's costs for dewatering would have incurred labor costs, fuel costs,  
7 electrical costs, and rental equipment costs. Each of these costs would have  
8 generated a receipt for payment, invoice, payment of wages, or other  
9 documentation of the cost paid or incurred by First Time. Without this  
10 documentation, First Time's actual dewatering costs cannot be verified by the  
11 OUCC or Commission for consideration in this case.

12 **Q: Should Petitioner be allowed to include in rate base more than \$1.2 million in**  
13 **dewatering costs?**

14 A: No. Petitioner has failed to document any of the actual cost of dewatering  
15 incurred by First Time and therefore, the additional \$1.2 million dollars over the  
16 amount pre-approved should not be included in rate base. The Stipulation and  
17 Settlement Agreement between the OUCC and ASU reached in Cause No. 44272  
18 specifically stated that ASU "is seeking no relief at this time to the extent actual  
19 costs exceed [the \$2.1 million estimate for the Big 3 Sewer Project]." Stipulation and Settlement Agreement Between ASU, Inc. and the OUCC, p. 2-3.  
20 The Agreement further stated that "in order to include the excess in rate base for  
21 ratemaking purposes, Petitioner will have the burden to demonstrate the excess  
22 was reasonable and was prudently incurred." Id. p. 3. Petitioner has not  
23 demonstrated the "actual costs" or "excess" was actually incurred by First Time,  
24 or that such costs were reasonable or prudently incurred. Therefore, I recommend  
25

1 that no cost for dewatering be included in rate base.

2 Deviation from Common Construction Practices

3 **Q: Did Petitioner provide a copy of the executed construction contract between**  
4 **Petitioner and First Time for the Big 3 Sewer Project?**

5 A: No. According to Petitioner, no formal construction contract was executed for the  
6 Big 3 Sewer Project. Through OUCC Data Request 4.7, the OUCC asked for a  
7 copy of the executed construction contract between Petitioner and First Time for  
8 the Big 3 Sewer Project. (See Attachment JTP-18) Petitioner replied with the  
9 following:

10 No formal construction contract was executed between ASU and  
11 FTDC. FTDC Proposal dated January 13, 2014 was considered the  
12 construction contract by ASU. Refer to Cause No. 44676,  
13 Petitioner's Exhibit No. 1, Attachment EJS-3, Pages 3 through 6.

14 **Q: Is it common practice that a construction contractor would construct a**  
15 **major capital improvement project without a signed contract for**  
16 **construction services with the utility?**

17 A: No. Based on my more than 25 years of experience in consulting engineering  
18 and municipal wastewater utility service, it is common practice to have a signed  
19 contract for construction services.

20 **Q: Is there anything else unusual about First Time's "Proposal (or Bid)"**  
21 **document?**

22 A: Yes. Nowhere in the six-page document does it indicate that the proposal or bid  
23 from First Time is for the Big 3 Sewer Project. Nonetheless, as indicated in its  
24 response to OUCC DR 4.7, Petitioner regards the "FTDC Proposal dated January  
25 13, 2014" to be the construction contract with First Time for the Big 3 Sewer  
26 Project. (See Petitioner's Exhibit 1, Attachment EJS-3, pages 3 – 6.)

27 **Q: Did Petitioner obtain a construction permit for the Big 3 Sewer Project?**

1 A: Yes. On January 22, 2014, Petitioner received an IDEM construction permit  
2 (Approval No. 20892) for the Los Tres Grandes Sanitary Sewer Project (aka "Big  
3 3 Sewer Project") (See Attachment JTP-19). The construction permit indicated,  
4 however, the Big 3 Sewer Project would consist of larger diameter lines than what  
5 had been proposed in Cause No. 44272 and that no additional sanitary flow was  
6 associated with the project:

7 The proposed project shall consist of approximately 4,870 feet of  
8 21-inch diameter PVC ASTM F697 sanitary sewer pipe and  
9 approximately 7,219 feet of 15-inch diameter PVC SDR26 (ASTM  
10 D3034) which will allow for the removal of three existing lift  
11 stations along the referenced project location. There is no  
12 additional sanitary flow associated with this project. The proposed  
13 sanitary sewer will be connected to an existing 21-inch diameter  
14 sanitary sewer located approximately 100' east and 2,975' south of  
15 the intersection of County Road 600 North and County Road 50  
16 West in West Lafayette, Indiana.

17 (emphasis added.)

18 **Q: Did Petitioner receive an IDEM Construction Permit to install sewer mains**  
19 **that were different than what was pre-approved in Cause No. 44272?**

20 A: Yes. Petitioner installed sewer mains that were different in diameter than what  
21 was requested and approved in Cause No. 44272. Where Petitioner proposed to  
22 install 1,462 feet of 12" PVC SDR-26 and 9,922 feet of 18" PVC SDR-26 sewer  
23 main, Petitioner actually installed 4,870 feet of 21-inch diameter PVC ASTM  
24 F697 sanitary sewer pipe and approximately 7,219 feet of 15-inch diameter PVC  
25 SDR26 (ASTM D3034).

26 **Q: Did Petitioner explain why the mains installed were different than what had**  
27 **been proposed and preapproved?**

28 A: No. Petitioner's case-in-chief included no explanation for this change.



1   **Q: Did First Time or ASU perform leakage testing of the sewer segments and**  
2   **manholes, and deflection testing on the Big 3 Sewer Project as required by**  
3   **the IDEM construction permit?**

4   A: No. In response to OUCC Data Request Nos. 4-12, 11-14 and 11-15, Petitioner  
5   responded that the only testing on the Big 3 Sewer Project was televising by  
6   Accu-Dig. (See Attachment JTP-2)

7   **Q: What is your recommendation with respect to the Big 3 Project's inclusion in**  
8   **rate base?**

9   A: I recommend the Commission exclude Petitioner's excess expenditures for  
10   dewatering and unsupported easement acquisition costs. I recommend  
11   expenditures associated with the Big 3 Sewer Project be included in rate base in  
12   an amount not to exceed \$2,198,046.

#### **IX. KLONDIKE ROAD SEWER PROJECT**

13   **Q: Please describe the Klondike Road sewer project.**

14   A: The Klondike Road Sewer project is replacing a 51-year old 12-inch PVC truss  
15   pipe installed in the mid 1960s that is located on the east side of Klondike Road.  
16   The Tippecanoe County Highway Department is widening Klondike Road in  
17   2018, which is forcing ASU to relocate its sewer.

18   **Q: What was the project's extent as ASU proposed in Cause No. 44272?**

19   A: In his Direct Testimony (pages 4 and 5), Mr. Timothy Beyer stated the existing  
20   12-inch would be replaced by approximately 3,200 feet of larger diameter 15-inch  
21   PVC SDR-26 sewer pipe that would discharge to an existing 18-inch interceptor  
22   sewer. ASU had constructed the interceptor sewer in 2002 and had sized it to  
23   accept the flow from the 15-inch sewer. The replacement Klondike Road sewer is  
24   being placed lower in the ground in order to serve a larger tributary area with

1 gravity sewers. To withstand the higher earth load placed on the sewer due to  
2 increased depth of burial, ASU will install more costly, thicker walled PVC pipe  
3 (SDR-26).

4 **Q: What were ASU's estimated costs for the Klondike Road Sewer project and**  
5 **what amount was pre-approved under Cause No. 44272?**

6 A: In Exhibit TAB-1, ASU estimated the total project costs at \$1,008,441. The pre-  
7 approved amount was \$725,000, which did not include reasonable costs for  
8 dewatering, easements, and engineering.

9 **Q: What costs did ASU identify in its Case-in-Chief for the Klondike Road**  
10 **Sewer project?**

11 A: In his direct testimony (pages 13-14), Mr. Serowka stated the project was  
12 competitively bid and that ASU would be awarding construction to F&K  
13 Construction Inc. for \$1,716,000. F&K's cost does include dewatering.

14 **Q: F&K Construction's cost is almost \$1 million higher than the pre-approved**  
15 **amount of \$725,000. Did ASU explain why the costs were higher?**

16 A: No. ASU stated it has no choice but to do the work since the existing sewer must  
17 be relocated out of Klondike Road to make way for the road widening project.  
18 ASU offered no further explanation for the significant cost increase.

19 **Q: Did the OUCC research to find out why F&K's bid amount was so much**  
20 **higher than the preapproved amount?**

21 A: Yes. The OUCC noticed that the length of sewer pipe as listed on F&K's bid was  
22 5,327 feet, which exceeded the preapproved project length of 3,200 feet for the  
23 15-inch sewer. The sewer pipe as bid included 8-inch, 10-inch, 15-inch, and 18-  
24 inch sewers. I also reviewed the design drawings and determined that new sewers  
25 were on both sides of Klondike Road. Therefore, it appears that the sewer project  
26 increased in both length and scope.

1   **Q: Did ASU obtain a construction permit from IDEM for the Klondike Road**  
2   **Sewer project?**

3   A: ASU did not apply for or obtain a separate construction permit for the Klondike  
4   Road Project. For design and permitting purposes, ASU combined the Klondike  
5   Road and Cumberland Road Sewer projects into a single project. TBird Design  
6   Services Corporation completed the surveying and designs for both sections on  
7   February 27, 2015. Clem S. Kuns, PE is the design engineer for the combined  
8   project. IDEM issued the Construction permit on March 25, 2015 shown in  
9   Attachment JTP-20.<sup>18</sup> The total sewer length permitted by IDEM for the  
10   combined Klondike – Cumberland project is 9,329 feet consisting of 8-inch to 18-  
11   inch sewer pipe.

12   **Q: What is your recommendation regarding the Klondike Road Sewer project?**

13   A   The Klondike Road project will exceed in scope as well as cost the project as  
14   presented in Cause No. 44272. The project may not necessarily be considered the  
15   same project as what was pre-approved in that cause. Moreover, since the  
16   Klondike Road Project has not yet been completed, the OUCC would consider it  
17   premature for a finding that the project should be included in rate base. As such,  
18   the OUCC does not recommend any finding that any excess expenditures should  
19   be included in rate base.

## **X. RECOMMENDATIONS**

20   **Q: Please restate your recommendations.**

21   A: I make the following recommendations:

---

<sup>18</sup> Construction Permit Approval No. 21294 for the Klondike – Cumberland Sanitary Sewer project issued March 25, 2015 by the Indiana Department of Environmental Management.

1           1.     To the extent the Commission is considering pre-approval of any  
2 of ASU's excess expenditures in this phase, I recommend denial of such pre-  
3 approval.

4           2.     I recommend that the Commission order Petitioner to maintain an  
5 accurate Continuing Property Record system in accordance with generally  
6 accepted accounting practices.

7           3.     I recommend the Commission order ASU to improve upon the  
8 minimal levels of collection system maintenance and management through the  
9 formal development and implementation of an ongoing I&I reduction program to  
10 identify I&I sources and address those sources in a cost effective manner.

11          4.     I recommend the Commission deny Petitioner's request for  
12 approval of excess expenditures associated with the Carriage Estates Wastewater  
13 Treatment Plant Expansion as proposed in this case.

14          5.     I recommend the Commission deny Petitioner's request for pre-  
15 approval of excess expenditures associated with the Klondike Road Project and  
16 inclusion in rate base until such time as a the plant has been placed in service and  
17 Petitioner has demonstrated the excess expenditures were reasonable and prudent.

18          6.     I recommend that First Time Development Corporation and ASU  
19 keep records of all costs incurred during construction of the Carriage Estates  
20 expansion project for materials, labor, equipment, engineering, and project  
21 management.

22          7.     I recommend expenditures associated with the Big 3 Sewer Project  
23 be included in rate base in an amount of \$2,198,046.

No. OUCC 1-8

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Requested:**

Will the "Big 3 Sewer" Project take customers off of the Carriage Estate Plant and put them on the Country Home Plant?

- a. If so, how will it affect the capacity of the Carriage Estate plant?
- b. If so, how will it affect the capacity of the Country Home plant?

**Requested By:** Daniel M. LeVay, Office of Utility Consumer Counselor (OUCC)  
317-232-4294 – [dlevay@oucc.in.gov](mailto:dlevay@oucc.in.gov)

**Information Provided:**

ASU's Kimberly Estates and Big Oaks Lift Stations are to be removed from service and replaced with a gravity sewer line which will redirect the flow from the Carriage Estates II Wastewater Treatment Plant to the County Home Wastewater Treatment Plant.

At the present time, the wastewater flow from the Big Oaks subdivision flows into the Big Oak Lift Station. This flow is then pumped to the Kimberly Estates Lift Station which also collects the wastewater by gravity from the Kimberly Estates Subdivision and the Hadley Moor Subdivision. All these subdivisions consist of single family homes.

The following two (2) methods will be used to estimate the amount of flow that removal of these lift stations will redirect from the Carriage Estates Plant to the County Home Plant:

- a. Method 1 is to determine the amount of sewage per day from the Kimberly Estates Lift Station that is pumped to the Carriage Estates II Wastewater Treatment Plant.
- b. Method 2 is to determine the theoretical wastewater flow rate that can be expected from the Big Oaks, Kimberly Estates and Hadley Moor Subdivision.

No. OUCC 1-8

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Provided (Cont'd):**

**Method 1**

First, the actual running times for each lift station sewage pump for the months of March, April and May 2012 (Exhibit EJS-3 – OUCC Request 1 attached hereto), which typically are wet weather months, will be determine from the Kimberly Estates lift station control panel's elapsed time meters. The average run time for each pump is listed below:

| <u>Month</u>              | <u>Pump No.</u> | <u>Total Running<br/>Hours</u> | <u>Average Running<br/>Hours</u> |
|---------------------------|-----------------|--------------------------------|----------------------------------|
| March, 2012               | 1               | 146                            | 4.7                              |
| March, 2012               | 2               | 164                            | 5.3                              |
| April, 2012               | 1               | 104                            | 3.5                              |
| April, 2012               | 2               | 153                            | 5.1                              |
| May, 2012                 | 1               | 120                            | 3.7                              |
| May, 2012                 | 2               | 176                            | <u>5.7</u>                       |
| Total of Monthly Averages |                 |                                | 28.0                             |
| Three Month Average       |                 |                                | 9.3                              |

The Kimberly Estates Lift Station has two (2) Zoeller Model 6124 raw sewage pumps each complete with a 5 HP, 1750 RPM motor. Data on the Zoeller raw sewage pumps is provided in Exhibit EJS-4 – OUCC Request 1 attached hereto.

Estimating that the Zoeller pumps are discharging 180 GPM at a Total Dynamic Head of 38 feet, the approximate daily flow to the Carriage Estates II Wastewater Treatment Plant can be calculated as follows:

$$\begin{aligned}\text{Daily Flow Rate} &= 9.3 \text{ hours/day} \times 60 \text{ min./hr.} \times 180.0 \text{ GPM} \\ &= 100,440.0 \text{ GPD}\end{aligned}$$

No. OUCC 1-8

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Provided (Cont'd):**

**Method 2**

The second method is to determine the theoretical wastewater flow based on the total number of homes in the three subdivisions and using IDEM's standard estimate of 310 GPD of wastewater per single family home.

The number of single family homes in each subdivision is listed as follows and in Exhibit EJS-5 – OUCC Request 1 attached hereto.

| <b><u>Subdivision</u></b>                        | <b><u>Number of Single Family Homes</u></b> |
|--------------------------------------------------|---------------------------------------------|
| Big Oaks                                         | 26                                          |
| Kimberly Estates                                 | 150                                         |
| Hadley Moor                                      | <u>306</u>                                  |
| Total Number of Homes                            | 482                                         |
| Estimated Sewage Flow = 482 homes × 310 GPD/Home |                                             |
| = 149,420.0 GPD                                  |                                             |

Based on the above calculations, the "Big Three" Sewer Line Project can be estimated to reduce the flow to the Carriage Estates II Treatment Plant by approximately 100,000.0 GPD and increase the flow to the County Home II Wastewater Treatment Plant by the same amount.

The flow reduction of 100,000.0 GPD from the Carriage Estates II Wastewater Treatment Plant and the addition of this flow to the County Home II Plant will have minimal impact on either plant. This flow is only a ten percent (6.7%) reduction to CEIITP current average daily flow of 1.50 MGD and only a 1.5 percent (1.5%) reduction to the proposed CEIITP design average daily flow of 6.8 MGD.

In regard to the County Home II Treatment Plant, the available capacity is approximately 900,000.0 gallons/day and therefore the additional flow of 100,000.0 GPD is acceptable.

No. OUCC 1-8

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Attachments Provided:**

Exhibit EJS-3 – OUCC Request 1  
Exhibit EJS-4 – OUCC Request 1  
Exhibit EJS-5 – OUCC Request 1



No. OUCC 1-10

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Requested:**

Has the Petitioner considered any treatment plant designs other than the proposed plant design in this petition?

- a. If other plant designs were considered, what were the designs?
- b. Why were the designs rejected?

**Requested By:** Daniel M. LeVay, Office of Utility Consumer Counselor (OUCC)  
317-232-4294 – [dlevay@oucc.in.gov](mailto:dlevay@oucc.in.gov)

**Information Provided:**

ASU, as addressed in Questions Q9, Q10 and Q11 of Mr. Serowka's Direct Testimony in this Cause, did look at expanding the existing Carriage Estates II Plant by activating the fourth CSBR tank. This would have resulted in increasing the Average Daily Flow rating for the plant from 1.5 MGD to 2.0 MGD, and did include all of the recommendations requested by IDEM Enforcement Section. However, the IDEM Facility Construction and Engineering Support Section rejected the plans and specifications which ASU submitted and ASU had to withdraw them. This was clearly documented in Exhibit EJS-6 "Carriage Estates III Wastewater Treatment Plant Voided Construction Permit Application".

ASU then looked at expanding the Carriage Estates Plant by adding an additional four (4) CSBR tank system. Unfortunately, as stated in Mr. Serowka's testimony, IDEM changed its design criteria for CSBR and SBR systems which resulted in these types of systems no longer being cost effective.

The Carriage Estates II Plant has an effluent limit for ammonia-nitrogen as follows:

|                                       |                        |          |
|---------------------------------------|------------------------|----------|
| Ammonia-Nitrogen (NH <sub>3</sub> -N) | Summer Monthly Average | 1.3 mg/l |
|                                       | Summer Weekly Average  | 2.2 mg/l |
|                                       | Winter Monthly Average | 1.9 mg/l |
|                                       | Winter Weekly Average  | 2.9 mg/l |

MAYBE  
2.0

No. OUCC 1-10

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Provided (Cont'd):**

Based on meeting the Monthly Ammonia-Nitrogen effluent limits listed above, the Carriage Estates III Plant must be designed with ammonia-nitrogen as its main criteria. This then limits the design to an extended activated sludge system or a two-stage conventional/nitrification system. The two (2) stage activated sludge system would be considerably more expensive both in capital costs and operational costs. Therefore the only cost effective system was to convert the plant to extended aeration activated sludge which allowed for the reuse of all the existing structures and much of the existing equipment.

There were several in-depth meetings with ASU and the decision was straightforward based on the required effluent requirement, site constraints and the level of operational capability. It was not necessary to prepare a detailed cost analysis comparing various systems and equipment.

No. OUCC 4-3

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Requested:**

Please expand on the response to OUCC Data Request 1.10. In the response, it is stated that the new plant's main design criteria is ammonia-nitrogen. The current plant has met the ammonia-nitrogen limits for the past two years. Please explain why changing to an extended activated sludge system for ammonia-nitrogen removal is needed if the current CSBR plant is meeting the ammonia-nitrogen limit.

**Requested By:** Daniel M. LeVay, Office of Utility Consumer Counselor (OUCC)  
317-232-4294 – [dlevay@oucc.in.gov](mailto:dlevay@oucc.in.gov)

**Information Provided:**

Part of the ASU response to OUCC Data Request 1, Question Q.10, stated the following:

The Carriage Estates II Plant has an effluent limit for ammonia-nitrogen as follows:

|                                       |                        |          |
|---------------------------------------|------------------------|----------|
| Ammonia-Nitrogen (NH <sub>3</sub> -N) | Summer Monthly Average | 1.3 mg/l |
|                                       | Summer Weekly Average  | 2.2 mg/l |
|                                       | Winter Monthly Average | 1.9 mg/l |
|                                       | Winter Weekly Average  | 2.9 mg/l |

Based on meeting the Monthly Ammonia-Nitrogen effluent limits listed above, the Carriage Estates III Plant must be designed with ammonia-nitrogen as its main criteria. This then limits the design to an extended activated sludge system or a two-stage conventional/nitrification system. The two (2) stage activated sludge system would be considerably more expensive both in capital costs and operational costs. Therefore the only cost effective system was to convert the plant to extended aeration activated sludge which allowed for the reuse of all the existing structures and much of the existing equipment.

The important question facing ASU is not if the current Continuous Sequencing Batch Reactor (CSBR) is meeting the plant's permitted nitrogen-ammonia (NH<sub>3</sub>-N) limits which it is, but can the plant be increased to handle additional flow by expanding the existing CSBR system or is it necessary to convert to another activated sludge process. Once again as explained in Mr. Serowka's prefiled testimony answer to question 11, lines 19 thru 24, it stated that:

No. OUCC 4-3

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Provided (Cont'd):**

...if ASU expanded CEIITP using the CSBR activated sludge process, IDEM would require a spare aeration tank which would reduce the average design flow by 25.0 percent using the existing tankage and by 15.0 percent with the existing and new tankage. Therefore, ASU wanted to make full use of all its existing tankage and facilities in order to keep the construction costs as reasonable as possible."

Therefore, ASU had to look for an activated sludge process which would be able to use a single aeration basin for oxidation of ammonia and carbonaceous material. The design conditions associated with this activated sludge modification are presented in the table below:

| <u>Parameter</u>        | <u>Typical Value</u>                                                                                |
|-------------------------|-----------------------------------------------------------------------------------------------------|
| Temperature             | 86°F (30°C) or higher desired                                                                       |
| pH                      | 8.0-8.5                                                                                             |
| F/M Ratio               | 0.05 -0.15                                                                                          |
| Aeration Detention Time | 18-24 hours                                                                                         |
| Sludge Retention Time   | 20-30 days                                                                                          |
| MLSS                    | 3000 -6000 mg/L                                                                                     |
| Volumetric Loading      | 5-15 lb. BOD <sub>2</sub> /1000 ft <sup>3</sup><br>(0.08-0.24 kg BOD <sub>5</sub> /m <sup>3</sup> ) |
| Dissolved Oxygen        | 1-2 mg/L                                                                                            |

Therefore, the sludge retention time is especially important due to the relatively slow growth rate of the nitrifying organisms. Based on this criteria, we used Table 8-16 "Typical design parameters for commonly used activated-sludge process" (attached) from Page 747 of Metcalf & Eddy's "Wastewater Engineering Treatment and Reuse", Fourth Edition, to determine those activated sludge processes which have high sludge retention times (SRT) between 20-30 days. In reviewing attached Table 8-16 it can be clearly seen that the following activated sludge processes can meet the SRT criteria for nitrogen-ammonia removal. These processes are as follows:

No. OUCC 4-3

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Provided (Cont'd):**

- a. Extended Aeration
- b. Oxidation Ditch
- c. Batch Decant
- d. Sequencing Batch Reactor
- e. Countercurrent Aeration System (CCAS™)

Activated Sludge Process options c, d, and e would each require a spare aeration tank as required by current IDEM regulations. The oxidation ditch (option b) activated sludge process would require "oval type" aeration basins which means that the current aeration tank could not be reused. This then leaves option a, extended aeration, as the best and most cost effective activated sludge process to achieve the effluent limits required by the NPDES permit for ammonia-nitrogen in addition to expanding the plant's hydraulic capacity.

No. OUCC 5-8

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Requested:**

Please provide a list of manhole rehabilitations (cured in place spray lining, plugging, etc.) that ASU has undertaken in the past ten (10) years not listed on Data Request 1.11.

**Requested By:** Daniel M. LeVay, Office of Utility Consumer Counselor (OUCC)  
317-232-4294 -- [dlevay@oucc.in.gov](mailto:dlevay@oucc.in.gov)

**Information Provided:**

American Suburban Utilities does not track manhole repairs. ASU inspects 3 manholes a day and repairs as needed.

No. OUCC 6-11

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Requested:**

How many of the 3,000 to 3,500 additional housing units mentioned on page 13 of Mr. Serowka's testimony are expected to be serviced by the County Home plant?

**Requested By:** Daniel M. LeVay, Office of Utility Consumer Counselor (OUCC)  
317-232-2494 – [dlevay@oucc.in.gov](mailto:dlevay@oucc.in.gov)

**Information Provided:**

All 3,000 to 3,500 additional housing units are considered to be installed on the ASU collection system which is served by the Carriage Estates II Wastewater Treatment Plant.

OUCC DR 04-001

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide a copy of the last cost of service study completed for ASU's wastewater utility.

**Information Provided:**

The last cost of service study was completed in conjunction with the settlement agreement in ASU's last rate case, Cause No. 41254. It can be found at page 14 of the the schedules presented in support of the settlement reached by ASU and the OUCC in that Cause (copy attached). As noted in the settlement agreement, the cost of service study utilized theoretical flows set forth in State Board of Health Bulletin SE13, and a copy of those theoretical flows is also provided herewith.

**Attachments:**

OUCC DR 4-1 Attachment A.pdf

OUCC DR 4-1 Attachment B.pdf



OUCC DR 04-002

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

For any fines imposed or paid during the test year, please state the date the fine was issued, the entity imposing the fine, the reason for the fine, the amount of the fine, the amount paid and the date of payment.

**Information Provided:**

September 22, 2014, under Agreed Order Case No. 2014-21924-W; imposed by Indiana Department of Environmental Management for the discharge of treated wastewater with oxygen levels below permitted levels which resulted in a minor fish kill in Indian Creek; a Civil Penalty of \$34,500 and IDNR Damage Penalty of \$809.91 were imposed. Payment amounts and dates of payment were:

| <u>To</u> | <u>Amount</u> | <u>Check #</u> | <u>Check Date</u> |
|-----------|---------------|----------------|-------------------|
| IDEM      | \$8,625.00    | 16249          | 1-October-14      |
| IDNR      | \$809.91      | 16354          | 23-October-14     |
| IDEM      | \$8,625.00    | 16520          | 13-January-15     |
| IDEM      | \$8,625.00    | 16778          | 28-April-15       |
| IDEM      | \$8,625.00    | 16986          | 16-July-15        |

OUCC DR 04-003

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

How does ASU determine the volumes for its volumetric customers (multi-family and commercial)?

**Information Provided:**

The volumes for volumetric customers are obtained from Indiana-American Water Company meter reads which they send to ASU.

OUCC DR 04-004

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Regarding the Big-3 Sewer Project's construction cost estimate, please provide the following:

- a. Please state whether any other construction cost estimates other than the construction cost estimate prepared by HWC Engineering, dated 1/17/14, were prepared by or on behalf of ASU, based on the final design documents prepared by TBIRD. If so, please state who prepared the construction cost estimates, the date of the design documents upon which the cost estimates are based, submit the estimates, and state what supporting documents were provided by or on behalf of ASU to the cost estimators.
- b. Please state assumptions, if any, that ASU required HWC Engineering and other estimators to use in preparation of their cost estimates. If no assumptions were communicated by or on behalf of ASU to the cost estimators, so state.
- c. Was the Geotechnical Report, prepared by Patriot Engineering & Environmental, Inc., dated August 20, 2013, submitted to HWC Engineering or any other cost estimator of the Big-3 Sewer Project? If not, why not? Please explain.
- d. Please provide copies of all correspondence with and invoices from HWC Engineering regarding the Big-3 Sewer Project.
- e. Please state whether HWC Engineering recommended or suggested any design changes to improve the Big-3 Sewer Project or reduce the construction costs.

**Information Provided:**

- a.
  - i. Mr. Timothy A. Beyer, P.E., L.S.
  - ii. Plans prepared by TBird Design Services Corporation.
  - iii. Refer to Petitioner's Exhibit TAB, Direct Testimony of Timothy A. Beyer, Exhibit TAB-3: Big 3 Sewer Summary and Big 3 Sewer Construction Cost for IURC Cause No. 44272.
  - iv. Construction Plans for Los Tres Grandes Sewer System prepared by TBird Design Services Corporation. (OUCC DR 4-4 Attachments A and B)

- v. Mr. Beyer was a sub-contracted engineer for ASU working with TBird on the design of the sewer and had access to all of their engineering documents and data.
- b. No assumptions were communicated.
- c. ASU believes it provided this information to HWC but does not have documentation.
- d. See OUCC DR 4-4(d).pdf, which includes:
  - i. Los Tres Grandes HWC Engineering Construction Estimate Proposal dated December 18, 2013.
  - ii. Copy of ASU email dated December 20, 2013 to Mr. Dick Weigel of HWC Engineering with the attached signed contract.
- e. No.

**Attachments:**

OUCC DR 4-4 Attachment A.pdf  
OUCC DR 4-4 Attachment B.pdf  
OUCC DR 4-4(d).pdf

OUCC DR 04-005

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please submit a copy of the Big-3 Sewer Project Contract Documents that was provided to First Time Development Corporation (FTDC) for use in preparing its' proposal. The Contract Documents should list the project and proposal requirements, including but not limited to the proposal form listing the base bid and contract items requiring unit prices, design drawings, specifications, special conditions, addenda, if any, insurance requirements, wage requirements, bond requirements, payment requirements, and schedule.

**Information Provided:**

The Contract Documents consist of the Construction Plans provided in response to OUCC DR 4-4(a) and the Proposal (or Bid 1 Form) referenced in response to OUCC DR 4-7.

OUCC DR 04-006

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Regarding FTDC's proposal for the Big-3 Sewer Project, please provide the following:

- a. FTDC's complete proposal, including any exceptions taken by FTDC;
- b. FTDC's Schedule of Values;
- c. FTDC's proposed construction schedule.

**Information Provided:**

- a. See response to OUCC DR 4-7 for Proposal (Bid) Form.
- b. Attached.
- c. See response to OUCC DR 4-7 for Proposal (Bid) Form.

**Attachments:**

OUCC DR 4-6(b).pdf

OUCC DR 04-007

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide a copy of the executed construction contract between ASU and FTDC for the Big-3 Sewer Project.

**Information Provided:**

No formal construction contract was executed between ASU and FTDC. FTDC Proposal dated January 13, 2014 was considered the construction contract by ASU. Refer to Cause No. 44676, Petitioner's Exhibit No. 1, Attachment EJS-3, Pages 3 through 6.

OUCC DR 04-008

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide a copy of the Notice to Proceed to FTDC for the Big-3 Sewer Project.

**Information Provided:**

There was no Notice to Proceed issued for this project.



OUCC DR 04-009

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state who provided construction engineering, construction inspection and testing services for the Big-3 Sewer Project and what firms they worked for. If third parties provided construction engineering, construction inspection and testing services, please provide copies of the invoices paid by ASU for such services.

**Information Provided:**

Construction Engineering and Inspection:  
Keith O'Brian  
TBird Design Service Corporation  
105 N. 10<sup>th</sup> Street  
Lafayette, IN 47901  
TEL: (765) 479-0847 Cell  
(765) 742-1900 Office

Testing Services:  
Accu-Dig  
4844 East 150 South  
Monticello, IN 47960  
TEL: (574) 583-4814

Invoices for TBird and Accu-Dig are attached.

**Attachments:**

OUCC DR 4-9.pdf

OUCC DR 04-010

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide copies of the Shop Drawing submittals made by FTDC.

**Information Provided:**

Only Shop Drawings for manhole structures (copies attached) were submitted.

**Attachments:**

OUCC DR 4-10.pdf

OUCC DR 04-011

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide copies of the daily reports for the Big-3 Sewer Project prepared by the construction inspector. If no such reports were made, so state.

**Information Provided:**

Construction inspections were not performed daily.

OUCC DR 04-012

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide copies of the testing reports completed for the Big-3 Sewer Project.

**Information Provided:**

Refer to the Response to OUCC DR 4-31 regarding dewatering.  
Copies of TV inspection reports from Accu Dig are attached.

**Attachments:**

OUCC DR 4-12.pdf

OUCC DR 04-013

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state if Mr. Lods spent time on the Big-3 Sewer Project in his capacity as President of FTDC. Please state the amount of time that was charged to the project.

**Information Provided:**

Mr. Lods spent very little time on the Big 3 jobsite. His time on the job was not tracked.

OUCC DR 04-014

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please describe the process used by ASU to make progress payments to FTDC for work completed on the Big-3 Sewer Project.

**Information Provided:**

FTDC would bill ASU when cash was needed to keep construction proceeding.

OUCC DR 04-015

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide all partial payment invoices from FTDC for the Big-3 Sewer Project along with documentation from FTDC supporting the invoices.

**Information Provided:**

See attached progress billing.

**Attachments:**

OUCC DR 4-15.pdf

OUCC DR 04-016

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide the actual construction schedule for the Big-3 Sewer Project including the dates for the Notice to Proceed, Substantial Completion, and Final Completion and the total number of days worked.

**Information Provided:**

Actual construction began in April 2014 with Substantial Completion in August 2015. There is no Final Completion date. There is no record of days worked.



OUCC DR 04-017

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state the total number of weather delay dates when no work was performed by FTDC on the Big-3 Sewer Project.

**Information Provided:**

No records of weather delays were maintained.

OUCC DR 04-018

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

In his direct testimony, Edward J. Serowka states on page 10 that the Big-3 Sewer Project was completed and placed in service in August 2015. Please state the date when site clearing began, the date when trench excavation began, the date in August 2015 when the Big-3 Sewer was substantially complete (beneficial use by ASU), and the date of Final Completion.

**Information Provided:**

Site clearing began February 2014; trench excavation started April 2014; Substantial Completion Date was August 3, 2015; no Final Completion date yet.

OUCC DR 04-019

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state if all punch list items for the Big-3 Sewer Project have been completed by FTDC.

**Information Provided:**

No.

OUCC DR 04-020

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide a copy of the field mark-up of design drawings maintained by the construction inspector or the Record Drawings if they have been finished, showing the changes made in the field to the Big-3 Sewer Project.

**Information Provided:**

There is no "field mark-up" of design drawings or record drawings available.

OUCC DR 04-021

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide copies of paid invoices for sewer pipe supporting the length, diameter, and type of sewer materials installed.

**Information Provided:**

See attached.

**Attachments:**

OUCC DR 4-21.pdf

OUCC DR 04-022

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide copies of paid invoices for manholes supporting the number, depth, diameter, and type of manholes installed.

**Information Provided:**

See attached.

**Attachments:**

OUCC DR 4-22.pdf

OUCC DR 04-023

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide all Requests for Clarification from FTDC to the design firm, TBIRD, or to the owner, ASU and the responses back to FTDC. If no Requests for Clarifications were made by FTDC, so state.

**Information Provided:**

No Requests for Clarification were made.

OUCC DR 04-024

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide copies of Change Orders requested for the Big-3 Sewer Project from either FTDC or ASU.

**Information Provided:**

There were no change orders.



OUCC DR 04-025

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide copies of approved Change Orders for the Big-3 Sewer Project.

**Information Provided:**

No change orders were received or approved.

OUCC DR 04-026

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

On what day was the Hawthorne Ridge Lift Station taken out of service and wastewater flows from customers served by the Hawthorne Ridge Lift Station routed to the Big-3 Sewer?

**Information Provided:**

Taken out of service September 4, 2015.

OUCC DR 04-027

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

On what day was the Big Oaks Lift Station taken out of service and wastewater flows routed to the Big-3 Sewer?

**Information Provided:**

Taken out of service August 3, 2015.

OUCC DR 04-028

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Has the Big Oaks Lift Station been removed? If not, what is the planned date for completion of removal and site restoration?

**Information Provided:**

No. Date for completion of removal and site restoration is yet to be determined.

OUCC DR 04-029

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

On what day was the Kimberley Estates Lift Station taken out of service and wastewater flows routed to the Big-3 Sewer?

**Information Provided:**

The station was tied into the Big-3 Sewer line on August 28, 2015. Actual flow to the County Home W.W.T.P. commenced on November 16, 2015.

OUCC DR 04-030

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Has the Kimberley Estates Lift Station been removed? If not, what is the planned date for completion of removal and site restoration?

**Information Provided:**

No. Date for completion of removal and site restoration is yet to be determined.

OUCC DR 04-035

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please confirm that the Big-3 Sewer Project and the Los Tres Grandes Sanitary Sewer refer to the same project.

**Information Provided:**

Yes.

OUCC DR 04-036

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state when ASU began routing wastewater through the sequencing batch reactors at the County Home Wastewater Treatment Plant.

**Information Provided:**

January 21, 2015



OUCC DR 04-037

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state when ASU began disinfecting wastewater at the County Home Wastewater Treatment Plant through the UV disinfection system.

**Information Provided:**

January 21, 2015

OUCC DR 04-038

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state whether the 0.100 MGD County Home Wastewater Treatment Plant continues to provide wastewater treatment or has been converted to aerobic sludge digestion.

**Information Provided:**

The 0.100 MGD County Home Wastewater Treatment Plant is still treating sewage.

OUCC DR 04-039

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

In his direct testimony under Cause 44272, Timothy A. Beyer stated the purpose of the Big-3 Sewer Project was to replace three 40-year old existing lift stations and an existing 40-year old 10-inch sewer approximately 2,400 feet in length located along County Road 50 West (Beyer, page 10). Please provide a drawing showing the specific location of this 10-inch sewer, identify the areas served by the sewer, and state whether the 10-inch sewer remains in service.

**Information Provided:**

See attached. The 10-inch sewer remains in service.

**Attachments:**

OUCC DR 4-39.pdf

OUCC DR 04-040

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Regarding planning for the Big-3 Sewer Project prior to 2013, please provide the following:

- a. Planning or engineering parameters, prepared by or on behalf of ASU, setting objectives and/or design criteria for the Big-3 Sewer Project.
- b. Preliminary drawings or layouts, if any, prepared by or on behalf of ASU.
- c. ASU's policy for eliminating lift stations.
- d. Alternatives, evaluated by or on behalf of ASU, for replacing the Big Oaks, Kimberley Estates, and Hawthorne Ridge Lift Stations, and the 2,400 ft. long 10-inch sewer along N CR 50 West. If no alternatives other than the Big-3 Sewer Project were evaluated, so state.
- e. Alternatives evaluated for the sizing, route, and depth of the Big-3 Sewer Project.
- f. Preliminary cost estimates, prepared by or on behalf of ASU, for the alternatives identified above. If no cost estimates for alternatives were prepared, so state.

**Information Provided:**

- a. The parameters for the Big-3 Sewer Project were to remove three existing lift stations from service by providing a positive gravity sewer outlet.
- b. See attached (OUCC DR 4-40.pdf). Several preliminary drawings were prepared throughout the duration of the project. The plans themselves underwent several modifications throughout the project design for optimization.
- c. ASU's policy is to eliminate lift stations when economically possible.
- d. Drawings were prepared to evaluate whether the Kimberly Estates and Big Oaks lift stations could be removed by shorter gravity lines from the south (see attachment to subpart (b)). There were no known alternatives for replacing the Hawthorne Ridge lift station.
- e. Topography and property configuration were determining factors in the route established. Other routes that were evaluated resulted in deeper sewer and/or additional land acquisition.
- f. None.

**Attachments:**  
OUCC DR 4-40.pdf

OUCC DR 04-041

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In his direct testimony under Cause 44272, Mr. Beyer stated the total estimated cost of the Big-3 Sewer Project was \$4,143,176 (page 11) as shown on Exhibit TAB-3 Big 3 Sewer Summary (one page). He included in Exhibit TAB-3 a Big 3 Sewer Construction Cost (one page) showing \$3,499,266 of estimated costs for construction only. Please indicate who prepared the Summary and Construction Cost shown in Exhibit TAB-3.

**Information Provided:**

It was a combined effort between Scott Lods, Timothy A. Beyer, P.E. & L.S., and Eric Burns.

OUCC DR 04-042

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please submit the project information (such as a study, engineering report, layouts, flow calculations, design drawings, specifications, etc.), prepared by or on behalf of ASU, that was provided to the person or firm identified by ASU above for use in preparing the Big 3 Sewer Summary and the Big 3 Sewer Construction Cost shown in Exhibit TAB-3.

**Information Provided:**

See responses to OUCC DR 4-40(b) and 4-43(d).

OUCC DR 04-043

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Regarding the Big-3 Sewer Project design, please provide the following:

- a. Design proposal from TBIRD Design Services Corporation (TBIRD).
- b. Copies of invoices from TBIRD for planning and design including the invoice from Patriot Engineering & Environmental, Inc. for the Geotechnical Report.
- c. Map of the service area to be served by the Big-3 Sewer.
- d. Design basis for the sewer slopes used by TBIRD.
- e. Design flows allocated for the Big Oaks, Kimberley Estates, and Hawthorne Ridge Lift Stations.
- f. Design flows allocated from new lift stations and new gravity sewers from currently proposed developments or future developments. If future flows were not considered in the Big-3 Sewer Project design, so state.
- g. Flow calculations used to size the sewer segments. Please indicate who prepared these flow calculations. If no flow calculations were made, please explain.
- h. Estimated construction cost prepared by TBIRD based on the final design. If TBIRD did not prepare a construction cost estimate, so state.

**Information Provided:**

- a. TBIRD Design Service Corporation did not prepare a design proposal.
- b. See attached and attachment to OUCC DR 4-9.
- c. See attached.
- d. See attached.
- e. Big Oaks and Kimberly Estates = 150,000 gal/day; Hawthorne = 10,000 gal/day
- f. See response to (d) above.
- g. TBIRD prepared an estimated future service area map (attached in response to subpart (d)) and an approximate number of EDU's served. The line sizing was based on these estimates and the existing receiving infrastructure.
- h. TBIRD did not prepare a cost estimate.

**Attachments:**

Attachment to OUCC DR 4-43(b).pdf  
Attachment to OUCC DR 4-43(c).pdf  
Attachment to OUCC DR 4-43(d).pdf



OUCC DR 05-001

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state the total feet of sanitary sewers in ASU's collection system.

**Information Provided:**

266,017.0 feet as of November 24, 2015.

OUCC DR 05-002

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state the total feet of sanitary sewers in ASU's collection system by diameter and pipe type.

**Information Provided:**

| <u>Size, Inches</u> | <u>Length, Feet (All PVC)</u> |
|---------------------|-------------------------------|
| 6                   | 1,289.0                       |
| 8                   | 151,010.5                     |
| 10                  | 33,105.5                      |
| 12                  | 26,798.0                      |
| 14                  | 7,562.5                       |
| 15                  | 16,350.5                      |
| 18                  | 10,600.5                      |
| 21                  | 12,835.0                      |
| 24                  | 453.0                         |
| 27                  | 3,600.0                       |
| 30                  | <u>2,412.5</u>                |
| TOTAL:              | 266,017.0                     |

OUCG DR 05-003

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In his direct testimony under Cause No. 44272, Mr. Serowka discussed reduction of infiltration and inflow on pages 16 and 17, and stated on page 17, lines 5-6, that "it is necessary to treat a reasonable level of I&I at the CEIITP." Please state what portion of the 4.0 mgd design average flow for the CE WWTP was allocated by Mr. Serowka or ASU for infiltration and inflow.

**Information Provided:**

Carriage Estates III Wastewater Treatment Plant Influent Design Criteria:

|                                  |         |
|----------------------------------|---------|
| Average Daily Design Flow (ADF): | 4.0 MGD |
| Peak Dry Weather Flow (PDWF)     | 6.0 MGD |
| Peak Wet Weather Flow (PWWF)*    | 8.0 MGD |

\*Based on a 100 year storm event.

OUCC DR 05-004

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In his direct testimony under Cause No. 44272, Mr. Serowka stated on page 15, lines 17 - 18, that "ASU feels that the expanded CEIITP will be capable of handling the 100 year storm event without bypassing." Please state the flow in million gallons per day (mgd) allocated by Mr. Serowka or ASU for the 100 year storm event in the design flows for the Carriage Estates Wastewater Treatment Plant (CE WWTP).

**Information Provided:**

See response to OUCC DR 5-3.

OUCC DR 05-005

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Does ASU conduct smoke testing of its sewers to locate inflow sources? If so, please indicate how many feet of sewer were smoke tested in 2013, 2014, and 2015 to date. If no smoke testing was done over the 2013 – 2015 time period, so state.

**Information Provided:**

No smoke testing was done 2013-2015.

OUCC DR 05-006

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state the year smoke testing of the collection system was last conducted by or on behalf of ASU, and indicate who conducted the smoke testing and where the smoke testing occurred.

**Information Provided:**

ASU smoke tested Woodmar Court in 1999-2000. Records could not be located.

OUCC DR 05-007

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Does ASU still own and operate sewer televising equipment?

**Information Provided:**

No.

OUCC DR 05-008

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Does ASU conduct annual sewer televising of existing sewer segments? If so, please state how many feet of existing sewers were televised in 2013, 2014, and 2015 to date.

**Information Provided:**

ASU subcontracts this service.

2013 – 6,089 feet

2014 – 2,513 feet

2015 – 1,988 feet



OUCC DR 05-009

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Does ASU staff perform the televising of existing sewers and new sewers installed by developers? If so, please identify the ASU employee(s) who televise the sewers.

**Information Provided:**

No.

OUCC DR 05-010

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Is sewer televising done by another firm? If so, please state the name of the outside firm and whether the outside firm is an affiliated company.

**Information Provided:**

- a. Televising of existing sewer lines are done by First Time Development which is an affiliated company.
- b. Televising of new sewer lines is done by companies hired by the site developer/contractor which are not affiliated with ASU.

OUCC DR 05-011

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please explain how ASU determines which existing sewers to televise each year, and describe how ASU tracks the progress of the sewer televising program.

**Information Provided:**

ASU does not establish a firm schedule of lines to be inspected. Factors considered when determining which lines to televise include the age and whether any problems have been identified with respect to the lines. Due to the relatively small size of its utility, ASU tries to reduce paperwork, which keeps office staffing levels at a minimum. Any issues are discussed at ASU's weekly Monday morning meeting.

OUCC DR 05-012

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state how long it takes (in years) for ASU's sewer televising program to televise all sewers within ASU's collection system.

**Information Provided:**

7.0 years based on 15% of sewers televised per year.

OUCG DR 05-013

DATA INFORMATION REQUEST  
American Suburban Utilities, Inc.

Cause No. 44676

**Information Requested:**

Please state whether ASU has completed its sewer televising for 2015.

**Information Provided:**

No, it has not.

OUCC DR 05-014

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Has ASU identified the sewer segments to be televised for 2016? If so, please provide a map or drawing showing which segments are included in the 2016 sewer televising plan.

**Information Provided:**

The only sewer segments that ASU is considering televising in 2016 are the two (2) listed in response to OUCC DR 5-15.

Refer to attached maps.

Map 6 shows the Woodmar Court Sewer Line.

Map 8 shows the Cavalry Court Sewer Line.

**Attachments:**

Attachment Q 5.14.pdf

OUCC DR 05-015

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state whether ASU has identified any existing sewer segments (not new development sewers) that ASU feels requires increased televising frequency and inspections due to the condition of the sewers, the type of sewer pipe, past problems, or increasing levels of infiltration and inflow. If so, please identify those existing sewer segments targeted for increased televising and inspections. Please also indicate the shortened time intervals between televising.

**Information Provided:**

The Woodmar Court 8" clay sewer Line and the Cavalry Court 8" clay sewer line. ASU has scheduled these two (2) sewer lines for televising at a minimum of every 6 months.

OUCG DR 05-016

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide a map showing those existing sewer segments (not new development sewers) televised by or on behalf of ASU in 2013, 2014, and 2015 to date.

**Information Provided:**

Refer to the following attached maps.

1. Map 3 shows the Candlelight Mobile Home Park sewer lines and the Blackthorne sewer system location.
2. Map 5 shows the Wake Robin Phase 3 sewer system location.
3. Map 6 shows the Woodmar Court sewer line.
4. Map 7 shows the Klondike Road sewer line.
5. Map 14 shows the Hawthorne Ridge sewer line.

**Attachments:**

Attachment Q 5.16.pdf



OUCC DR 05-017

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Does ASU conduct sewer televising of new sewers installed by developers before they are accepted by ASU? If so, please state how many feet of new sewers were televised in 2013, 2014, and 2015 to date.

**Information Provided:**

No.

OUCC DR 05-018

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please describe the sewer televising procedures used by or on behalf of ASU including whether the sewers are cleaned before televising, the rating system, if any, ASU uses to characterize and rank defects, how ASU prioritizes which defects are repaired, and how the sewer segment is assessed during follow-up after ASU has completed repairs.

**Information Provided:**

- a. Whether the sewer line is “jetted” before televising will depend on the condition of the sewer. If the sewer is blocked, then it will be “jetted” prior to televising. If the sewer line is not blocked/plugged, then it might or might not be “jetted” prior to televising depending on what the problem might be.
- b. ASU does not characterize or rank defects.
- c. ASU prioritizes when defects are repaired, not whether they are repaired. If the defect is determined to be critical, it is immediately repaired. If the problem is a root, then the root will be chemically treated and if required, retreated or cut out. How often the sewer is rechecked depends on several factors such as the size and location of the root or other blockage. The sewer stays in ASU’s preventive maintenance list until it is determined that the problem has been successfully resolved.

OUCC DR 05-019

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state whether ASU retains and archives videotapes or other recordings documenting sewer conditions found during televising.

**Information Provided:**

ASU attempts to archive most video computer discs for the sewer lines which are televised.

OUCC DR 05-020

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Does ASU have a program to inform and educate ASU's customers that sump pumps, area drains, foundation drains, and connection of downspouts to ASU's collection system are prohibited? If so, please provide supporting documentation of the information and education materials referenced above.

**Information Provided:**

No.

OUCC DR 05-021

**DATA INFORMATION REQUEST**

**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In an 11/30/11 letter to IDEM, on page 3, Petitioner showed that for September 2010 to January 2011 and August 2011, the daily flow for the Carriage Estates Treatment Plant (CETP) averaged 1.14756 MGD and stated: "Therefore, the treatment plant is operating at 76.5 percent of design average daily flow rate of 1.5 MGD." The annual average raw sewage influent flows for 2013 and 2014 were 1.41 mgd and 1.80 mgd respectively. Please explain what has occurred since August 2011 to cause the CETP to reach 94 percent and 120 percent of the design average flow capacity of 1.50 mgd in 2013 and 2014 respectively.

**Information Provided:**

These flows are a result of increased development within ASU's franchise area.

- a. Refer to ASU Response to OUCC Data Request 1-7 dated January 28, 2013 for Cause No. 44272, a copy of which is attached (attachments thereto omitted).
- b. The following is the 2013 and 2014 Hydraulic Flow Data for the Carriage Estates II W.W.T.P. in which the average daily flow of 2013 was 1.56 MGD or 104.0% higher and for 2014 the flow was 1.84 MGD or 123.0% higher.

**2013 HYDRAULIC FLOW**

| <u>MONTH/YEAR</u> | <u>EFFLUENT (MGD)</u> |                |
|-------------------|-----------------------|----------------|
|                   | <u>AVERAGE</u>        | <u>MAXIMUM</u> |
| January, 2013     | 1.23                  | 2.42           |
| February, 2013    | 1.23                  | 1.94           |
| March, 2013       | 1.87                  | 2.80           |
| April, 2013       | 2.22                  | 4.00           |
| May, 2013         | 1.65                  | 2.71           |
| June, 2013        | 2.00                  | 2.70           |
| July, 2013        | 1.74                  | 2.58           |
| August, 2013      | 1.57                  | 2.14           |
| September, 2013   | 1.57                  | 1.90           |
| October, 2013     | 1.39                  | 1.68           |
| November, 2013    | 1.11                  | 1.34           |
| December, 2013    | <u>1.18</u>           | <u>2.40</u>    |

|              |       |       |
|--------------|-------|-------|
| TOTAL 2013   | 18.76 | 28.61 |
| 2013 AVERAGE | 1.56  | 2.38  |

**2014 HYDRAULIC FLOW**

| <u>MONTH/YEAR</u> | <u>EFFLUENT (MGD)</u> |                |
|-------------------|-----------------------|----------------|
|                   | <u>AVERAGE</u>        | <u>MAXIMUM</u> |
| January, 2014     | 1.36                  | 2.10           |
| February, 2014    | 1.62                  | 3.60           |
| March, 2014       | 1.69                  | 2.25           |
| April, 2014       | 1.82                  | 3.93           |
| May, 2014         | 2.06                  | 3.15           |
| June, 2014        | 1.69                  | 2.22           |
| July, 2014        | 1.41                  | 1.78           |
| August, 2014      | 1.77                  | 2.88           |
| September, 2014   | 2.16                  | 2.92           |
| October, 2014     | 2.22                  | 2.94           |
| November, 2014    | 2.40                  | 1.86           |
| December, 2014    | <u>1.84</u>           | <u>2.25</u>    |
| TOTAL 2014        | 22.04                 | 31.88          |
| 2014 AVERAGE      | 1.84                  | 2.66           |

**Attachments:**

Attachment Q 5.21.pdf

OUCC DR 05-022

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide a list of projects that were undertaken in 2013, 2014, and 2015 to date to remove infiltration and inflow, the quantity of I&I removed, and the associated project costs.

- a. 2013 I&I Projects list, I&I removed (gallons per day) and the cost of each project.
- b. 2014 I&I Projects list, I&I removed (gallons per day) and the cost of each project.
- c. 2015 I&I Projects list, I&I removed (gallons per day) and the cost of each project.

**Information Provided:**

- a. None
- b. None
- c. None

OUCC DR 05-023

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

How many sanitary sewer overflows (SSOs) occurred in ASU's collection system from Jan. 1, 2009 to 2015 to date? Please also indicate the cause(s) of the SSOs.

**Information Provided:**

To the best of our knowledge, the following are the Sanitary Sewer Overflows (SSOs) in ASU's collection system from January 1, 2009 to September 30, 2015.

1. 2015 Sanitary Sewer Overflows (SSOs)

Carriage Estates Collection System

July 12, 2015 Manhole in Hadley Moore subdivision due to a power failure of the Kimberly Lift Station.

July 15, 2015 Manhole in Big Oaks subdivision due to a power failure of the Big Oaks Lift Station.

July 15, 2015 Manhole in Kimberly Estates subdivision due to a power failure of both the Big Oaks and Kimberly Estates Lift Station

County Home Collection System

No Sanitary Sewer Overflows (SSOs)

2. 2014 Sanitary Sewer Overflows (SSOs)

Carriage Estates Collection System

April 3, 2014 Manhole in Kimberly Estates subdivision due to a pump malfunction and a heavy 3" per hour rain event.

July 1, 2014 Overflow from Copper Beech Lift Station to a drainage ditch due to an ultrasonic level sensor power failure.



October 10, 2014      Overflow from the two (2) manholes prior to the CEII  
WWTP Influent Lift Station as the result of a 500 year storm event.

County Home Collection System

No Sanitary Sewer Overflows (SSOs)

3. 2013 Sanitary Sewer Overflows (SSOs)

Carriage Estates Collection System

No Sanitary Sewer Overflows (SSOs)

County Home Collection System

No Sanitary Sewer Overflows (SSOs)

4. 2012 Sanitary Sewer Overflows (SSOs)

Carriage Estates Collection System

No Sanitary Sewer Overflows (SSOs)

County Home Collection System

No Sanitary Sewer Overflows (SSOs)

5. 2011 Sanitary Sewer Overflows (SSOs)

Carriage Estates Collection System

No Sanitary Sewer Overflows (SSOs)

County Home Collection System

No Sanitary Sewer Overflows (SSOs)

6. 2010 Sanitary Sewer Overflows (SSOs)

Carriage Estates Collection System

No Sanitary Sewer Overflows (SSOs)

County Home Collection System

No Sanitary Sewer Overflows (SSOs)

7. 2009 Sanitary Sewer Overflows (SSOs)

Carriage Estates Collection System

No Sanitary Sewer Overflows (SSOs)

County Home Collection System

No Sanitary Sewer Overflows (SSOs)

OUCG DR 05-024

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

How many bypasses occurred at ASU's wastewater plants each year from Jan. 1, 2009 to 2015 to date? Please also indicate the cause(s) of the bypasses.

**Information Provided:**

None.

OUCC DR 05-025

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state the manufacturers, model numbers, and types of influent flow meters at the Carriage Estates and County Home wastewater plants, and state how often flow data could be recorded and how often flow data is actually recorded during a 24 hour period (time interval) for both flow meters. Please also state how many days of flow data can be stored on the software used with the flow meters.

**Information Provided:**

1. Carriage Estates Flow Meter

- a. Location: Effluent
- b. Type: Ultrasonic
- c. Primary Measuring Device: 3'-0" long rectangular weir with constricted ends
- d. Manufacturer: ISCO
- e. Model No.: 3010 Flow Transmitter
- f. Serial No.: \*206L01452\*
- g. Flow data is continuously recorded and totalized.
- h. Flow meter is read and flow recorded daily, seven (7) days a week.
- i. Flow meter does not have data storage software nor capabilities.

2. County Home Flow Meter

- a. Location: Effluent
- b. Type: Ultrasonic
- c. Primary Measuring Device: 3'-0" long rectangular weir with constricted ends
- d. Manufacturer: Siemens
- e. Model No.: Milltronic OCM III
- f. Serial No.: PSD/X8110245XV
- g. Flow data is continuously recorded and totalized.
- h. Flow meter is read and flow recorded daily, seven (7) days a week.
- i. Flow meter does not have data storage software nor capabilities

OUCC DR 05-026

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide copies of the Monthly Report of Operations (MROs) submitted to the Indiana Department of Environmental Management (IDEM) for August, September, and October 2015 for both the Carriage Estates and County Home Wastewater Treatment Plants.

**Information Provided:**

See attached.

**Attachments:**

Attachment Q 5.26.pdf

OUCC DR 05-027

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Has an infiltration and inflow (I&I) study been conducted by or on behalf of ASU in the last five years? If so, please state who conducted the I&I Study and provide a copy of the study. If no studies were conducted, so state.

**Information Provided:**

No studies have been conducted within the last five (5) years.

OUCC DR 05-028

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Have temporary flow meters been installed in the collection system by or on behalf of ASU in the last five years? If so, please indicate the monitoring location(s). If no flow meters were installed, so state.

**Information Provided:**

No flow meters have been installed in the collection system within the last five (5) years.

OUCC DR 05-029

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Has an influent flow study been conducted by or on behalf of ASU in the last five years for the Carriage Estates and County Home wastewater plants? If so, please state who conducted the Influent Flow Studies and provide a copy of the studies. If no studies were conducted, so state.

**Information Provided:**

No influent flow studies have been conducted for either the Carriage Estates II or the County Home II Wastewater Treatment Plant.

OUCG DR 05-030

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Has an influent flow study been conducted by or on behalf of ASU in the last five years for individual lift stations? If so, please state who conducted the Lift Station Influent Flow Studies and provide a copy of the studies. If no studies were conducted, so state.

**Information Provided:**

No influent flow studies have been conducted for any lift stations within the ASU Collection System.



OUCG DR 05-031

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state whether ASU identified any segment of the collection system that experiences surcharging, and if so, please explain what ASU has done to address the surcharging.

**Information Provided:**

The three (3) manholes prior to the Carriage Estates II Wastewater Treatment Plant will surcharge and overflow with rain events greater than the 100 year storm event since approximately 70% of ASU collection system serviced by the CEIIWWTP discharged into these manholes. The result is that the plant's headworks cannot pump this volume of water fast enough into the plant for treatment.

ASU is addressing this situation in two (2) ways:

- a. ASU is attempting to divide the collection system more evenly so that more flows goes to the larger and newer north collection system thus taking pressure off the east system.
- b. Expanding the Carriage Estates II W.W.T.P. including larger and deeper influent auxiliary manholes and a new larger influent lift station so that the influent can be removed faster from the collection system and treated in the expanded plant.

OUCC DR 05-032

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state whether ASU has any plans to identify and reduce I&I in the next five years, including proposed annual budgets for I&I reduction.

**Information Provided:**

There are no plans or budgets to identify I&I sources over the next five (5) years because ASU's collection system is 80% PVC pipe and most of it is less than ten (10) years old and in good condition.

OUCC DR 05-033

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state whether ASU has identified defects in specific manholes and sewer locations where infiltration and inflow is entering ASU's collection system.

**Information Provided:**

There are none.

OUCG DR 05-034

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

In response to OUCG discovery (DR 1.5 and 1.6) under Cause 44272, ASU stated that issues found during inspections of 3 manholes per week and issues found during televised inspections of 15% of the sewer lines are discussed at the morning staff meeting, and a consensus is reached as to the most cost effective method to handle the situation. Please explain what cost assumptions ASU uses in evaluating the most cost effective method for manhole and sewer repairs.

**Information Provided:**

If the sewer line problem or manhole repair can be made by ASU's maintenance staff, the issue is discussed with management and a decision is made at that time to either make the repair or if it is determined that the repair required more manpower or equipment and it is not critical then it will be discussed in the Monday morning meetings.

At the Monday morning meeting the repair requirements will be discussed and although costs are important, the main factors considered are how fast does the repair have to be made, what equipment will be required to make the repair and the number of ASU staff required to make the repair. In the end the recommended repair procedure is the most effective and least expensive solution.

OUCC DR 05-035

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide a list of the employees or individuals that participated in the production of the information or documents provided in response to the foregoing questions. Please indicate whether the individual is an employee and describe generally the person's responsibilities and area of expertise.

**Information Provided:**

Mr. Scott Lods, President/Owner of ASU, management.

Mr. Edward J. Serowka, P.E., President of Lakeland InnovaTech, Consulting Engineer.

OUCC DR 06-001

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Were potable water usage records obtained and reviewed by or on behalf of ASU in determining base sanitary sewage flows for the Carriage Estates WWTP?

**Information Provided:**

No.

OUCC DR 06-002

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In Petitioner's 6/25/13 responses to IURC Docket Entry questions dated 5/29/13, ASU stated: "For a single family home, however, ISBH Bulletin S.E. 13 lists estimated flow at 350.0 GPD." Please provide a copy of ISBH Bulletin S.E. 13 highlighted where it states the wastewater flow for single family homes.

**Information Provided:**

See attached pages 19 and 20 of ISBH Bulletin S.E. 13 (also previously provided as Attachment B to OUCC DR 4.1). Table 6 "Guide for Estimating Wastewater Flows" which lists the estimated flow of 350 GPD for a three bedroom apartment which is used for a single family home since Table 6 does not have a specific listing for a single family home.

**Attachments:**

Attachment OUCC DR 6.2.pdf

OUCC DR 06-003

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide the names of metered customers discharging to ASU's system, and provide the billed wastewater flows from metered customers for 2013, 2014, and 2015 to date.

**Information Provided:**

To clarify, American Suburban Utilities does not have any customers who are billed based upon a wastewater flow meter reading. ASU receives all readings for metered customers from Indiana American Water and usage billed is based upon those figures. A list of the metered customers and usage billed is attached.

**Attachment:**

Attachment OUCC DR 6-3.pdf



OUCC DR 06-004

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide the names of industrial customers discharging to ASU's system, and provide the billed wastewater flows for industrial customers for 2013, 2014, and 2015 to date.

**Information Provided:**

American Suburban Utilities does not have any industrial customers within its current service area therefore no industrial type wastewater is discharged into its treatment plants.

OUCC DR 06-005

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state the base sanitary sewage flows (excludes infiltration and inflow) expressed on an annual average (12 month) basis used by Mr. Serowka or ASU in the design of the CETP. If Mr. Serowka or ASU did not estimate base sanitary sewage flows, so state.

**Information Provided:**

Estimated base sanitary sewer flows were not used in the design of the Carriage Estates III Wastewater Treatment Plant.

OUCC DR 06-006

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In the same format ASU used for its response to OUCC Data Request 1.2 under Cause No. 44272, please identify how many customers of each user class are connected to each of ASU's treatment plants as of December for 2013, 2014, and 2015 to date (indicate month).

|                      | # of Customers |         |
|----------------------|----------------|---------|
|                      | CE WWTP        | CH WWTP |
| Residential          |                |         |
| Multi-Family (Units) |                |         |
| Mobile Home          |                |         |
| Service Stations     |                |         |
| Schools              |                |         |
| Metered Customers    |                |         |

**Information Provided:**

| ASU Customers as of<br>31-Oct- 2015 | # of Customers |         |       |
|-------------------------------------|----------------|---------|-------|
|                                     | CE WWTP        | CH WWTP | TOTAL |
| Residential                         | 1,395          | 883     | 2,278 |
| Multi-Family (Units)                | 2,694          | 0       | 2,674 |
| Mobile Home                         | 575            | 0       | 575   |
| Service Stations                    | 1              | 0       | 1     |
| Schools                             | 1,529          | 3,489   | 5,018 |
| Metered Customers                   | 48             | 2       | 50    |

|          |   |   |   |
|----------|---|---|---|
| Averaged | 1 | 0 | 1 |
| Contract | 0 | 0 | 0 |

NOTE: 2015 customer count is as of 31-Oct-15. The customer base, especially for residential customers, changes monthly as people move out and move in.

| ASU Customers as of<br>31-DEC-14 | # of Customers |         |       |
|----------------------------------|----------------|---------|-------|
|                                  | CE WWTP        | CH WWTP | TOTAL |
| Residential                      | 1,684          | 487     | 2,171 |
| Multi-Family (Units)             | 2,667          | 0       | 2,667 |
| Mobile Home                      | 571            | 0       | 571   |
| Service Stations                 | 1              | 0       | 1     |
| Schools                          | 1,569          | 3,361   | 4,930 |
| Metered Customers                | 48             | 2       | 50    |
| Averaged                         | 1              | 0       | 1     |
| Contract                         | 0              | 0       | 0     |

| ASU Customers as of<br>31-DEC-13 | # of Customers |         |       |
|----------------------------------|----------------|---------|-------|
|                                  | CE WWTP        | CH WWTP | TOTAL |
| Residential                      | 1,678          | 427     | 2,105 |
| Multi-Family (Units)             | 2,663          | 0       | 2,663 |
| Mobile Home                      | 571            | 0       | 571   |
| Service Stations                 | 1              | 0       | 1     |
| Schools                          | 1,528          | 3,166   | 4,694 |
| Metered Customers                | 43             | 2       | 45    |
| Averaged                         | 1              | 0       | 1     |
| Contract                         | 0              | 0       | 0     |

\*For purposes of the presentation above, ASU considers a customer as someone who receives one monthly bill such as residential homes, apartment complexes, mobile home community etc. regardless of how many individuals are serviced within each facility.

OUCC DR 06-007

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

On page R-10 of his rebuttal testimony dated 4/9/13, Mr. Serowka calculated ASU's service population at 12,900 people, based on the theoretical average daily flow (ADF) of 1.29 MGD derived on page R-9 and a water usage of 100 gallons per capita per day (gpcd). However, in the 7/29/13 Construction Permit application for the CETP, Mr. Serowka listed a current population (2013) of 20,000 people and a 2030 design population of 40,000 people, and in the 1/7/14 Construction Permit application for the CETP, Mr. Serowka lowered the current population (2013) to 15,000 people, listed the same 2030 design populations at 40,000 people and listed the 2040 design population as 60,000 people. Please explain.

**Information Provided:**

Population Equivalent (PE) is defined as 100.0 GPD/person. Therefore, if the influent flow is 1,290,000.0 gallons per day and you divide by 100.0 GPD/person you obtain a PE of 12,900.0 persons for this flow. See also the discussion of Population Equivalency in the Direct Testimony of Edward J. Serowka filed in this Cause, at pages 3-4.

In Section 2 "Design Data" of the IDEM construction permit Wastewater Plant Design summary it asks for the treatment plant's capacity based on population equivalents. Therefore, since the current Carriage Estates II WWTP can treat 2.0 MGD, the PE of this plant is 20,000.0 persons, which was listed on the July 29, 2013 construction permit application. However, IDEM informed ASU that the CE II WWTP's old construction permit was only for 1.5 MGD which they wanted to use for the revised permit dated January 7, 2014. In addition, IDEM requested that in the revised permit, ASU include a PE for the current proposed plant expansion to 4.0 MGD which is designed to serve a PE of 40,000.0 persons in 2030 and a future proposed PE in 2040 of 60,000.00 persons when the plant's second expansion increases the plant's average design flow (ADF) to 6.0 MGD.

OUCC DR 06-008

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state the current (2015) connected population served by the ASU wastewater system and provide supporting documentation or the basis for the current and forecasted populations. If Petitioner does not know the current connected population, so state, and give ASU's best estimate for the current population.

**Information Provided:**

ASU does not know the current connected population. Please refer to the Direct Testimony of Edward J. Serowka in this Cause, at pages 3-4 for a discussion of the various ways to describe numerically the customer base that ASU serves.

OUCC DR 06-009

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

How many manholes are in ASU's collection system? Please provide the inventory list ASU uses to track its manholes, including manhole identification numbers or individual references for each manhole. If ASU relies on a database for this purpose, please provide a printout conforming with the foregoing request.

**Information Provided:**

- a. ASU has a total of 1,046 manholes in its collection system.
- b. ASU keeps a physical inventory of the collection system manholes and updates it whenever a new subdivision sewer system is accepted. At the time a sewer system is accepted, ASU provides the manhole numbering system to be used to number each manhole lid.
- c. ASU does maintain a database for its manholes and is attaching a list of manholes as of October 31, 2015.

**Attachments:**

Attachment OUCC DR 6.9.pdf



OUCC DR 06-010

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide maps of the collection system showing the manholes, sewer segments, sewer sizes (if available), and lift stations.

**Information Provided:**

The following maps are provided on 5 CDs due to the size of the files:

1. American Suburban Utilities Sewer Location map
2. Stonehenge Phase 3, Part 2 Sewer Location map
3. Soleado Vista Sewer Location map
4. Wake Robin 3, Part 2 Sewer Location map
5. Blackthorne 3 Sewer Location map

NOTE: Los Tres Grandes (Big 3) Sewer Location maps were provided in response to OUCC Data Request 4.4.

OUCC DR 06-011

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state the number of manholes in ASU's system with a top of casting that is below the 100-year flood elevation.

**Information Provided:**

There are no records available which indicate which, if any, of the 1,046 manholes in the American Suburban Utilities collection system are below the 100 year flood elevation. The great majority of ASU's collection system was installed after 2000 and all of these manholes top castings are located at a minimum of two (2) feet above the 100 year flood elevation; however, there might be several manholes in the older segments of the collection system with top castings below the 100 year flood elevation.

OUCG DR 06-012

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please describe how ASU staff are trained to inspect manholes and the collection system. Please provide a copy of any manhole and collection system inspection training documents used by ASU. If no ASU inspection training documents exist, so state.

**Information Provided:**

There are no ASU training documents for inspecting ASU's collection system including for sewer lines and manholes. All of American Suburban Utilities field staff have "hands on" experience not only in the repair and maintenance of sewer lines and manholes but also in their installation. ASU field staff work closely with sewer contractors in inspecting their work, which maintains their skills and keeps them updated on new products and installation procedures.

OUCC DR 06-013

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In an 11/30/11 letter to the Indiana Department of Environmental Management (IDEM), Mr. Serowka stated: "a minimum of three (3) manholes are completely inspected every week and fifteen percent (15%) of sewer lines are televised each year." Please state how ASU management verifies that ASU staff inspects a minimum of 3 manholes each week.

**Information Provided:**

American Suburban Utilities field staff must fill out a "daily activity sheet" and if they inspect any manholes these must be listed on the back of the sheet.

OUCC DR 06-014

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state whether manhole inspections and work on ASU manholes are performed by ASU staff or outside contractors. If work is performed by outside contractors, please identify those contractors.

**Information Provided:**

All work on ASU manholes is performed by ASU employees.

OUCC DR 06-015

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide copies of ASU's annual budget showing the amount allocated for manhole rehabilitation in 2013, 2014, and 2015. If no money was budgeted for manhole rehabilitation in these years, so state. For the same periods, show the amounts expended for manhole rehabilitation.

**Information Provided:**

Manhole repairs are not a separate budget item. Manhole repairs are not recorded separately but included in collection maintenance.

OUCG DR 06-016

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Regarding ASU's manhole inspections, please state the following for 2013, 2014, and 2015 to date:

- a. Total number of manholes inspected each year.
- b. Documentation identifying which manholes were inspected each year.
- c. Number of manholes ASU staff tried to inspect but could not locate.
- d. Number of manholes ASU identified as being damaged.
- e. Number of manholes ASU identified with missing or broken lids. Please provide copies of invoices showing how many replacement manhole lids were purchased.
- f. Number of manholes ASU identified with broken pipes.
- g. Number of manholes ASU identified as having infiltration and inflow.
- h. Number of manholes ASU identified as having sewage back-ups or signs of sewage back-ups (surcharging).
- i. Number of manholes ASU rehabilitated each year. Please state the amount ASU spent on rehabilitating manholes in 2013, 2014, and 2015 to date.

**Information Provided:**

- a. 2013 - 42 manholes  
2014 - 25 manholes  
2015 - 163 manholes
- b. The only available documentation regarding manholes inspected consists of the daily activity sheets referred to in response to OUCG DR 6-13. Copies of the daily activity sheets from 2013, 2014 and 2015 are provided herewith.
- c. These are not recorded.

- d. All damaged manholes are immediately repaired and no special records are maintained.
- e. Refer to comment for 6.16d above.
- f. Refer to comment for 6.16d above.
- g. Refer to comment for 6.16d above.
- h. Refer to comment for 6.16d above.
- i. Refer to comment for 6.16d above and response to OUCC DR 6.15 above.

**Attachments:**

Attachment 1 OUCC DR 6.16(b).pdf  
Attachment 2 OUCC DR 6.16(b).pdf  
Attachment 3 OUCC DR 6.16(b).pdf



OUCG DR 06-017

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide copies of all studies, condition assessments, inspection reports, or rehabilitation reports prepared by or on behalf of ASU in the last 5 years pertaining to ASU's manholes. If no studies, assessments, or inspections were conducted by or on behalf of ASU, so state. If no studies or reports exist, so state.

**Information Provided:**

No reports or studies have been prepared in the last five (5) years for ASU's collection system manholes.

OUCC DR 06-018

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide a list of the employees or individuals that participated in the production of the information or documents provided in response to the foregoing questions. Please indicate whether the individual is an employee and describe generally the person's responsibilities and area of expertise.

**Information Provided:**

Mr. Scott Lods, President/Owner of ASU, management.

Mr. Edward J. Serowka, P.E., President of Lakeland InnovaTech, Consulting Engineer.

OUCC DR 11-001

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

For the 10-inch diameter, 2,400 feet sewer located along County Road 50 West that remains in service, please identify the area served by the sewer and state the sewer pipe material.

**Information Provided:**

The area served is Shepherd's Point Subdivision. The pipe material is Clay.

OUCC DR 11-002

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Have the conditions of the 10-inch sewer along CR 50 W and the 8-inch sewers that are connected to this sewer been evaluated by or on behalf of ASU? If so, please provide a copy of the evaluation report, study, inspection, or any other documentation that shows the condition of these sewers. If no documentation of the sewers' condition exists, so state.

**Information Provided:**

No, the condition of the sewers has not been evaluated or documented.

OUCC DR 11-003

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state whether the 10-inch diameter sewer along CR 50 W and the 8-inch sewers that are connected to this sewer have been televised by or on behalf of ASU within the last five years.

**Information Provided:**

No, they have not.

OUCC DR 11-004

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state how many customers remain connected to the 10-inch diameter sewer along CR 50 W and the 8-inch sewers that are connected to this sewer.

**Information Provided:**

There are 35 customers that remain connected.

OUCC DR 11-005

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state ASU's plan for the 10-inch diameter sewer along CR 50 W and the 8-inch sewers that are connected to this sewer.

**Information Provided:**

ASU's plan is to replace this line as soon as it can.

OUCG DR 11-006

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please confirm that no other alternative other than the Big-3 Sewer project was evaluated by or on behalf of ASU for replacement of the Hawthorne Ridge lift station.

**Information Provided:**

No other alternatives were evaluated.



OUCC DR 11-007

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In response to OUCC DR 4-40 (d), ASU stated that "Drawings were prepared to evaluate whether the Kimberly Estates and Big Oaks lift stations could be removed by shorter gravity lines from the south (see attachment to subpart (b))." The 4 page attachment 4-40 (d) shows sewer invert elevations on sheets 1 (dated 3/9/12) and 2 (dated 2/2/12) and the layout for the Big-3 sewer project on sheets 3 (dated 7/16/12) and 4 (undated). Please explain how this attachment is responsive to the OUCC's question regarding the identification of alternatives evaluated for replacing the three lift stations.

**Information Provided:**

The drawings showed that the Kimberly Lift Station was too deep to be served by gravity from the South.

OUCC DR 11-008

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide a drawing showing the manhole(s) where the force mains from the Big Oaks and Kimberley Estates lift stations discharged and the invert elevation and sewer diameter of the sewer(s) exiting these manhole(s).

**Information Provided:**

Please refer to the following attached maps:

1. Map 1 "Big Oaks/Kimberly Lift Station Site Layout"
2. Map 2 "Big Oaks Lift Station and Receiving Manhole Layout"
3. Map 3 "Kimberly Lift Station and Receiving Manhole Layout"

Note that the Big Oaks Lift Station discharges into a manhole which is actually the wet well for the Kimberly Lift Station. Therefore there are two (2) 4" suction lines from the wet well to the pumps located in the Kimberly Lift Station steel chamber.

**Attachments:**

Attachment OUCC DR 11-8.pdf

OUCC DR 11-009

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state whether the alternative of consolidating the Big Oaks and Kimberley Estates lift stations into a single new lift station was evaluated by or on behalf of ASU. If so, please provide a copy of the evaluation. If no evaluation or study was performed, so state.

**Information Provided:**

No such evaluation or study was performed.

OUCC DR 11-010

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state the date of the Big-3 Sewer plans used by Timothy A. Beyer to prepare Exhibit TAB-3 in Petitioner's Case-In-Chief under Cause 44272, filed on 12/19/12.

**Information Provided:**

Mr. Beyer's Exhibit TAB-3 was based on preliminary design data prepared by him, which consisted of the route selection, sewer sizing, approximate lengths and what subdivisions would be served by the proposed sewer. He then prepared a preliminary cost estimate for ASU. When ASU decided to proceed with this project, they obtained the services of TBird to prepare the required engineering data and plans for IDEM's approval and for bidding/construction purposes.

OUCC DR 11-011

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide a copy of the 12/9/13 TBIRD design drawings referenced in the HWC Engineering letter dated 1/20/14.

**Information Provided:**

See attached.

**Attachments:**

Attachment OUCC DR 11-11.pdf

OUCC DR 11-012

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state whether the 12/9/13 TBIRD design drawings used by HWC Engineering were the same design drawings submitted with ASU's Big-3 Construction Permit application to IDEM in December 2013.

**Information Provided:**

The T-Bird Engineering plans submitted to HWC Engineering were the same plans that were submitted to IDEM with the Construction Permit Application on December 12, 2013.

OUCC DR 11-013

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state what work TBIRD's two man survey crew performed in March 2014 for 36.5 hours as shown in TBIRD Invoice 4770, dated 4/15 14.

**Information Provided:**

The survey crew staked permanent and temporary easements and rough staked sanitary structures.

OUCC DR 11-014

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state whether Accu-Dig performed any other sewer testing services besides sewer televising for the Big-3 Sewer project.

**Information Provided:**

No, they did not.



OUCC DR 11-015

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state whether any other firms or ASU performed testing services for the Big-3 Sewer project.

**Information Provided:**

No, they did not.

OUCG DR 11-016

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state what firm performed surveying to lay out the horizontal and vertical positions of the Big-3 Sewer project and indicate whether ASU or FTDC paid for these surveying services.

**Information Provided:**

T-Bird did the surveying and ASU paid for the surveying services.

OUCC DR 11-017

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide the as-built sewer lengths, sewer invert elevations, rim elevations, and manhole numbers for the Big-3 Sewer project. Please also state what firm conducted the survey to establish the as-built elevations and sewer lengths and indicate whether ASU or FTDC paid for these surveying services.

**Information Provided:**

The as-builts are not yet completed.

OUCC DR 11-018

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Did First Time Development Corporation (FTDC) encounter any unsuitable soils during excavation on the Big-3 Sewer project which had to be undercut and replaced with structural backfill?

**Information Provided:**

Yes.

OUCC DR 11-019

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Were changes made by FTDC in the field during construction that altered the Big-3 Sewer as designed by TBIRD and approved by IDEM on January 22, 2014 under Permit Approval No. 20892?

**Information Provided:**

Yes, the Hawthorne line was lowered by two (2) feet. No change order was produced; no extra charges were incurred.

OUCC DR 11-020

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Will Record Drawings be made for the Big-3 Sewer project? If so, who will prepare the Record Drawings and on what information will they be based?

**Information Provided:**

T-Bird will do as-built drawings during the first part of 2016.

OUCC DR 11-021

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Besides Mr. Lods, did any ASU employees work on the Big-3 Sewer construction project? If so, please state the names of the ASU employees, explain how they were involved, and indicate the number of hours they worked on the Big-3 Sewer project during 2014 and 2015. If ASU employee hours spent working on the Big-3 Sewer construction project are unavailable, please provide ASU's best estimate of the hours. If no ASU employees other than Mr. Lods worked on the Big-3 Sewer construction project, so state.

**Information Provided:**

Bob Patton; ASU's best estimate is that 80% of Mr. Patton's time was spent working on the Big 3 Sewer construction project.

OUCC DR 11-022

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

The invoices for the sewer pipe and manholes list American Suburban Utilities as the customer. Please state the name and title of the person(s) who (1) ordered the sewer pipe and manholes, (2) processed the shop drawings for the manholes, and (3) processed the invoices for payment. Please also state what company employs each person(s) and state what company paid for the sewer pipe and manholes.

**Information Provided:**

- 1) Scott Lods, ASU
- 2) Bob Patton, L 3 Corp.
- 3) Scott Lods, ASU
- 4) FTDC paid for all materials



OUCC DR 11-023

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide cost support for the actual dewatering employed for the Big-3 Sewer project.

**Information Provided:**

Please refer to the Direct Testimony of Edward J. Serowka P.E. Q&As 18 through 21 (pages 11-12) and Attachments EJS-6 and EJS-7.

OUCC DR 11-024

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please identify all dewatering pumps actually used on the Big-3 Sewer project by manufacturer and model number, state the capacity of each pump in gallons per minute, how each pump was powered, and what company owns each pump.

**Information Provided:**

| <u>Manufacturer</u> | <u>Model#</u> | <u>Capacity</u> | <u>Power</u> | <u>Owner</u> |
|---------------------|---------------|-----------------|--------------|--------------|
| Tsurumi             | NK2-15        | 120gpm          | Electric     | FTDC         |
| Tsurumi             | NK2-15        | 120gpm          | Electric     | FTDC         |
| Tsurumi             | NK2-15        | 120gpm          | Electric     | FTDC         |
| Tsurumi             | NK2-15        | 120gpm          | Electric     | FTDC         |
| Tsurumi             | NK2-15        | 120gpm          | Electric     | FTDC         |
| Tsurumi             | LB-800        | 85gpm           | Electric     | FTDC         |
| Tsurumi             | LB-800        | 85gpm           | Electric     | FTDC         |
| Tsurumi             | LB-800        | 85gpm           | Electric     | FTDC         |
| Wacker              | PT2A          | 210gpm          | Gas          | FTDC         |
| Wacker              | PT3A          | 425gpm          | Gas          | FTDC         |
| Godwin              | CD150M        | 1700gpm         | Diesel       | FTDC         |

OUCC DR 11-025

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please confirm that neither ASU nor FTDC has ever employed Patriot Pumps or Mersino Dewatering, Inc. for dewatering services.

**Information Provided:**

They have not.

OUCG DR 11-026

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state the name and title of the person(s) who transmitted Big-3 Sewer Plan Sheet C111 to Patriot Pumps and Mersino Dewatering, Inc. and indicate what company this person(s) works for.

**Information Provided:**

Ed Serowka, Lakeland Innovatech

OUCC DR 11-027

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please explain why only Plan Sheet C111 was sent to Patriot Pumps and Mersino Dewatering, Inc.

**Information Provided:**

FTDC was doing dewatering themselves so it was sent to Patriot and Mersino to determine if an outside agency could be more cost effective to dewater the next 500 feet.

For further explanation please reference response to OUCC Data Request 11-23 and materials referenced therein.

OUCC DR 11-028

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In response to OUCC DR 4-37, ASU stated that UV disinfection began at the County Home Wastewater Treatment Plant on January 21, 2015. Please explain.

**Information Provided:**

It was placed in operation to test it and determine if there were any corrections that needed to be made before the system was brought online. Even though the plant is processing and treating wastewater, the UV system was not left on because ASU does not have to disinfect via UV during the months of November, December, January, February or March.

OUCC DR 11-029

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Is sludge still being hauled from the County Home WWTP to the Carriage Estates WWTP for processing?

**Information Provided:**

Yes.

OUCC DR 11-030

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please explain what company employs Eric Burns.

**Information Provided:**

Eric Burns is a Partner with Withered Burns, LLP

ASU utilizes his legal services for easement acquisition.

FTDC utilizes his legal services.

Scott Lods personally utilizes his legal services.



OUCG DR 11-031

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

For the 5,200 EDUs and tributary area shown on Attachment 4-43 (d) that ASU submitted in response to OUCG DR 4-42, please state the average daily flow and the peak hourly flow that the Big-3 Sewer will receive from these EDUs in the year 2030 and 2040 and under future build-out. If no flow projections have been made by or on behalf of ASU, so state.

**Information Provided:**

No flow projections were made.

OUCC DR 11-032

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state if the year future build-out of the 5,200 EDUs will occur has been projected by or on behalf of ASU.

**Information Provided:**

First it must be noted that the Big 3 Service Area Exhibit dated October 29, 2013 for TBird Project No. 13046 is incorrect. The 24" gravity sewer at a 0.2% slope has been revised to a 21" gravity sewer at a 0.15% slope. Therefore, the EDU's for the upper third area should be revised from 2200 EDU's to 700 EDU's.

Therefore, the 21" gravity collection system can handle a total of 3,700 EDU's not 5,200 EDU's.

No future date for build-out has been determined.

OUCG DR 11-033

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state the connected service population ASU has projected for the 5,200 EDUs.

**Information Provided:**

The actual design EDU's for the Big 3 sewage collection system is 3,700 EDU's as explained in ASU response to OUCG DR 11.32. Therefore the population equivalent (PE) is as follows:

$$P = \text{EDU} \times 3.1$$

Where:

P = Population of individuals served

EDU = Equivalent Dwelling Units = 3,700.0

3.1 = Constant, number of individuals in and EDU

$$\begin{aligned} P &= 3,700 \times 3.1 \\ &= 11,470.0 \text{ individuals} \end{aligned}$$

OUCC DR 11-034

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state the estimated timetable for connection of these 5,200 EDUs to the County Home Wastewater Treatment Plant. If no timetable or population growth projection has been made by or on behalf of ASU, so state.

**Information Provided:**

No timetable nor growth projection data was prepared.

OUCC DR 11-035

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide copies of the TBIRD invoices for planning and design of the Big-3 Sewer project prior to 2014.

**Information Provided:**

See attached.

**Attachments:**

Attachment OUCC DR 11-35.

OUCC DR 11-036

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state the design average flow and peak hourly flow capacities of the Big-3 Sewer.

**Information Provided:**

|                     |             |     |
|---------------------|-------------|-----|
| Design Average Flow | 1,147,000.0 | GPD |
| Peak Hourly Flow    | 138,595.8   | GPH |

OUCC DR 11-037

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state the excess design average and peak hourly flow capacities of the Big-3 Sewer available for future development.

**Information Provided:**

|                     |           |     |
|---------------------|-----------|-----|
| Design Average Flow | 873,270.0 | GPD |
| Peak Hourly Flow    | 105,520.1 | GPH |

OUCC DR 11-038

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide the flow calculations used to size the Big-3 Sewer segments. Please indicate the name of the person(s) who made these flow calculations.

**Information Provided:**

See attached.

**Attachments:**

Attachment OUCC DR 11-038.pdf



a. 15" Sewer Segments

Design EDU's = 1,500

ADF = 1,500 EDU x 3.1 Persons/EDU x 100.0 GPD/Person  
= 465,000 GPD

Peaking Factor =  $\frac{18 \times \sqrt{P}}{4 + \sqrt{P}}$  P=Persons

$$\begin{aligned} &= \frac{18 \times \sqrt{4.65}}{4 + \sqrt{4.65}} = \frac{18 + 2.2}{6.2} = 20.2 \\ &= 4 \times \sqrt{4.65} = 4 + 2.2 = 6.2 \\ &= 3.3 \end{aligned}$$

Maximum sewer line Flow Rate = 465,000 GPD x 3.3  
= 1,534,500 GPD

From discharge of Circular Sewers Flowing Full Chart at  
a Kutter's N = 0.013 and a slope of 0.25%, the sewer capacity  
flowing full is 2.0 MGD with a velocity of 2.5 feet/second

15" PVC Sewer line is acceptable.

b. 21" Sewer Segment

Design EUD's = 3,700

ADF = 3,700 EDU x 3.1 Persons/EDU x 100.0 GPD/Person  
= 1,147,000 GPD

Peaking Factor =  $\frac{18 + \sqrt{P}}{4 + \sqrt{P}}$  P=Population in thousands

$$\begin{aligned} &= \frac{18 + \sqrt{11.47}}{4 + \sqrt{11.47}} = \frac{18 + 3.39}{7.39} = 21.39 \\ &= 4 \times \sqrt{11.47} = 4 + 3.39 = 7.39 \\ &= 2.9 \end{aligned}$$

Maximum sewer line Flow Rate = 1,147,000 GPD x 2.9  
= 3,326,300 GPD

From discharge of Circular Sewers Flowing Full Chart at  
a Kutter's N = 0.013 and a slope of 0.15%, the sewer capacity  
flowing full is 3.8 MGD with a velocity of 2.3 feet/second

21" PVC sewer line is acceptable

c. The above calculations were prepared by:

Edward J. Serowka P.E.  
Lakeland Innovatech  
332 Persimmon Trail  
Lafayette, IN 47909  
Tel: (317) 796-5273  
Email: eserowka270@gmail.com

OUCC DR 11-039

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In response to OUCC DR 4-40 (c), ASU stated that it is ASU's policy to eliminate lift stations when economically possible. Please explain the process and underlying cost assumptions ASU uses to determine what is economically possible.

**Information Provided:**

When ASU determines whether to replace a lift station with gravity sewers ASU takes into consideration many factors. Cost of operation i.e. electric power and maintenance are only a few of them. In addition ASU evaluates the risk of employees being called out at night to work on the lift station. ASU also takes into consideration customer complaints and interrupted service from power outages and mechanical breakdowns. ASU evaluates increased capacity to serve new areas not only adjacent to the lift station but the distance between lift stations and plants.

OUCC DR 11-040

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide the economic analysis, study, report, calculation, or other information prepared by or on behalf of ASU that showed the Big-3 Sewer Project as built was the most cost effective alternative for replacing the three lift stations. If no analysis, study, report, calculation, or other information was prepared, so state.

**Information Provided:**

No study was prepared.

OUCC DR 12-003

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In response to OUCC DR 5-2, ASU reported that it has a total of 266,017 feet of sanitary sewer and indicated all of the sewer pipe was PVC, but in response to OUCC DR 5-32, ASU stated that the collection system is 80% PVC. Please explain.

**Information Provided:**

The response to OUCC DR 5-2 was in error. The correct total length of sewer lines 309,611.0 and includes PVC, clay and truss sewer pipe.

| <u>Size, Inches</u> | <u>Length, Feet</u> |
|---------------------|---------------------|
| 6                   | 1,289.0             |
| 8                   | 176,092.0           |
| 10                  | 37,535.0            |
| 12                  | 24,042.0            |
| 14                  | 21,168              |
| 15                  | 16,350.5            |
| 18                  | 16,136.0            |
| 21                  | 7,091.0             |
| 24                  | 229.0               |
| 27                  | 7,266.0             |
| 30                  | <u>2,412.5</u>      |
| TOTAL:              | 309,611.0           |

OUCG DR 12-004

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

In response to OUCG DR 5-15, ASU stated that the Woodmar Court and Calvary Court sewers are clay pipe. Does ASU have any other type of sewer pipe in its collection system besides PVC and clay pipe?

**Information Provided:**

Yes, the Klondike Road sewer line is truss pipe.

OUCC DR 12-005

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state the force main length, diameter, and pipe material for each of ASU's remaining active lift stations. Please also state the lift station names.

**Information Provided:**

ASU has three (3) active lift stations and they are as follows:

1. Willowbrook Lift Station has a 7,950 foot 10" PVC SDR 21 force main.
2. Copper Beech Lift Station has a 5,700 foot 10" PVC SDR 21 force main.
3. Kimberly Lift Station has an 8,000 foot 10" PVC SDR 21 force main.

OUCC DR 12-006

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Regarding ASU's response to OUCC DR 5-3, please confirm that the portion of the 4.0 mgd design average flow for the CE WWTP allocated by Mr. Serowka for infiltration and inflow is 0.0 mgd.

**Information Provided:**

No, that statement is not correct. The Recommended Standards for Wastewater Treatment (Ten State Standards) defines the Design Average Flow (ADF) as follows:

**11.24 Hydraulic Capacity**

**11.241 Flow Definitions and Identification**

The following flows for the design year shall be identified and used as a basis for design for sewers, lift stations, wastewater treatment plants, treatment units, and other wastewater handling facilities. Where any of the terms defined in this Section are used in these design standards, the definition contained in this Section applies.

a. Design Average Flow

The design average flow is the average of the daily volumes to be received for a continuous 12 month period expressed as a volume per unit time. However, the design average flow for facilities having critical seasonal high hydraulic loading periods (e.g., recreational areas, campuses, industrial facilities) shall be based on the daily average flow during the seasonal period.

Therefore, the average daily flow to the plant is the average of the total of the actual sewage flow plus the I&I entering the collection system over the years. Based on these average flows the 4.0 MGD Average Design Flow will contain I&I flows but these I&I flows can only be estimated. Notably, the response to OUCC DR 5-3 also provided the Peak Dry Weather Flow (6.0 MGD) and Peak Wet Weather Flow (8.0 MGD) design criteria.

OUCC DR 12-007

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Regarding ASU's response to OUCC DR 5-4 asking for ASU to state the flow in mgd allocated by Mr. Serowka or ASU for the 100 year storm event in the design flows for the CE WWTP, please confirm that the 100 year storm flow is 4.0 MGD which is the difference between the Peak Wet Weather Flow (PWWF) of 8.0 MGD and the Average Daily Design Flow (ADF) of 4.0 MGD.

**Information Provided:**

The peaking factor used to arrive at the 100 year storm flow capacity for the Carriage Estates III W.W.T.P. was 2.0 which resulted in a peak wet weather flow of 8.0 MGD which is 4.0 MGD above the ADF.



OUCC DR 12-008

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please confirm that the 10,590 feet of sewers televised by First Time Development Corporation (FTDC) from 2013 to date did not include sewers in new developments.

**Information Provided:**

First Time Development only televises existing sewer lines for ASU. All new developments are televised by the developer's sewer contractor and only observed by ASU personnel.

OUCC DR 12-009

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state the name(s) of FTDC personnel who perform sewer televising services for ASU.

**Information Provided:**

As indicated in the response to OUCC DR 7-13, the number of FTDC's employees varies on a seasonal basis. Currently there is no one employed by FTDC who can televise.

OUCC DR 12-010

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In its response to OUCC DR 5-12, ASU states that it will take 7.0 years to televise all sewers within ASU's collection system at 15% per year which equates to approximately 38,000 feet televised annually. However, ASU stated that FTDC has only televised 10,590 from 2013 to date which equates to less than 1.4% annually. Please explain.

**Information Provided:**

Being able to televise sanitary sewers "in situ" is a great technology resource for a utility but like many resources it is expensive and should only be used when there is a clear need for it. For ASU, 80% of its sewers are PVC and have been installed less than 15 years. As such, there is not a clear need that outweighs the considerable cost, particularly in light of the fact that the life expectancy of gravity sewers is 40 to 50 years and probably longer for PVC sewers.

OUCC DR 12-011

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state the last year ASU televised or had televised at least 15% of the collection system.

**Information Provided:**

In the three years after the settlement reached in the last case, ASU televised at least 15% of its collection system. The majority of ASU's system was installed after 2000. In 1998, the total linear feet of sewer lines reported in the Annual Report was 30,665. In the 2014 Annual Report, the total linear feet reported was 296,745. ASU only has data for the number of feet televised for the last two years. The Response to OUCC DR 12-10 provides an explanation of the reasons more of the system has not been televised.

**Attachments:**

Attachment OUCC DR 12-11.pdf

OUCC DR 12-012

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Have estimates of infiltration and inflow from Woodmar Court, Calvary Court, Candlelight Mobile Home Park, Blackthorne sewer system, the Wake Robin Phase 3 sewer system and the Hawthorne Ridge sewer line been made by or on behalf of ASU?

**Information Provided:**

No.

OUCC DR 12-013

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In response to OUCC DR 5-23, ASU stated that the October 10, 2014 sanitary sewer overflows (SSOs) from 2 manholes located upstream of the CE WWTP Influent Lift Station were the result of a 500 year storm event, but only reported 0.2 inches and 0.3 inches of precipitation for October 9<sup>th</sup> and 10<sup>th</sup> respectively and reported no overflows or bypasses on the Monthly Report of Operation (MROs) submitted to IDEM. Please explain your statement that these SSOs were caused by a 500 year storm event.

**Information Provided:**

The response in OUCC DR 5-23 in which ASU stated that the bypass occurred on October 10, 2014 was incorrect, the bypass occurred on October 3, 2014 and was immediately reported to IDEM and attached is a copy of ASU e-mail cover letter with the Bypass/Overflow Incident Report.

Note that there was a 0.2 inch rain on Thursday, 10/02/2014 followed by a 2.1 inch rain on Friday 10/03/2014 and a 3.0 inch rain on Saturday, 10/04/2014. These sequential rain events produced a wet weather event that was similar to one caused by a 500 year event. (Refer to attached MRO for October 2014.)

It should be noted that almost all utilities use standardized design storms in designing and evaluating the wet weather performance of their plants and collection systems.

In practice, design storms are developed in a variety of ways. Some are derived using the Intensity-Duration-Frequency (I-D-F) information, while others are derived using other available rainfall data. A design storm, in theory, is expected to be representative of many recorded rainstorms and may also be expected to reflect the intensity, volume, and duration of a storm having a given recurrence frequency (i.e., 5-year, 50-year, etc.).

When a standardized design storm is used to design wastewater and collection systems, it is assumed that the facility will operate at capacity, on the average, at the same recurrence frequency as the design storm. This assumption presupposes many things.

First, it assumes that the design storm has a rainfall volume equivalent to a real storm having the same statistical recurrence frequency. Second, it assumes that the temporal

distribution of rainfall within the storm is representative of a storm occurring in nature. Third, it assumes that the facilities are operating in normal hydraulic conditions and are ready to accept all of the runoff when the design storm occurs. Namely, the system is not partially full from rain events that may have occurred only a few hours or a few days prior to this storm. Fourth, the design storm is uniformly distributed over the entire watershed. This is probably a reasonable assumption for small watersheds, but is not appropriate for the larger watersheds.

Standardized design storms are used extensively in practice. In fact, for practical reasons their use may be the only readily available alternative at many locations.

In referring to attached Table 2-5 "Rainfall Depths for Various Return Periods and Storm Durations" it can be seen for example that a 10-year rain event over a 6 hour duration will produce a 3.18" depth which is greater than the 3.15" depth produced by a 100-year rain event over a 1 hour duration. Therefore, small rain events over a period of several days can finally produce sufficient I&I to overwhelm any system especially when the plant and collection system are already operating at full hydraulic capacity. A small rain event shortly after a large or several small rain events can cause hydraulic overflows such as what occurred October 3, 2014. In reporting such overflows, the equivalent I-D-F cannot be actually determined even with complicated computer modeling systems due to the numerous variables and as such, the equivalent 500-year storm event was the best engineering estimate for this particular event. In actuality, it could have been an equivalent 300- or 600-year event but the effect would have been the same which was an overflow of the Carriage Estates II collection system.

This fact is recognized by the Ten States Standards which uses a chart to arrive at the Ratio of Peak Hourly Flow to Design Average Flow. From this chart the wet weather peaking factor for the 1.5 MGD Carriage Estates II W.W.T.P. should be 2.8 but due to the young age of the system a 2.5 peaking factor was used to arrive at a wet weather peak flow rate of 3.75 MGD. From the October 2014 MRO it can be seen that the highest one day maximum flow was 2.944 MGD which occurred on October 15, 2014 which was below the design wet weather capacity of the plant.

**Attachments:**

Attachment OUCC DR 12-13.pdf

OUCC DR 12-014

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Were the October 10, 2014 SSOs reported to IDEM? If so, please provide the Bypass / Overflow Incident Report submitted to IDEM.

**Information Provided:**

Refer to the response to OUCC DR 12-13.



OUCG DR 12-015

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In his Rebuttal Testimony under Cause 44272 (page R-15), Mr. Serowka stated that the ASU Carriage Estates sewer collection system does not have excessive I/I and is in fact a very tight system. Please explain how ASU's 100% sanitary sewer system can have sanitary sewer overflows caused by storm events and not have I/I that IDEM defines as excessive.

**Information Provided:**

ASU does not know how IDEM would define excessive I/I. There have only been two overflows in the last several years, neither of which were actually at the plant. The Carriage Estates II plant has two (2) incoming sewer lines, one (1) 30" sewer comes in from the north and the second line is a 24" sewer which comes in from the east. It is the two (2) closest manholes to the plant's headworks on the east line which overflow in storm flow events greater than the 100 year event. This occurs because the east sewer carries more flow than the north line. Therefore, when the sewer lines are surging due to several small or large rain events over several days, the velocity of the wastewater in this line increases so that the existing influent lift station cannot keep up even when a 6" portable pump is added. As a result the sewer backs up and since the two manholes are the lowest in the system, they overflow.

The existing Carriage Estates II W.W.T.P. can handle a larger peak wet weather flow but the headworks are the limiting factor as to how much flow can be pumped to the plant.

OUCC DR 12-016

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In his direct testimony from 12/19/2012 under Cause 44272 (page 17), Mr. Serowka stated that the "Carriage Estates II Wastewater Treatment Plant has experienced only two (2) bypasses over the last three and a half years and that was the result of a rain event exceeding a 500 year storm." Please state the date(s) of these 500 year storm events and indicate the rainfall totals for those dates.

**Information Provided:**

Refer to the Response to OUCC DR 12-13.

OUCC DR 12-017

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state how many 100-year or greater storm events, ASU's service area has experienced from January 1, 2010 to date and provide the days of these events and the total amount of rainfall for each day. Please also indicate which of these storm events were 500 year or greater storm events.

**Information Provided:**

ASU does not monitor how many 100-year or greater storm events there are unless there is a bypass and there were two bypasses during this period. Refer to the Response to OUCC DR 12-13.

OUCC DR 12-018

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state the manufacturers, model numbers, and types of *influent* flow meters at the Carriage Estates and County Home wastewater plants and state how often flow data could be recorded and how often flow data is actually recorded during a 24 hour period (time interval) for both flow meters. Please also state how many days of flow data can be stored on the software used with the flow meters.

**Information Provided:**

1. The Carriage Estates II W.W.T.P. has the following influent flow meter:
  - a. Location: Influent
  - b. Type: Magnetic
  - c. Primary Measuring Device: 8" Measuring Tube
  - d. Manufacturer: McCrometer
  - e. Model No.: MX Magnetic Flowmeter
  - f. Flow data is continuously recorded and totalized.
  - g. Flow meter is read and flow recorded daily, seven (7) days a week.
  - h. Flow meter does not have data storage software nor capabilities.
2. The County Home II W.W.T.P. does not have nor ever had an influent flow meter.

OUCC DR 12-019

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide the November 2013 Monthly Report of Operation (MRO) for the County Home Wastewater Treatment Plant and the October and November 2015 MROs for both treatment plants.

**Information Provided:**

Attached are the following Monthly Reports of Operations (MRO's):

1. County Home II W.W.T.P. November 2013 MRO
2. Carriage Estates II W.W.T.P. October 2015 MRO
3. County Home II W.W.T.P. October 2015 MRO
4. Carriage Estates II W.W.T.P. and County Home II W.W.T.P. November 2015 MRO's are not available at this time.

**Attachments:**

Attachment OUCC DR 12.19 Attachment 1  
Attachment OUCC DR 12.19 Attachment 2  
Attachment OUCC DR 12.19 Attachment 3

OUCC DR 12-020

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Does ASU use a work order system to generate repair orders and track repairs for the collection system and treatment plants?

**Information Provided:**

No.

OUCC DR 12-021

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

In response to OUCC DR 5-21, ASU stated that flows for the Carriage Estates WWTP which increased from an average of 1.14756 MGD for September 2010 to January 2011 and August 2011 to 1.56 MGD in 2013 and 1.84 MGD in 2014 were the “result of increased development within ASU’s franchise area.” Please provide calculations, documentation of customer growth or other information accounting for the 0.41 MGD flow increase from 2011 to 2013 and the additional 0.28 MGD flow increase (18%) from 2013 to 2014.

**Information Provided:**

The increase is a result of customer growth for the periods mentioned, which is reflected in Attachment EJS-2 to Petitioner's Exhibit 1 in this Cause, as described in the Direct Testimony of Edward J. Serowka, Q6 on Page 3; see also the response to OUCC DR 06-006.

OUCC DR 12-022

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In Petitioner's testimony (Exhibit 2, page 22), Mr. Serowka states that ASU is addressing infiltration and inflow by various repair and replacement methods and offered the Big-3 Sewer project as a great example of the replacement method. Please state how many feet of sewer ASU replaced with the Big-3 Sewer project.

**Information Provided:**

ASU removed two (2) very old and high maintenance lift stations along with their force mains. In addition, the existing 40 year old 10" sewer line located under County Home 50 West had its flow significantly reduced and ASU is now in the position to remove this sewer from service when the Shepherds Point sewer system can be redirected through development.



OUCG DR 12-023

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide drawings showing the existing Klondike Road sewer that is being replaced including manhole locations, pipe diameters, rim elevations, and invert elevations. Please state the flow capacities of the existing Klondike Road sewer segments.

**Information Provided:**

1. The Construction Plans Bid Set for the Klondike Sanitary Sewer Project dated July 6, 2015 prepared by TBird Design Services Corporation, provided in response to OUCG DR 12-39, includes data on the existing Klondike Sewer Line as requested above.
2. Flow capacities are not available for the Existing Klondike Sewer System nor its segments.

OUCC DR 12-024

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state the design flow capacities for the relocated Klondike Road sewer segments.

**Information Provided:**

1. 10" Sewer Segment (Klondike Sewer Extension South of MH 370)

Design EUD's = 700

ADF = 700 EDU  $\times$  3.1 Persons/EDU  $\times$  100.0 GPD/Person  
= 217,000.0

Peaking Factor =  $\frac{18 + \sqrt{P}}{4 + \sqrt{P}}$       P = Population in thousands  
$$= \frac{18 + \sqrt{2.17}}{4 + \sqrt{2.17}} = \frac{18 + 1.47}{4 + 1.47} = \frac{19.47}{5.47}$$
  
= 2.9

Maximum sewer line Flow Rate = 217,000.0 GPD  $\times$  3.6  
= 781,200.0 GPD

From discharge of Circular Sewers Flow Full Chart at a Kutter's N = 0.013 and a slope of 0.33%, the 10" PVC SDR 35 flowing full is 0.89 MGD with a velocity of 2.5 feet/second.

10" PVC sewer line is acceptable.

2. 15" Sewer Segment (Cumberland Sewer Extension East of MH 395)

Design EUD's = 1,500

$$\begin{aligned}\text{ADF} &= 1,500 \text{ EDU} \times 3.1 \text{ Persons/EDU} \times 100.0 \text{ GPD/Person} \\ &= 465,000.0\end{aligned}$$

$$\begin{aligned}\text{Peaking Factor} &= \frac{18 + \sqrt{P}}{4 + \sqrt{P}} \quad P = \text{Population in thousands} \\ &= \frac{18 + \sqrt{4.65}}{4 + \sqrt{4.65}} = \frac{18 + 2.2}{4 + 2.2} = \frac{20.2}{6.2} \\ &= 3.3\end{aligned}$$

$$\begin{aligned}\text{Maximum sewer line Flow Rate} &= 465,000.0 \text{ GPD} \times 3.3 \\ &= 1,534,500.0 \text{ GPD}\end{aligned}$$

From discharge of Circular Sewers Flow Full Chart at a Kutter's N = 0.013 and a slope of 0.20%, the 15" PVC SDR 21 flowing full is 1.8 MGD with a velocity of 2.5 feet/second.

15" PVC sewer line is acceptable.

3. 18" Sewer Segment (Klondike Road Sewer Line)

$$\text{Design EUD's} = 3,150$$

$$\begin{aligned}\text{ADF} &= 3,150 \text{ EDU} \times 3.1 \text{ Persons/EDU} \times 100.0 \text{ GPD/Person} \\ &= 976,500.0\end{aligned}$$

$$\begin{aligned}\text{Peaking Factor} &= \frac{18 + \sqrt{P}}{4 + \sqrt{P}} \quad P = \text{Population in thousands} \\ &= \frac{18 + \sqrt{9.76}}{4 + \sqrt{9.76}} = \frac{18 + 3.12}{4 + 3.12} = \frac{21.12}{7.12} \\ &= 3.0\end{aligned}$$

$$\begin{aligned}\text{Maximum sewer line Flow Rate} &= 976,500.0 \text{ GPD} \times 3.0 \\ &= 2,929,500.0 \text{ GPD}\end{aligned}$$

From discharge of Circular Sewers Flow Full Chart at a Kutter's N = 0.013 and a slope of 0.20%, the 18" PVC SDR 26 flowing full is 3.0 MGD with a velocity of 2.6 feet/second.

18" PVC sewer line is acceptable.

4. The above calculations were prepared by:

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Lakeland InnovaTech  
332 Persimmon Trail  
Lafayette, IN 47909  
TEL: (317) 796-5273  
Email: [eserowka270@gmail.com](mailto:eserowka270@gmail.com)

OUCC DR 12-025

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please describe any sewer tie-in points to the relocated Klondike Road sewer for flows from future developments.

**Information Provided:**

There are two (2) locations where sewer lines can be connected to the Klondike Sewer for future developments and they are as follows:

1. The future Cumberland Sewer Line will be connected to the Klondike Sewer at Manhole 395. This sewer will serve future developments located in the area bordered on the west of Klondike Road, on the east by U.S. 231, on the north by U.S. 52 and on the south by Cumberland Road.
2. The future extension of the Klondike Sewer south will be extended from Manhole 370 and will serve future developments bordered on the north by Point West 11 Mobile Home Park, south by C.R. 250 N, east by Klondike Road and west by the Kankakee, Beaverville and Southern Railroad tracks.

OUCC DR 12-026

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please explain why the replacement Klondike Road sewer is being increased in size and installed deeper than the existing sewer.

**Information Provided:**

Whenever it becomes necessary to replace an existing sewer, the Utility must evaluate the potential for future growth in the surrounding area and determine if it is cost effective to upsize the sewer in order to handle future flows. The incremental cost to upsize a gravity sewer is minor compared to the overall cost of engineering, material purchase and installation. ASU, based on the preliminary service area that can be handled by the Klondike sewer, decided to upsize the proposed Klondike Road sewer for future development in its service area. Refer to Response 2 to OUCC DR 12-46 for the Service Area Map showing all the surrounding area that can be serviced by the Klondike Road sewer.

The existing sewer must be kept in service until the proposed sewer is installed and the flow can be switched over to it. Therefore, the proposed sewer must be installed sufficiently lower than the existing sewer to allow enough clearance for installation. In addition, due to the numerous buried utilities and existing structures, it is necessary to install the proposed sewer on alternate sides of Klondike Road where there is sufficient area available for its installation. This also necessitates the deeper sanitary sewers.

OUCC DR 12-027

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide a copy of the Plans and Specifications for the Klondike Road Sewer project that were submitted to IDEM for the Construction Permit.

**Information Provided:**

Attached are the signed and sealed construction plans for the ASU Klondike and Cumberland Sanitary Sewer Project prepared by TBird Design Services Corporation and dated February 25, 2015. These construction documents contain the engineering plans and specifications for the proposed sewer system.

NOTE: The Cumberland Sanitary Sewer was deleted from the Bid Documents Plans and Specifications.

**Attachments**

Attachment OUCC DR 12-27.pdf

OUCC DR 12-028

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

On the Construction Permit application for the Klondike Road Sewer project, Clem S. Kuns did not list the total average flow or the peak flow but instead indicated "existing flow". Please explain.

**Information Provided:**

The Klondike Road sewer was designed to not only handle the existing flows but also to handle future flows as development occurs in the Klondike sewer service area. Since the type of development that might occur is unknown whether single family residences, multi-family units or commercial, the future flows cannot be calculated. In the IDEM Sanitary Sewer Design Summary which is Page 3 of 9 in the Application for Sanitary Sewer Construction Permit per 327 IAC 3 (State Form 53159) the number of units of the various types of establishments must be listed. However, since the number of these units is unknown, these future flows cannot be calculated nor listed. Therefore the Total Average Flow and Peak Flow are unavailable for the proposed sewer. The Total Average Flow and Peak Flow are therefore listed only as the existing flow in order to avoid any confusion. This is standard practice for this type of situation.



OUCC DR 12-029

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In his direct testimony (Petitioner's Exhibit No. 1, page 9, Mr. Serowka states the Klondike Road sewer project involves replacing the existing 48 year old 12" PVC truss pipe with 3,200 feet of 15" PVC gravity sewer but in the Construction Permit issued by IDEM on 3/25/15, the total sewer length is shown as 9,329 feet. In addition, the F&K proposal (Petitioner's Exhibit Attachment EJS-8) lists a total sewer length of 5,327 feet. Please explain.

**Information Provided:**

1. The 3,200 feet of sewer refers to the existing sewer line located adjacent to Klondike Road.
2. The 9,329 feet of proposed sewer listed in the Construction Sanitary Sewer Design Summary, page 3 of 9 under the heading of "Sewer" includes not only the Klondike Sewer but also the future Cumberland Sewer and the Klondike sewer extension south of Manhole 370 as shown in the signed and sealed construction plans prepared by TBird and dated February 25, 2015.
3. The 5,327 feet of sewer listed in F & K proposal dated June 30, 2015 includes only that portion of the Klondike sewer that must be installed currently for the Klondike Road Reconstruction project that does not include the Cumberland sewer nor the Klondike sewer extension referenced above in Response 2 to Data Request 12-29. It is longer than the original Klondike Road sewer due to installing on both sides of the road to connect existing customers. Otherwise, numerous road borings under Klondike Road would have been needed for lateral connections, which would have resulted in a higher total price.

OUCC DR 12-030

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state whether Tippecanoe County or other authority has given ASU a date by which the Klondike Road Sewer must be relocated. If so, please provide a copy of the correspondence indicating the date. If no date has been communicated to ASU, please state ASU's best estimate for the date.

**Information Provided:**

The last information ASU had on the proposed schedule for the Klondike Road Reconstruction Project was from the attached minutes from the Preliminary Field Check Meeting held on June 6, 2014.

It is ASU's understanding that no firm date has been set for the start of the Klondike Road Reconstruction Project but that their existing sewer relocation must be completed by the end of 2016.

**Attachments:**

Attachment OUCC DR 12-30.pdf

OUCG DR 12-031

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide the names and contact information of the person(s) at the County and the County's engineering consultant with whom ASU is coordinating the Klondike Road Sewer project.

**Information Provided:**

Attached is the list of the Preliminary Field Check Attendees for the June 6, 2014 meeting. Note that ASU is coordinating its sewer location with the following individuals:

1. Strand Associates, Inc.  
629 Washington Street  
Columbus, IN 47201  
TEL: (812) 372-911  
FAX: (812) 372-7190  
  
Bill Hawkins, P.E., Project Manager  
Jeremy Brodhacker, P.E., Design Engineer
2. Tippecanoe County Highway Department  
County Office Building  
20 North 3rd Street, 1st Floor  
Lafayette, IN 47901  
  
Opal Kuhl, Executive Director  
Mike Spencer, Associate Executive Director

**Attachments:**

Attachment OUCG DR 12-31.pdf

OUCC DR 12-032

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide all correspondence, meeting notes, or other information conveyed to ASU by Tippecanoe County pertaining to the Klondike Road widening project.

**Information Provided:**

There is no correspondence, meeting notes, etc. from the Tippecanoe County Highway Department since all the design work on the Klondike Reconstruction Project is being handled by Strand Associates, Inc. of Columbus, Indiana who is under contract with the Indiana Department of Transportation for its design. Refer to the attached May 21, 2014 letter from Strand Associates.

**Attachments:**

Attachment OUCC DR 12-32.pdf

OUCG DR 12-033

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In his direct testimony (Petitioner's Exhibit No. 1, page 13), Mr. Serowka states that ASU has competitively bid the Klondike Road sewer. Please provide copies of the advertisements for competitive bids for the Klondike Road Sewer project placed by or on behalf of ASU. If no advertisements were placed, so state.

**Information Provided:**

Attached is the Klondike Road Sewer Project Plan Holders List dated July 21, 2015. Note that ASU listed the project in the following national and local plan rooms:

1. Dodge Reports Plan Room  
114 West St. Clarie St.  
Indianapolis, IN 46204  
TEL: (317) 687-8641  
FAX: (317) 687-8639  
Davina Jacobs (davina.jacobs@construction.com)
2. CMDG-USA  
30 Technology Parkway South, Suite 100  
Norcross, GA 30092  
TEL: (800) 424-3996  
Peter Varquez (peter.varques@cmdgroup.com)
3. Indiana Plan Room (also iSqFt + bidclerk)  
9901 Allisonville Road  
Fishers, IN 46038  
TEL: (800) 364-2059 x 7172  
FAX: (866) 570-8187  
Michael Taylor (mtaylor@ISQFT.com)

**Attachments:**

Attachment 1 OUCG DR 12-33.pdf  
Attachment 2 OUCG DR 12-33.pdf

OUCC DR 12-034

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

If competitive bids were solicited, please describe how ASU made potential bidders aware of the Klondike Road Sewer project including what bid listing services were contacted by or on behalf of ASU.

**Information Provided:**

In addition to listing the Klondike Sewer Project on the bid services listed in response to OUCC DR 12-33, ASU directly contacted a number of local sewer contractors and asked them to bid. These contractors are listed in the Plan Holders List attached in response to OUCC DR 12-33.

OUCC DR 12-035

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Did ASU only allow contractors selected by ASU submit proposals for the Klondike Road Sewer project?

**Information Provided:**

No, all contractors who wanted to bid were welcomed.

OUCC DR 12-036

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please list all contractors that were notified of the Klondike Road Sewer project by or on behalf of ASU.

**Information Provided:**

ASU asked the following contractors to submit a bid:

1. Atlas Excavating  
4740 Swisher Road  
West Lafayette, IN 47906  
TEL: (765) 429-4800  
FAX: (765) 429-6464  
Kim Frey (KimF@AtlasExcavating.com)
2. Midwest Paving, LLC  
16105 River Road  
Noblesville, IN 46062  
TEL: 317-776-8925  
Douglas K. Denney



OUCC DR 12-037

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Were any criteria applied by or on behalf of ASU to pre-qualify contractors for the Klondike Road Sewer project?

**Information Provided:**

No.

OUCC DR 12-038

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state the name, title, and company of the person(s) who handled the proposal process for the Klondike Road Sewer project for ASU.

**Information Provided:**

The following two individuals handled the bidding process for ASU:

1. Edward J. Serowka, P.E.  
332 Persimmon Trail  
Indianapolis, IN 47909  
TEL: (317) 796-5273  
Edward J. Serowka, P.E.  
E-mail: [eserowka270@gmail.com](mailto:eserowka270@gmail.com)
2. TBird Design Services Corporation  
105 North 10th Street  
Lafayette, IN 47901  
Clem Kuns ([clemk@tbirddesign.com](mailto:clemk@tbirddesign.com))  
TEL: (765) 742-1900

OUCC DR 12-039

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide a copy of the Klondike Road Sewer Project Contract Documents that were provided to contractors. The Contract Documents should list the project and proposal requirements, including but not limited to the proposal form listing the base bid and contract items requiring unit prices, design drawings, specifications, special conditions, addenda, insurance requirements, wage requirements, bond requirements, payment requirements, and schedule.

**Information Provided:**

Attached are the following Klondike Road Sewer Project Contract Documents:

1. Bid Set of Construction Plans for the Klondike Sanitary Sewer Project dated July 6, 2015 prepared by TBird Design Service Corporation.
2. Project Specifications for Klondike Sanitary Sewer Project, Wabash Township, Tippecanoe County, Indiana; American Suburban Utilities, Inc.; Project Number 15-021 dated July, 2015 prepared by Edward J. Serowka, P.E.
3. Addendum No. 1 to Project Specifications and Plans for Klondike Sanitary Sewer Project; Wabash Township, Tippecanoe County, Indiana; American Suburban Utilities, Inc.; Project Number 15-021 dated July 22, 2015 prepared by Edward J. Serowka, P.E.

**Attachments:**

Attachment A OUCC DR 12-39.pdf  
Attachment B OUCC DR 12-39.pdf  
Attachment C OUCC DR 12-39.pdf  
Attachment D OUCC DR 12-39.pdf  
Attachment E OUCC DR 12-39.pdf  
Attachment F OUCC DR 12-39.pdf

OUCC DR 12-040

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Was a firm date and time established by or on behalf of ASU for receipt of all contractor proposals for the Klondike Road Sewer project? If so, please state the firm date and time. If no set date and time was established, so state.

**Information Provided:**

Yes. The attached Invitation to Bid listed the bid date as Thursday, July 30, 2015 with bids being received at ASU's office in West Lafayette, Indiana until 5:00 PM local prevailing time.

**Attachments:**

Attachment OUCC DR 12-40.pdf

OUCC DR 12-041

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide copies of all contractor proposals received by or on behalf of ASU for the Klondike Road Sewer project.

**Information Provided:**

ASU received three (3) bids from the following contractors and copies of their bids are attached.

1. Atlas Excavating  
4740 Swisher Road  
West Lafayette, IN 47906  
TEL: (765) 429-4800  
FAX: (765) 429-6464  
Kim Frey (KimF@AtlasExcavating.com)
2. Midwest Paving, LLC  
16105 River Road  
Noblesville, IN 46062  
TEL: 317-776-8925  
Douglas K. Denney
3. F & K Construction, Inc.  
2055 W 150 S  
Flora, IN 46929-9246  
TEL: 574-967-4543  
Nathan Anderson (nanderson@fkconst.com)

**Attachments:**

Attachment 1 OUCC DR 12-41.pdf  
Attachment 2 OUCC DR 12-41.pdf  
Attachment 3 OUCC DR 12-41.pdf

OUCC DR 12-042

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide a copy of the Proposal Tabulation for the Klondike Road Sewer project and name the person(s) who reviewed the contractor proposals and prepared the Proposal Tabulation.

**Information Provided:**

The Contractors bids were reviewed and the attached Bid Tab Sheet for the Klondike Road Sanitary Sewer Relation was prepared by:

Edward J. Serowka, P.E.  
332 Persimmon Trail  
Indianapolis, IN 47909  
TEL: (317) 796-5273  
Edward J. Serowka, P.E.  
E-mail: [eserowka270@gmail.com](mailto:eserowka270@gmail.com)

**Attachments:**

Attachment OUCC DR 12-42.pdf

OUCC DR 12-043

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Regarding F&K Construction Inc.'s proposal for the Klondike Road Sewer Project, please provide the following:

- a. F&K's complete proposal, including any exceptions taken by F&K
- b. F&K's Schedule of Values
- c. F&K's proposed construction schedule

**Information Provided:**

- a. Refer to F & K's proposal provided in the response to OUCC DR 12-41.
- b. No contractor was required to file a separate Schedule of Values with their proposal since the Bid Documents only require a lump sum bid.
- c. F & K's proposal stated that they would complete the bid base contract in 365 calendar days from the date of the Notice to Proceed as required by the Bid Documents.

OUCC DR 12-044

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Has ASU executed a construction contract with F&K Construction, Inc. for the Klondike Road sewer project? If so, please provide a copy of the executed contract.

**Information Provided:**

No.



OUCC DR 12-045

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Was a Geotechnical study for the Klondike Road sewer project prepared? If so, please provide a copy of the study. If not, please explain.

**Information Provided:**

Yes. A copy of the Subsurface Investigation and Geotechnical Report prepared by Alt & Witzig Engineering, Inc. Geotechnical Division dated April 20, 2015 is attached.

**Attachments:**

Attachment OUCC DR 12-45.pdf

OUCC DR 12-046

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Regarding planning and design for the Klondike Road Sewer project, please provide the following:

- a. Planning or engineering parameters, prepared by or on behalf of ASU, setting objectives and/or design criteria for the Klondike Road Sewer Project.
- b. Preliminary drawings or layouts, if any, prepared by or on behalf of ASU.
- c. Alternatives evaluated for the sizing, route, and depth of the Klondike Road Sewer Project.
- d. Preliminary cost estimates, prepared by or on behalf of ASU, for the alternatives identified above. If no cost estimates for alternatives were prepared, so state.

**Information Provided:**

a.  
The proposed Klondike sewer relocation project was discussed between Scott Lods, Owner of ASU, Clem S. Kuns, design engineer for TBird Design Services Corporation and Tim Beyer, sewer consultant for ASU. The following design/engineering parameters were discussed:

1. Topography, surface conditions, details of paving to be disturbed, underground structures, subsoil conditions and water table details.
2. Details of existing sewer system which must be relocated.
3. Locations of streets, utilities, normal and reversed obstructions; required right-of-ways; easements; and all other similar data necessary to define physical features of the proposed sewer project.
4. Pertinent information relative to possible future development in the selected area which could be served by the proposed sewer.
5. Population trends and density in the existing area being served and in future areas that could be served by the new sewer.

6. Type of development, i.e., residential, multi-family or commercial.

After reviewing the above parameters, it was decided that the new sewer will be designed to service not only the existing connections but future developments in areas east and south of the existing Klondike Sewer.

**b.**

The attached Service Area Map, Sheet C101 was prepared by TBird to show the area to be served by the new Klondike Road sewer line.

**c.**

The attached set of preliminary construction plans were prepared by TBird for the review of ASU. The proposed sewer route and depths were reviewed by ASU and modified based on discussions with Strand Associates as they finalized the Klondike Road Relocation Details.

**d.**

No cost estimates were prepared.

**Attachments:**

Attachment 1 OUCC DR 12-46.pdf

Attachment 2 OUCC DR 12-46.pdf

OUCC DR 12-047

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

In his direct testimony under Cause 44272, Timothy A. Beyer stated the total estimated cost of the Klondike Road Sewer Project was \$1,008,441 (page 5) as shown on Exhibit TAB-1 Klondike Road Sewer Summary (one page). He included in Exhibit TAB-1 a Klondike Road Sewer Construction Cost (one page) showing \$808,441 of estimated costs for construction only. Please indicate who prepared the Summary and Construction Cost shown in Exhibit TAB-1.

**Information Provided:**

1. Exhibit TAB-1: Klondike Road Sewer Construction Cost was prepared by Timothy A. Beyer.
2. Exhibit TAB-1: Klondike Road Sewer Summary was prepared by ASU.

OUCC DR 12-048

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please submit the project information (such as a study, engineering report, layouts, flow calculations, design drawings, specifications, etc.), prepared by or on behalf of ASU, that was provided to the person or firm identified by ASU above for use in preparing the Klondike Road Sewer Summary and the Klondike Road Sewer Construction Cost shown in Exhibit TAB-1.

**Information Provided:**

Mr. Beyer assisted in preparing the preliminary design data which consisted of the route selection, sewer sizing, approximate lengths and what subdivisions would be served by the proposed sewer. He then prepared a preliminary cost estimate for ASU. When ASU decided to proceed with this project, they obtained the services of TBird to prepare the required engineering data and plans for IDEM's approval and for bidding/construction purposes.

OUCC DR 12-049

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Regarding the Klondike Road Sewer Project design, please provide the following:

- a. Design proposal from TBIRD Design Services Corporation (TBIRD).
- b. Copies of invoices from TBIRD for planning and design
- c. Map of the expanded service area to be served by the Klondike Road Sewer.
- d. Design basis for the sewer slopes used by TBIRD.
- e. Design flows allocated from new lift stations and new gravity sewers from currently proposed developments or future developments. If future flows were not considered in the Klondike Road Sewer Project design, so state.
- f. Flow calculations used to size the sewer segments. Please indicate who prepared these flow calculations. If no flow calculations were made, please explain.
- g. Estimated construction cost prepared by TBIRD based on their final design. If TBIRD did not prepare a construction cost estimate, so state.

**Information Provided:**

- a.  
A design proposal was not requested from TBird.
- b.  
  
See attached invoices.
- c.  
Refer to Response to OUCC DR 12-46.
- d.  
Slopes were used to allow for future development and to avoid field conflicts with the existing sewer line and proposed stormwater lines.
- e.  
Refer to Response to OUCC DR 12-24.

**f.**

Refer to Response to OUCC DR 12-24.

Edward J. Serowka, P.E.  
Lakeland InnovaTech  
332 Persimmon Trail  
Lafayette, IN 47909-6823  
TEL: (317) 796-5273  
Email: [eserowka270@gmail.com](mailto:eserowka270@gmail.com)

**g.**

No estimate was prepared by TBird.

OUCC DR 12-050

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Regarding the Klondike Road Sewer Project's construction cost estimates, please provide the following:

- a. Please state whether any other construction cost estimates other than the construction cost estimate shown in Petitioner's Exhibit TAB-1 under Cause 44272, dated 12/19/121/17/14, were prepared by or on behalf of ASU. If so, please state who prepared the construction cost estimates, the date of the design documents upon which the cost estimates were based, submit the estimates, and state what supporting documents were provided by or on behalf of ASU to the cost estimators.
- b. Please state assumptions, if any, that ASU required estimators to use in preparation of cost estimates for the Klondike Road Sewer. If no assumptions were communicated by or on behalf of ASU to the cost estimators, so state.

**Information Provided:**

- a. No other construction cost estimates were prepared.
- b. No assumptions were communicated because ASU did not request any other construction cost estimates.



OUCC DR 16-001

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Attachment Q 11.38 submitted by ASU in response to OUCC DR 11-38 shows sewer flow calculations for the Big-3 Sewer project prepared by Mr. Edward Serowka. Please state the date Mr. Serowka made the above referenced flow calculations.

**Information Provided:**

December 10, 2015, in response to OUCC DR 11-38.

OUCG DR 16-002

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state why Mr. Serowka assumed a value of 0.013 for the Kutter  $\eta$  roughness coefficient instead of a Kutter  $\eta$  for PVC pipe in his Big-3 Sewer flow calculations submitted by ASU in response to OUCG DR 11.38.

**Information Provided:**

The Uni-Bell PVC Pipe Association recommends that the value of the Manning's  $\eta$  factor to be 0.009 for hydraulic design of PVC gravity sewer systems.

Hydraulic flow research and analysis have established that flow conditions and hydraulic slope in PC gravity sewer piping systems can be designed conservatively using the Manning's equation. Kutter's formula was accepted as the proper design basis for estimation of open-channel flow in the early 1900's; however, use of the formula was difficult. Use of Manning's equation has superseded Kutter's formula due to the equation's relative simplicity. The coefficient of roughness ( $\eta$ ) used in both Kutter's formula and Manning's equation is essentially equal for piping products commonly used in sewer construction.

The value for  $\eta$  has been experimentally determined for all common sewer piping materials. The value can be as low as 0.007 under laboratory conditions and using clean water, or higher than 0.015 under less favorable conditions and with rough-surfaced pipe. Most engineers have historically selected  $\eta$  to be 0.013 for all sewer products available before the advent of PVC sewer pipe. There is no data that technically supports the single  $\eta$  value approach.

A Kutter  $\eta$  of 0.013 was used because Ten States Standards state the following:

**"33.4 Slope**

**33.41 Recommended Minimum Slopes**

All sewers shall be designed and constructed to give mean velocities, when flowing full, of not less than 2.0 feet per second (0.6 m/s), based on Manning's formula using an " $\eta$ " value of 0.013."

Since the "coefficient of roughness ( $\eta$ ) used in both Kutter's formula and Manning's equation is essentially equal for piping products", a  $\eta$  of 0.013 was used.

OUCC DR 16-003

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state whether Mr. Serowka prepared the flow and sewer sizing calculations used by TBIRD Design Services Corporation in 2013 in the preparation of the design drawings for the Big-3 Sewer project.

**Information Provided:**

No. All calculations were prepared by TBIRD Design Services Corporation.

OUCG DR 16-004

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

ASU's construction permit application for the Big-3 Sewer project signed 12/9/13 by Justin Frazier, P.E. of TBIRD Design Services Corporation did not show design flows and described the project as a "Gravity sewer line to remove 3 existing lifts stations. No new connections." Please explain why ASU did not identify the Big-3 Sewer as an interceptor sewer sized to convey sewage flows to the County Home Wastewater Treatment Plant from the EDUs within the 2,680 acre Big-3 Service Area shown on Attachment 4.43(d) submitted in response to OUCG DR 4-43(d).

**Information Provided:**

The engineering plans and specifications submitted to IDEM for the Big Three Sewer Project by TBIRD Design Services Corporation was only for the gravity sewer line to replace the three (3) old lift stations and redirect the flow from two (2) of the lift stations from the Carriage Estates II W.W.T.P. to the County Home II W.W.T.P.

The Big Three gravity sewer line was oversized to accept additional development in the Big Three service area but since these flows are unknown at this time accurate design flow calculations could not be provided to IDEM. In the future, as development occurs in the service area, these development gravity sewer systems will have to be submitted to IDEM for construction permits including certification by ASU that the Big Three sewer line and County Home II W.W.T.P. have sufficient capacity to accept the flow.

**OUCG DR 16-005**

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In response to OUCG DR 3-6 under Cause No. 44272, ASU stated that "I&I exists in every sewer system." and in his direct testimony under Cause No. 44272, Mr. Serowka stated on page 17, lines 5-6, that "it is necessary to treat a reasonable level of I&I at the CEIITP." Please state the reasonable levels of I&I assumed or estimated by or on behalf of ASU in the current influent flows and in the design of the Carriage Estates WWTP using the following format.

|                                                    | Current Year | Design Year | Future |
|----------------------------------------------------|--------------|-------------|--------|
| Year                                               | 2013         | 2030        | 2040   |
| ASU Assumed Population                             | 15,000       | 40,000      | 60,000 |
| Domestic, Commercial, and Institutional Flow (MGD) |              |             |        |
| Reasonable Level of Infiltration & Inflow (MGD)    |              |             |        |
| Design Average Flow (MGD)                          | 1.50         | 4.0         | 6.0    |
| Annual Average Flow (MGD)                          | 1.41         | 4.0         | 6.0    |

**Information Provided:**

To be provided.

**OUCG DR 16-005 (Supplemental)**

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In response to OUCG DR 3-6 under Cause No. 44272, ASU stated that "I&I exists in every sewer system." and in his direct testimony under Cause No. 44272, Mr. Serowka stated on page 17, lines 5-6, that "it is necessary to treat a reasonable level of I&I at the CEIITP." Please state the reasonable levels of I&I assumed or estimated by or on behalf of ASU in the current influent flows and in the design of the Carriage Estates WWTP using the following format.

|                                                    | Current Year | Design Year | Future |
|----------------------------------------------------|--------------|-------------|--------|
| Year                                               | 2013         | 2030        | 2040   |
| ASU Assumed Population                             | 15,000       | 40,000      | 60,000 |
| Domestic, Commercial, and Institutional Flow (MGD) |              |             |        |
| Reasonable Level of Infiltration & Inflow (MGD)    |              |             |        |
| Design Average Flow (MGD)                          | 1.50         | 4.0         | 6.0    |
| Annual Average Flow (MGD)                          | 1.41         | 4.0         | 6.0    |

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

The above request will be answered based on the requirements listed in Ten States Standard which states the following:

**"11.243 Hydraulic Capacity for Wastewater Facilities to serve New Collection Systems**

- a. The sizing of wastewater facilities receiving flows from new wastewater collection systems shall be based on an average daily flow of 100 gallons (380 L) per capita plus wastewater flow from industrial plants and major institutional and commercial facilities unless water use data or other justification upon which to better estimate flow is provided.
- b. The 100 gal/cap/d [380 L/(capita·d)] figure shall be used which, in conjunction with a peaking factor from Figure 1, is intended to cover normal infiltration for systems built with modern construction techniques. Refer to Section 31. However, an additional allowance should be made where conditions are unfavorable."

|                                                                     | Current Year | Design Year | Future |
|---------------------------------------------------------------------|--------------|-------------|--------|
| Year                                                                | 2013         | 2030        | 2040   |
| ASU Assumed Population                                              | 15,000       | 40,000      | 60,000 |
| Domestic, Commercial, and Institutional Flow (MGD)                  | 1.50         | 4.0         | 6.0    |
| Flow including Infiltration & Inflow (MGD)                          | 5.55         | 10.0        | 13.8   |
| Reasonable Level of I&I as Determined by Ten States Standards (MGD) | 4.05         | 6.0         | 7.8    |
| ASU Plant ADF Size                                                  | 1.50         | 4.0         | 6.0    |
| ASU Plant PWWF Size                                                 | 3.75         | 8.0         | 12.0   |

As can be seen from the above data, ASU's proposed Carriage Estates III Wastewater Treatment Plant sizing is less than required by the Ten States Standards since ASU used "water data or other justification upon which to better estimate flow..." which once again, proves that the ASU collection system does not have excessive I&I.



OUCG DR 16-006

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please submit a copy of the Wastewater Facilities - Master Plan prepared by Hawkins Environmental.

**Information Provided:**

Refer to ASU response to OUCG DR 4-43, Attachment to Q4-43c.

OUCC DR 16-007

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please submit copies of updates to ASU's Wastewater Facilities – Master Plan prepared by or on behalf of ASU since 2002.

**Information Provided:**

No updates have been done for the Master Plan.

OUCC DR 16-008

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please confirm that Justin Frazier of TBIRD Design Services Corporation designed and certified the design of the Big-3 Sewer project. If Justin Frazier did not design the Big-3 Sewer project, please state the name of the person who did the design.

**Information Provided:**

Mr. Justin Frazier was the Engineer in Charge of the design of the Big 3 Sewer Project and as such, he stamped and signed the construction plans and the IDEM Application for Sanitary Sewer Construction Permit per 327 IAC 3.

OUCC DR 16-009

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide the flow and sewer sizing calculations prepared by or under the direction of Justin Frazier that were used by TBird to size the Big-3 Sewer segments, establish the sewer depths, and set the sewer slopes. If Justin Frazier or a person working for TBird did not calculate the flows or size the sewer as part of their design effort, so state and please explain.

**Information Provided:**

Attached are the two (2) TBIRD Design Service Corporation computer drainage calculation summaries for the 15" and 21" Big Three gravity sewer system. Please note that TBIRD's computer program uses the Manning Formula for calculating the sewers capacity based on the input variables of the roughness coefficient ( $\eta$ ), the percent pipe slope (%) and the sewer pipe diameter (inches) and then provides the attached summary data which provide the capacity at full flow (cu.ft./sec.), the velocity at full flow (ft./sec.), the population equivalent and the peaking factor.

There are no calculations for determining the sewer depth. The depth of the sewer is determined by using the professional judgment of the design engineer who must take into consideration the following minimum parameters when laying out the gravity sewer:

- a. Topography of the proposed gravity sewer route.
- b. Minimum slopes required by Ten States Standards.
- c. Depths of the various structures including the lowest elevation of influent sewer line and of the treatment plant.
- d. Natural barriers such as streams, lakes, retention ponds, drainage ditches, etc.
- e. Manmade barriers such as roads, railroad tracks, structures, etc.
- f. Location of existing easements and cost of obtaining new easements.

**Attachments:**

Attachment to OUCC DR 16-9.pdf

OUCC DR 16-010

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state whether the Big-3 Sewer was designed by or on behalf of ASU for the estimated ultimate tributary population.

**Information Provided:**

The Big Three Gravity Sewer system was designed to service an estimated ultimate tributary population of 3,700 EDUs.

OUCC DR 16-011 (Supplemental)

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state whether the Klondike Road Sewer was designed by or on behalf of ASU for the estimated ultimate tributary population. If so, please state the estimated ultimate tributary population for the Klondike Road Sewer and provide a drawing showing the tributary area.

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

1. The Klondike Road Relocated Sewer was designed to service an estimated ultimate tributary population of 3,150 EDUs.
2. Attached is the Klondike Road Relocated Gravity Sewer Service Area consisting of the following tributary areas estimated ultimate tributary populations:

Area 1: 700 EDUs  
Area 2: 1,000 EDUs  
Area 3: 950 EDUs

**Attachments:**

Attachment to OUCC DR 16-11.pdf

OUCC DR 16-012 (Supplemental)

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state whether the Cumberland Road Sewer was designed by or on behalf of ASU for the estimated ultimate tributary population. If so, please state the estimated ultimate tributary population for the Cumberland Road Sewer and provide a drawing showing the tributary area.

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

The Cumberland Road Sewer was designed to service an estimated ultimate tributary population of 1,000 EDUs.

Refer to ASU response to OUCC DR 16-11 for drawing showing the Cumberland Road Sewer tributary area.

NOTE: The proposed Cumberland Road Gravity Sewer was also designed to transport the flow from the temporary Copper Beech Lift Stations.

OUCC DR 16-013

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

In response to OUCC DR 11-19 asking about any field changes made by FTDC to the Big-3 Sewer project, ASU stated that the Hawthorne line was lowered by two (2) feet. Please explain why the Hawthorne line was lowered by two (2) feet.

**Information Provided:**

The Hawthorne Gravity Sewer Line was lowered 2'-0" in order to service future development east of County Road 50 West which includes the Shepards Subdivision which currently discharges to the old 10" sewer located under County Road 50 West.



OUCC DR 16-014

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In his direct testimony filed on December 19, 2012 under Cause No. 44272 regarding the Big-3 Sewer project, Mr. Beyer stated: "If the lift stations are not replaced by gravity sewer, in addition to replacing the lift stations, approximately 8,000 feet of forcemain would require replacement." Please provide a drawing(s) showing the 8,000 feet of forcemain referenced by Mr. Beyer that would require replacement and the discharge locations for the forcemains.

**Information Provided:**

Refer to ASU Response to OUCC DR 11-8, Map 1 "Big Oaks/Kimberly L.S. Site Layout".

OUCC DR 16-015

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state the manhole number for the manhole identified as Kimberly MH shown on Map 3 submitted by ASU in response to OUCC DR 11-8. Please also state the invert elevations and pipe diameters for all sewers entering and exiting the Kimberly manhole.

**Information Provided:**

1. The identification number for the receiving manhole for the Kimberly Lift Station force main identified on Map 3 "Kimberly L.S. and Receiving Manhole Layout" is CSA2.
2. Attached is Map 3 "Kimberly L.S. and Receiving Manhole Layout" Revision 1: 12/30/15 in which all the inlet and outlet sewer/force main connection inverts and gravity pipe sizes have been included.

**Attachments:**

OUCC DR 16-15.pdf

OUCC DR 16-016

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state what firm completed the field survey to document the as-built invert elevations, sewer lengths, diameters, and manhole locations and elevations for the Big-3 Sewer project.

**Information Provided:**

Refer to ASU Response to OUCC DR 11-17.

OUCC DR 16-017

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

If the as-built survey for the Big-3 Sewer project has been completed, please provide a copy of the surveyor's data sheets showing the as-built dimensions and elevations.

**Information Provided:**

Refer to ASU Response to OUCC DR 11-17.

OUCC DR 16-018

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

If the as-built survey for the Big-3 Sewer project has not yet been completed, please explain why it has been delayed, and state when ASU projects the as-built survey will be conducted.

**Information Provided:**

Refer to ASU Response to OUCC DR 11-20.

OUCC DR 16-019

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state whether ASU or FTDC paid for the as-built surveying services for the Big-3 Sewer project.

**Information Provided:**

Refer to ASU Response to OUCC DR 11-17.

OUCC DR 16-020

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

On the March 2014 through August 2015 TBIRD invoices for the Big-3 Sewer project submitted by ASU in response to OUCC DR 4-9, Senior Land Surveyor time totaled 19 hours and Two Man Survey Crew time totaled 55.5 hours. Please describe what work was being performed by the surveyors.

**Information Provided:**

Refer to ASU Response to OUCC DR 11-13.

OUCC DR 16-021

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide a drawing showing where unsuitable soils were encountered on the Big-3 Sewer project that had to be removed by FTDC and replaced with structural backfill. Please also provide copies of invoices for all structural backfill used on the Big-3 Sewer project.

**Information Provided:**

Refer to ASU Response to OUCC DR 11-18.



OUCC DR 16-022 (Supplemental)

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

In response to OUCC DR 11-21 asking whether any other ASU employees besides Mr. Lods worked on the Big-3 Sewer project, ASU stated that Bob Patton spent 80% of his time on the project. Please explain why Mr. Patton is not listed as an ASU employee on ASU's Actual Payroll test Year 1-Apr-2014 thru 31-Mar-2015 sheet submitted in response to OUCC DR 10.3 and why there were no ASU W-2 Forms submitted for Mr. Patton.

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

Provided herewith is a supplemental response to OUCC DR 11-21 to clarify that response. Mr. Bob Patton was a union employee employed by L3 Corp. (See also the response to OUCC DR 11-22.) His work for ASU was billed through the affiliate agreement with First Time Development Corporation.

**OUCG DR 16-023 (Supplemental)**

**DATA INFORMATION REQUEST  
American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state whether Mr. Patton also works for any affiliate of ASU.

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

As noted above, Mr. Patton was employed by L3 Corp, contracted by First Time Development Corporation to perform work for ASU.

OUCC DR 16-024 (Supplemental)

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please explain what specific tasks Mr. Patton performed on the Big-3 sewer project and estimate the number of hours Mr. Patton worked annually on the project in 2014 and in 2015.

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

Project Management. His hours were not tracked. ASU's best estimate is that 80% of his time (as a full-time employee) was spent on the Big 3 Sewer project.

OUCC DR 16-025

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In response to OUCC DR 4-41, ASU stated that preparation of the Big-3 Sewer project cost estimates shown on Exhibit TAB-3 was a combined effort between Scott Lods, Timothy A. Beyer, P.E. & L.S., and Eric Burns. Please explain what specific tasks Mr. Lods and Mr. Burns performed in the preparation of the cost estimates.

**Information Provided:**

Mr. Eric Burns, Attorney at Law, assisted ASU in determining the estimated legal costs for land acquisition along the Big 3 Sewer Line route.

Mr. Scott Lods was in overall charge of accumulating all the necessary costs required to prepare the Big 3 Sewer Summary listed in Exhibit TAB-3.

OUCC DR 16-026 (Supplemental)

DATA INFORMATION REQUEST  
American Suburban Utilities, Inc.

Cause No. 44676

Information Requested:

Please identify the portable generators used on the Big-3 Sewer project by manufacturer and model number, how each generator was powered (gasoline or diesel), and what company owns each generator.

Original Information Provided:

To be provided.

Supplemental Information Provided:

| Quantity | Manufacturer                                                                                                                                                                                                                                                               | Model       | Fuel | Owner |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------|-------|
| 3        | Coleman                                                                                                                                                                                                                                                                    | Max 5000 ER | Gas  | FTDC  |
| 1        | Generac                                                                                                                                                                                                                                                                    | GP6500      | Gas  | FTDC  |
| 1        | Trailer mounted generator purchased by ASU was transferred to FTDC for payment on a job at original purchase price (no depreciation) Value of \$14,200.00. ASU no longer needs generator because all remaining lift stations and plants have fixed generators. Diesel FTDC |             |      |       |

OUCC DR 16-027 (Supplemental)

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state where the above generators are currently located and what company owns the generators.

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

FTDC owns the generators and they are located in the building referred to as the Horse Barn.

OUCC DR 16-028 (Supplemental)

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

For the two Generac GP6500 generators purchased by ASU at Menards on 6/9/14 for \$779.00 each, please state whether the generators were used on the Big-3 Sewer project and who owns the generators.

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

No they were not used on the Big 3 Sewer project. ASU owns both generators and neither has been used to date.

OUCC DR 16-029

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state the length of gravity sewer excluding laterals that will be replaced by the Klondike Road Sewer project and the total length of gravity sewer that will be installed excluding laterals.

**Information Provided:**

Refer to ASU Response to OUCC DR 12-29.



OUCC DR 16-030

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state the number and total length of sewer laterals that will be installed under the Klondike Road sewer project.

**Information Provided:**

1. Number of sewer laterals to be installed under Klondike Road: Six (6).

2. Total Length:

|                      |             |
|----------------------|-------------|
| M.H. 320 to M.H. 322 | 110'        |
| M.H. 330 to M.H. 332 | 115'        |
| M.H. 357 to M.H. 355 | 119'        |
| M.H. 315 to M.H. 395 | 187'        |
| M.H. 340 to M.H. 345 | 120'        |
| M.H. 365 to M.H. 370 | <u>148'</u> |
| TOTAL LENGTH:        | 799'        |

OUCC DR 16-031

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state the length of gravity sewer that will be replaced by the Cumberland Road Sewer project.

**Information Provided:**

No gravity sewer will be replaced by the Cumberland Road Sewer project.

OUCC DR 16-032

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide flow metering results for sewage flows from Harrison High School for 2013, 2014, and 2015 to date.

**Information Provided:**

There is no wastewater flow meter installed to record flows from Harrison High School and therefore there are no meter readings for 2013, 2014 and 2015.

OUCC DR 16-033

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please explain how ASU obtains flow information and bills sewage flows from schools.

**Information Provided:**

ASU obtains from the Tippecanoe School Corporation a head count for each school consisting of staff, faculty and students at the start of the year and then multiplies the total number by a set rate per person to arrive at a total monthly sewage rate which is used for the year.

OUCC DR 16-034

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

If sewage flows for schools are determined from water meter readings, please provide the monthly billed flow volumes and billed amounts for all schools discharging sewage to ASU's collection system.

**Information Provided:**

Refer to ASU Response to OUCC DR 16-33 for a discussion on how sewage rates are determined for the schools.

OUCC DR 16-035

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

In response to OUCC DR 11-26 asking for the name and company of the person who transmitted the Big-3 Sewer Plan Sheet C111 to Patriot Pumps and Mersino Dewatering, Inc., ASU stated that Ed Serowka of Lakeland Innovatech transmitted the sheet. However, on page 6 of Attachment EJS-6, is a copy of an email from John A. Huggins of ASU transmitting Sheet C111 to Mersino. Please explain.

**Information Provided:**

ASU indicated Mr. Serowka in response to OUCC DR 11-26 because he is the one who was responsible for evaluating the costs for dewatering not only for the Bid 3 Sewer Project but also for the Klondike Road Relocation Sewer Project. Mr. Serowka also discussed the issue in his direct testimony for IURC Cause Number 44676 in Petitioner's Exhibit 1.

Mr. Serowka was assisted by Mr. John Huggins.

OUCC DR 16-036

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide a copy of the email, transmittal letter, or phone record from Ed Serowka to Patriot Pumps and Mersino Dewatering, Inc. that describes what dewatering services were being requested from the dewatering contractors and that transmitted design drawings or project information for the dewatering contractors use in preparing their quotations.

**Information Provided:**

Refer to ASU response to OUCC 16.35.

OUCC DR 16-037 (Supplemental)

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please list the sanitary sewer and wastewater treatment plant projects constructed by First Time Development Corporation in the last 10 years, including the project name, location, brief project description, Owner of the project, and construction cost.

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

First Time Development Corporation completed five (5) projects in the last ten (10) years and there were as follows:

1. Project: County Home III Wastewater Treatment Plant  
Location: West Lafayette, IN  
Owner: American Suburban Utilities, Inc.  
Description: One (1) Million Gallon per Day Sequencing Batch  
Reactor Wastewater Treatment Plant with  
Ultraviolet Disinfection.  
Construction Cost: \$2,500,000.00
  
2. Project: Howard County Wastewater Treatment Plant  
Location: Kokomo, IN  
Owner: Howard County Utilities, Inc.  
Description: One (1) Two Hundred Thousand Gallon per Day  
Extended Aeration Activated Sludge Wastewater  
Treatment Plant with Ultraviolet Disinfection and



1,700 feet of 15" sewer pipe connecting the old  
plant to the new plant.

Construction Cost: \$1,626,526.00

3. Project: Howard County Interceptor Sewer Project  
Location: Kokomo, IN  
Owner: Howard County Utilities, Inc.  
Description: One (1) Interceptor Gravity Sewer Line consisting  
of approximately 1,700 feet of 15" sewer pipe, 5  
manholes, and a creek crossing to connect the old  
plant to the new plant.  
Construction Cost: Included in Plant Construction Cost
4. Project: US 231 Force Main Relocation  
Location: West Lafayette, IN  
Owner: American Suburban Utilities, Inc.  
Description: Relocation of the Copper Beech and Willowbrook  
Lift Stations force mains consisting of  
approximately 8,000 feet of 10" PVC pipe.  
Construction Cost: \$792,784.00
5. Project: Big 3 Gravity Sewer Line  
Location: West Lafayette, IN  
Owner: American Suburban Utilities, Inc.  
Description: Gravity Sewer Line consists of approximately  
12,461 feet of 15" and 21" sewer pipe along with  
the 46 manholes and four bores. The sewer line  
removed three (3) old lift stations and redirected the  
sewage flows from several subdivisions from the  
Carriage Estates II plant to the County Home III  
plant.  
Construction Cost: \$3,499,00.00

OUCC DR 16-038 (Supplemental)

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please list the sanitary sewer projects constructed by F & K Construction, Inc. in the last 5 years, including the project name, location, brief project description, Owner of the project, and construction cost.

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

See attachment.

**Attachments:**

OUCC DR 16-38.pdf

OUCC DR 16-039

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state whether FTDC performs sewer cleaning and sewer televising services for clients other than ASU.

**Information Provided:**

FTDC no longer performs sewer cleaning or sewer televising service for any other clients than ASU.

OUCC DR 16-040

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state whether ASU maintenance employees Gary Yoder, Dean Yoder, Eric Klopfenstein, and Kenyon Coleman also performed work for First Time Development Corporation in 2013, 2014, or 2015. If so, please state the percentage of time each employee spent working for FTDC for each year.

**Information Provided:**

No, they did not.

OUCG DR 16-041

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state whether any other ASU employee performed work for FTDC in 2013, 2014, or 2015. If so, please identify the employee and state the percentage of time each employee spent working for FTDC for each year.

**Information Provided:**

None.

OUCC DR 16-042 (Supplemental)

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Does ASU enter into formal agreements with Developers to provide sewage service? If so, for the agreements with Developers that ASU has entered into since 2003, please state the names of the Developments/Subdivisions, the names of the Developers and provide copies of the agreements between ASU and the Development Companies.

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

See attached.

**Attachments:**

OUCC DR 16-42, Part 1.pdf  
OUCC DR 16-42, Part 2.pdf  
OUCC DR 16-42, Part 3.pdf

OUCC DR 16-043 (Supplemental)

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide the agreement for sewer service with the developers of the Fieldstone Subdivision and the Soleado Vista Subdivision.

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

There is no agreement to date with Fieldstone.  
The agreement for Soleado Vista Subdivision is with Solbuen LLC, and is attached.

**Attachments:**

OUCC DR 16-43.pdf

OUCC DR 16-044

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Did Mr. Serowka or ASU determine the population equivalents (P.E.) for the 2013 (current), 2030 (design year) and 2040 (future) cBOD<sub>5</sub>, total suspended solids (TSS), ammonia, and phosphorus loadings as part of the Carriage Estates Wastewater Treatment Plant design? If so, please provide the calculations made by or on behalf of ASU in 2013 showing the population equivalents based on pollutant concentrations.

**Information Provided:**

No.



OUCC DR 16-045

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

According to the Carriage Estates Wastewater Treatment Plant Design Summary submitted to IDEM with the Construction Permit application, the design organic loadings are based on 200 mg/l CBOD<sub>5</sub>, 200 mg/l TSS, and 25 mg/l NH<sub>3</sub>. Please explain why Mr. Serowka and ASU did not use actual pollutant concentration data in the design of the CE WWTP.

**Information Provided:**

The following are the actual and design organic parameters for the Carriage Estates II Wastewater Treatment Plant Expansion and Modifications:

| <u>Parameter</u> | <u>Actual</u> | <u>Design</u> |
|------------------|---------------|---------------|
| CBOD5            | 88.0 mg/l     | 200.0 mg/l    |
| TSS              | 140.0 mg/l    | 200.0 mg/l    |
| NH3-N            | 11.0 mg/l     | 15.0 mg/l     |

Mr. Matthew Florczyk, Project Engineer for the Facility Construction and Engineering Support Section of IDEM's Office of Water Quality stated that in his professional opinion it was incorrect to use the actual organic loadings because they were significantly lower than normal. Therefore, ASU revised the parameters to the above design to meet his concerns. Please refer to the note on the bottom of Page 3-A-3 in attached Section 3 "Design Calculations and Data", Part A "Design Data" for additional comment on this issue.

**Attachments:**

OUCC DR 16-45.pdf

OUCC DR 16-046 (Supplemental)

DATA INFORMATION REQUEST  
American Suburban Utilities, Inc.

Cause No. 44676

**Information Requested:**

Please describe the wastewater sampling method ASU uses to collect representative influent and effluent samples, including whether the samples are flow weighted composite samples, how compositing is accomplished, the time interval used to pull samples, how many grab samples are composited, and how flow weighting is accomplished.

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

Effluent samples are taken by an automatic sampler at both the Carriage Estates II and County Home III Wastewater Treatment Plants. The samples are taken as follows:

- |                                     |            |
|-------------------------------------|------------|
| 1. Flow weighting composite samples | No*        |
| 2. Equally spaced time samples      | Yes        |
| 3. Time between samples             | 30 Minutes |
| 4. Number of samples                | 48 Samples |
| 5. Length of time samples are taken | 24 Hours   |
| 6. Samples combined over 24 hours   | Yes        |

\* Flow weighting is not required because the samples are taken at equally spaced time intervals and not flow proportioned. This method is approved by the Carriage Estates II Treatment Plant NPDES Effluent Discharge Permit IN0043273, in 4.b.(4) on Page 7 of 26.

OUCC DR 16-047

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide a drawing showing where the raw sewage flow weighted composite sample is collected at the Carriage Estates WWTP including the name of the structure and a listing of all influent lines into the structure such as raw sewage influent sewers, drain lines from the treatment plant, and supernatant decant lines, etc.

**Information Provided:**

All raw sewage samples are taken at the inlet barscreen box located at the top of the existing CSBR tanks. The only inlet line connected to the inlet barscreen box is the 8" PVC SDR 21 force main from the influent lift station. All the plant's supernatant return and drain lines are connected to the plant's influent lift station.

Plan Sheet 14-039-02 "Plant Site Layout - Existing" is attached which shows the location of the inlet bar screen box.

**Attachments:**

OUCC DR 16-47.pdf

OUCC DR 16-048

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please describe what efforts ASU has taken to identify the source(s) of higher than normal raw sewage ammonia levels that ASU reported began in 2014.

**Information Provided:**

ASU undertook the following actions to determine the cause of the higher ammonia nitrogen level at its Carriage Estates II W.W.T.P.

1. Tested effluent from large commercial establishments which might be a cause of higher ammonia nitrogen levels, such as the Meijer Super Store, Menards, and local restaurants.
2. Monitored ammonia nitrogen levels in each of the four (4) CSBR tanks.
3. Monitored several times a day the influent and effluent ammonia nitrogen levels.

Refer to ASU responses to OUCC DR 16-49 and -50 for additional data.

OUCC DR 16-049

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide a summary of the ammonia analysis ASU made of the collection system over a 4 week period as referenced in Mr. Ed Serowka's letter to IDEM dated 11/26/2014.

**Information Provided:**

Complete records were not maintained over the entire four (4) week period of testing but attached is ammonia nitrogen data that was collected for October 7, 8 and 9, 2014.

**Attachments:**

OUCC DR 16-49.pdf

OUCG DR 16-050

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state whether the higher than normal influent ammonia concentrations are continuing at the Carriage Estates WWTP and if so, please state what steps ASU is taking to address the ammonia.

**Information Provided:**

No. The higher ammonia effluent limits were corrected when the existing CSBR treatment plant was modified as described in the attached Lakeland InnovaTech letter to IDEM dated November 26, 2014.

**Attachments:**

OUCG DR 16-50.pdf

OUCC DR 16-051

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state whether ASU obtained IDEM approval to make the modifications listed in Mr. Ed Serowka's letter to IDEM dated 11/26/2014.

**Information Provided:**

No. An IDEM construction permit was not required since no changes were made to the basic CSBR treatment process.

OUCC DR 16-052 (Supplemental)

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide cost details supporting the lump sum \$1,500,000 cost shown on page 6 of 23 in Petitioner's Exhibit No.1 Attachment EJS-10 for the standby chemical based phosphorus removal system.

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

The following is the engineer's estimated cost for the installation of the standby phosphorus chemical feed system.

1. Modification of Existing Blower/Chemical Building  
 $24.0' \times 12.0' \times \$300.00/\text{pump} = \$86,400.00 \quad \$86,400.00$
2. Equipment
  - 3 – Variable Speed Chemical Metering Pumps  
 $3 \times \$18,000.00/\text{pump} = 54,000.00$
  - 2 – Chemical Transfer Pumps  
 $2 \times \$10,200.00/\text{pump} = 20,400.00$
  - 1 – 1,500 gal. Day Tank = 9,600.00
  - 2 – 15,000 gal. Vertical Storage Tanks  
 $2 \times \$48,000.00/\text{tank} = 96,000.00$
  - 1 – Micro Star Tertiary Filter = 1,020,000.00
  - 1 – Item Miscellaneous Chemical



|                                |   |                |                |
|--------------------------------|---|----------------|----------------|
| Fittings, Pipe and Accessories | = | 42,000.00      |                |
|                                |   | <hr/>          |                |
|                                |   | \$1,242,000.00 | \$1,242,000.00 |

3. Installation

1 – Installation of Equipment including Concrete  
Channel for Micro Star Filter = 210,000.00

1 – Installation of Chemical and Drain  
Lines = 150,000.00

1 – Installation of Electrical Equipment = 90,000.00

|               |       |               |
|---------------|-------|---------------|
|               | <hr/> |               |
| \$ 450,000.00 |       | \$ 450,000.00 |

|                          |  |                |
|--------------------------|--|----------------|
| TOTAL ENGINEER ESTIMATE: |  | <hr/>          |
|                          |  | \$1,778,400.00 |

OUCC DR 16-053 (Supplemental)

DATA INFORMATION REQUEST  
American Suburban Utilities, Inc.

Cause No. 44676

**Information Requested:**

Please provide the process flow schematic and the design drawings for the standby chemical based phosphorus removal system.

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

The following drawings are attached:

1. Drawing No. 13-021-02, Revision 2 "Plant Site Layout-Proposed" dated 01/04/16.
2. Drawing No. 13-021-24, Revision 1 "Existing Air Blower/Chemical Building" dated 01/04/16.
3. Drawing No. 15-022-01 "Standby Phosphorus Chemical Removal System" dated 01/04/16.

**Attachments:**

Attachment to OUCC DR 16-53.pdf

OUCC DR 16-054 (Supplemental)

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide a copy of ASU's response to the IDEM Deficiency Letter dated 9/11/2013 regarding the Carriage Estates WWTP design including the submittal of the requested drawings.

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

Attached is the following data that ASU sent to IDEM in response to their Deficiency Notice for the Construction Permit Application for the Carriage Estates III Wastewater Treatment Plant Expansion located in West Lafayette, Tippecanoe County, Indiana, IDEM Project No. PS-1392X dated September 11, 2013:

1. Application for Wastewater Treatment Plant Construction Permit per 327 IAC 3 dated January 7, 2014.
2. Indiana Department of Environmental Management, Office of Water Management, Wastewater Treatment Plant Design Summary dated January 3, 2014.
3. Section 3 - Design Calculations and Data for Water Reclamation Plant for Carriage Estates III, West Lafayette, Tippecanoe County, Indiana, Project Number 13-021 dated January, 2014.

**Attachments:**

Attachment to OUCC DR 16-54 Attachment 1.pdf  
Attachment to OUCC DR 16-54 Attachment 2.pdf

OUCG DR 16-055 (Supplemental)

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please provide a copy of the IDEM approved plans and specifications for the Carriage Estates WWTP incorporating all of the final changes that ASU made in response to IDEM Deficiency Notice.

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

The following documents are attached:

1. Engineering Plans for the Carriage Estates III Water Reclamation Plant, West Lafayette, Tippecanoe County, Indiana, Project Number 13-021 dated November 12, 2013.
2. Project Specifications for the Carriage Estates III Wastewater Treatment Plant, West Lafayette, Tippecanoe County, Indiana Project Number 13-021 dated July 17, 2013.

**Attachments:**

Attachment to OUCG DR 16-55(1) Attachment 1.pdf  
Attachment to OUCG DR 16-55(1) Attachment 2.pdf  
Attachment to OUCG DR 16-55(1) Attachment 3.pdf  
Attachment to OUCG DR 16-55(1) Attachment 4.pdf  
Attachment to OUCG DR 16-55(1) Attachment 5.pdf  
Attachment to OUCG DR 16-55(1) Attachment 6.pdf  
Attachment to OUCG DR 16-55(2).pdf

OUCC DR 16-056 (Supplemental)

DATA INFORMATION REQUEST  
American Suburban Utilities, Inc.

Cause No. 44676

**Information Requested:**

In the progress report dated June 12, 2015, ASU claimed \$547,539.37 in costs had been expended for the Carriage Estates III WWTP project (CE-III-Project). Please provide documentation supporting the \$547,539.37 in costs.

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

Please see Attachment to OUCC DR15.3 for CEIII FTD Invoicing

|                               |                    |
|-------------------------------|--------------------|
| FTD Invoicing                 | \$543,542.00       |
| T-Bird Engineering Inv. 5163* | \$ 1,820.00        |
| T-Bird Engineering Inv. 5164* | \$ 665.00          |
| Credit Card Charges**         | <u>\$ 1,522.37</u> |
| Total CWIP                    | \$547,539.37       |

\* Previously provided.

\*\* These items were 2012 items that were miscoded to this account and should not have been included in the total.

OUCC DR 16-057

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Were geotechnical borings completed for the Carriage Estates project? If so, please provide a copy of the Geotechnical Report. If no soil borings or Geotechnical Report were made, so state and please explain.

**Information Provided:**

No soil borings were taken at the Carriage Estates II W.W.T.P. since ASU fully knows the site soil conditions based on past work at the plant.

OUCC DR 16-058

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state the current firm rated capacity of the Carriage Estates WWTP with the largest CSBR Tank offline for maintenance.

**Information Provided:**

The current capacity of the Carriage Estates II Wastewater Treatment Plant with one (1) of the four (4) CSBR tanks off-line for maintenance is as follows:

|                               |          |
|-------------------------------|----------|
| Average Design Flow (ADF):    | 1.50 MGD |
| Peak Dry Weather Flow (PDWF): | 2.25 MGD |
| Peak Wet Weather Flow (PWWF): | 3.75 MGD |

OUCC DR 16-059

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Please state which influent and effluent flow meters at ASU's wastewater plants are non-functioning.

**Information Provided:**

The Carriage Estates II Wastewater Treatment Plant Influent McCrometer Model MX Magnetic Flowmeter is non-functioning and has been removed from service.



OUCC DR 16-060

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

For the non-functioning flow meters at ASU's wastewater plants identified above, please state the date when each flow meter became non-functioning and the date each flow meter was repaired and put back in service. For flow meters continuing out of service, please estimate when the flow meter will be functioning again.

**Information Provided:**

The Carriage Estates II W.W.T.P. Influent flow meter stopped working on or about June 12, 2015. It was determined that due to the flow meter's age and the fact that the manufacturer was no longer in business, it would not be repaired and was removed from service.

Since the expanded Carriage Estates III W.W.T.P. did not include any influent flow meter in its design, it was decided that this flow meter will not be replaced.

## American Suburban Utilities, Inc.

## Housing Units, Required Design Flows &amp; Base Sanitary Flows 2010-2015 (Source: OUCC DR 6-6 and OUCC DR 1-2 Cause 44272)

## Housing Units / Customers

|                                       |
|---------------------------------------|
| Residential (homes)                   |
| Multi-Family (units)                  |
| Mobile Homes (units)                  |
| Service Station                       |
| Schools (Students, Faculty, & Staff)* |
| Metered customers                     |
| Total                                 |

\* People at 2 and 3 schools respectively

| Design Flows (per regulations)       | gpd   |
|--------------------------------------|-------|
|                                      | 310   |
| Multi-Family (gpd) EJS 4/9/13        | 200   |
| Mobile Homes (gpd) 327 IAC 3-6-11    | 200   |
| Service Station 327 IAC 3-6-11       | 1,000 |
| Schools (Students, Faculty, & Staff) | 15    |
| Metered customers (gpd) EJS 4/9/13   | 350   |
| Total (gpd)                          |       |

## Base Sanitary Sewage Flows

|                                             |       |
|---------------------------------------------|-------|
| Housing density (persons/housing unit)      | 2.43  |
| Residential (gpd)                           | 70    |
| Multi-Family (gpd)                          |       |
| Mobile Homes (gpd)                          |       |
| Service Station 327 IAC 3-6-11 (gpd)        | 1,000 |
| Schools (Students & Staff)(gpd)             | 15    |
| Metered customers (gpd) actual              |       |
| OUCC Est. Base Sanitary Flow Total (gpd)    |       |
| OUCC Calculated Infiltration & Inflow (gpd) |       |
| ASU Reported Influent Flow (gpd)            |       |

| 2010 (as of 12/31/10) |         |       | 2011 (as of 12/31/11) |         |       |
|-----------------------|---------|-------|-----------------------|---------|-------|
| CE WWTP               | CH WWTP | Total | CE WWTP               | CH WWTP | Total |
| 1,645                 | 245     | 1,890 | 1,655                 | 268     | 1,923 |
| 2,380                 | -       | 2,380 | 2,385                 | -       | 2,385 |
| 571                   | -       | 571   | 571                   | -       | 571   |
| 1                     | -       | 1     | 1                     | -       | 1     |
| 1,664                 | 2,859   | 4,523 | 1,542                 | 2,818   | 4,360 |
| 38                    | 2       | 40    | 42                    | 2       | 44    |
| 4,637                 | 250     | 4,887 | 4,656                 | 273     | 4,929 |

| 2010 (as of 12/31/10) |         |           | 2011 (as of 12/31/11) |         |           |
|-----------------------|---------|-----------|-----------------------|---------|-----------|
| CE WWTP               | CH WWTP | Total     | CE WWTP               | CH WWTP | Total     |
| 509,950               | 75,950  | 585,900   | 513,050               | 83,080  | 596,130   |
| 476,000               | -       | 476,000   | 477,000               | -       | 477,000   |
| 114,200               | -       | 114,200   | 114,200               | -       | 114,200   |
| 1,000                 | -       | 1,000     | 1,000                 | -       | 1,000     |
| 12,309                | 21,149  | 33,458    | 11,407                | 20,845  | 32,252    |
| 13,300                | 700     | 14,000    | 14,700                | 700     | 15,400    |
| 1,126,759             | 97,799  | 1,224,558 | 1,131,357             | 104,625 | 1,235,982 |

| 2010 (as of 12/31/10) |         |         | 2011 (as of 12/31/11) |         |         |
|-----------------------|---------|---------|-----------------------|---------|---------|
| CE WWTP               | CH WWTP | Total   | CE WWTP               | CH WWTP | Total   |
| 781,780               | 41,675  | 823,454 | 784,331               | 45,587  | 829,918 |
| 1,000                 | -       | 1,000   | 1,000                 | -       | 1,000   |
| 12,309                | 21,149  | 33,458  | 11,407                | 20,845  | 32,252  |
| 25,000                | 10,000  | 35,000  | 27,000                | 10,000  | 37,000  |
| 820,089               | 72,823  | 892,912 | 823,738               | 76,432  | 900,170 |
| 490,745               | 26,742  |         | 667,929               | 12,553  |         |
| 1,310,833             | 99,565  |         | 1,491,667             | 88,985  |         |

**American Suburban Utilities, Inc.**  
**Housing Units, Required Design Flows & Base Sanitary Flow**

**Housing Units / Customers**

|                                       |
|---------------------------------------|
| Residential (homes)                   |
| Multi-Family (units)                  |
| Mobile Homes (units)                  |
| Service Station                       |
| Schools (Students, Faculty, & Staff)* |
| Metered customers                     |
| Total                                 |

\* People at 2 and 3 schools respectively

| 2012 (as of 12/31/12) |         |       | 2013 (as of 12/31/13) |         |       |
|-----------------------|---------|-------|-----------------------|---------|-------|
| CE WWTP               | CH WWTP | Total | CE WWTP               | CH WWTP | Total |
| 1,727                 | 302     | 2,029 | 1,678                 | 427     | 2,105 |
| 2,674                 | -       | 2,674 | 2,663                 | -       | 2,663 |
| 572                   | -       | 572   | 571                   | -       | 571   |
| 1                     | -       | 1     | 1                     | -       | 1     |
| 1,700                 | 2,994   | 4,694 | 1,528                 | 3,166   | 4,694 |
| 42                    | 2       | 44    | 43                    | 2       | 45    |
| 5,018                 | 307     | 5,325 | 4,958                 | 432     | 5,390 |

| Design Flows (per regulations)       | gpd   |
|--------------------------------------|-------|
|                                      | 310   |
| Multi-Family (gpd) EJS 4/9/13        | 200   |
| Mobile Homes (gpd) 327 IAC 3-6-11    | 200   |
| Service Station 327 IAC 3-6-11       | 1,000 |
| Schools (Students, Faculty, & Staff) | 15    |
| Metered customers (gpd) EJS 4/9/13   | 350   |
| Total (gpd)                          |       |

| 2012 (as of 12/31/12) |         |           | 2013 (as of 12/31/13) |         |           |
|-----------------------|---------|-----------|-----------------------|---------|-----------|
| CE WWTP               | CH WWTP | Total     | CE WWTP               | CH WWTP | Total     |
| 535,370               | 93,620  | 628,990   | 520,180               | 132,370 | 652,550   |
| 534,800               | -       | 534,800   | 532,600               | -       | 532,600   |
| 114,400               | -       | 114,400   | 114,200               | -       | 114,200   |
| 1,000                 | -       | 1,000     | 1,000                 | -       | 1,000     |
| 12,541                | 22,087  | 34,628    | 11,303                | 23,420  | 34,723    |
| 14,700                | 700     | 15,400    | 15,050                | 700     | 15,750    |
| 1,212,811             | 116,407 | 1,329,218 | 1,194,333             | 156,490 | 1,350,823 |

**Base Sanitary Sewage Flows**

|                                             |       |
|---------------------------------------------|-------|
| Housing density (persons/housing unit)      | 2.43  |
| Residential (gpd)                           | 70    |
| Multi-Family (gpd)                          |       |
| Mobile Homes (gpd)                          |       |
| Service Station 327 IAC 3-6-11 (gpd)        | 1,000 |
| Schools (Students & Staff)(gpd)             | 15    |
| Metered customers (gpd) actual              |       |
| OUCC Est. Base Sanitary Flow Total (gpd)    |       |
| OUCC Calculated Infiltration & Inflow (gpd) |       |
| ASU Reported Influent Flow (gpd)            |       |

| 2012 (as of 12/31/12) |         |         | 2013 (as of 12/31/13) |          |         |
|-----------------------|---------|---------|-----------------------|----------|---------|
| CE WWTP               | CH WWTP | Total   | CE WWTP               | CH WWTP  | Total   |
| 845,907               | 51,370  | 897,278 | 835,531               | 72,633   | 908,164 |
| 1,000                 | -       | 1,000   | 1,000                 | -        | 1,000   |
| 12,541                | 22,087  | 34,628  | 11,303                | 23,420   | 34,723  |
| 27,000                | 10,000  | 37,000  | 27,415                | 10,838   | 38,254  |
| 886,448               | 83,457  | 969,905 | 875,250               | 106,891  | 982,140 |
| 377,958               | 30,126  |         | 536,621               | (21,242) |         |
| 1,264,407             | 113,583 |         | 1,411,870             | 85,649   |         |

**American Suburban Utilities, Inc.**  
**Housing Units, Required Design Flows & Base Sanitary Flow**

**Housing Units / Customers**

|                                       |
|---------------------------------------|
| Residential (homes)                   |
| Multi-Family (units)                  |
| Mobile Homes (units)                  |
| Service Station                       |
| Schools (Students, Faculty, & Staff)* |
| Metered customers                     |
| Total                                 |

\* People at 2 and 3 schools respectively

| 2014 (as of 12/31/14) |         |       | 2015 (as of 10/31/15) |         |       |
|-----------------------|---------|-------|-----------------------|---------|-------|
| CE WWTP               | CH WWTP | Total | CE WWTP               | CH WWTP | Total |
| 1,684                 | 487     | 2,171 | 1,395                 | 883     | 2,278 |
| 2,667                 | -       | 2,667 | 2,694                 | -       | 2,694 |
| 571                   | -       | 571   | 575                   | -       | 575   |
| 1                     | -       | 1     | 1                     | -       | 1     |
| 1,569                 | 3,361   | 4,930 | 1,529                 | 3,489   | 5,018 |
| 48                    | 2       | 50    | 48                    | 2       | 50    |
| 4,973                 | 492     | 5,465 | 4,715                 | 888     | 5,603 |

| Design Flows (per regulations)       | gpd   |
|--------------------------------------|-------|
|                                      | 310   |
| Multi-Family (gpd) EJS 4/9/13        | 200   |
| Mobile Homes (gpd) 327 IAC 3-6-11    | 200   |
| Service Station 327 IAC 3-6-11       | 1,000 |
| Schools (Students, Faculty, & Staff) | 15    |
| Metered customers (gpd) EJS 4/9/13   | 350   |
| Total (gpd)                          |       |

| 2014 (as of 12/31/14) |         |           | 2015 (as of 10/31/15) |         |           |
|-----------------------|---------|-----------|-----------------------|---------|-----------|
| CE WWTP               | CH WWTP | Total     | CE WWTP               | CH WWTP | Total     |
| 522,040               | 150,970 | 673,010   | 432,450               | 273,730 | 706,180   |
| 533,400               | -       | 533,400   | 538,800               | -       | 538,800   |
| 114,200               | -       | 114,200   | 115,000               | -       | 115,000   |
| 1,000                 | -       | 1,000     | 1,000                 | -       | 1,000     |
| 11,606                | 24,862  | 36,468    | 11,310                | 25,809  | 37,119    |
| 16,800                | 700     | 17,500    | 16,800                | 700     | 17,500    |
| 1,199,046             | 176,532 | 1,375,578 | 1,115,360             | 300,239 | 1,415,599 |

**Base Sanitary Sewage Flows**

|                                             |       |
|---------------------------------------------|-------|
| Housing density (persons/housing unit)      | 2.43  |
| Residential (gpd)                           | 70    |
| Multi-Family (gpd)                          |       |
| Mobile Homes (gpd)                          |       |
| Service Station 327 IAC 3-6-11 (gpd)        | 1,000 |
| Schools (Students & Staff)(gpd)             | 15    |
| Metered customers (gpd) actual              |       |
| OUCC Est. Base Sanitary Flow Total (gpd)    |       |
| OUCC Calculated Infiltration & Inflow (gpd) |       |
| ASU Reported Influent Flow (gpd)            |       |

| 2014 (as of 12/31/14) |          |         | 2015 (as of 10/31/15) |         |           |
|-----------------------|----------|---------|-----------------------|---------|-----------|
| CE WWTP               | CH WWTP  | Total   | CE WWTP               | CH WWTP | Total     |
| 837,232               | 82,839   | 920,071 | 832,356               | 150,198 | 982,554   |
| -                     | 1,000    | 1,000   | -                     | 1,000   | 1,000     |
| 11,606                | 24,862   | 36,468  | 11,310                | 25,809  | 37,119    |
| 28,604                | 10,356   | 38,960  | 32,040                | 9,989   | 42,029    |
| 877,443               | 119,057  | 996,500 | 875,706               | 186,996 | 1,062,703 |
| 922,763               | (12,698) |         | 979,169               |         |           |
| 1,800,206             | 106,359  |         | 1,854,876             |         |           |



*EPA New England Water Infrastructure Outreach provides tools, examples, and technical assistance for water infrastructure operators and managers, local officials, and other decision-makers for more effective and sustainable water infrastructure management. For more information see <http://www.epa.gov/region1/ssol/toolbox.html>*

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## Guide for Estimating Infiltration and Inflow

June 2014

### **Purpose**

This Guide is intended to provide background and information for managers of wastewater collection systems on estimating the amount of infiltration and inflow (I&I) entering their collection system and for responding to National Pollutant Discharge Elimination System (NPDES) I&I permit reporting requirements.

This Guide provides methods for analyzing wastewater treatment plant influent flow data to estimate the I&I impact from the collection system as a whole. It will assist municipalities in ascertaining whether they have a significant I&I problem and, if so, what kind of problem they have. Areas (sewersheds) served by pump stations that are capable of recording flow can also be evaluated using these methods.

### **Background**

There are three major components of wastewater flow in a sanitary sewer system, base sanitary (or wastewater) flow, groundwater infiltration and rainfall derived inflow and infiltration, more commonly referred to as inflow. Virtually every sewer system has some infiltration and/or inflow. Historically, small amounts of I&I are expected and tolerated. However, infiltration and inflow may be considered excessive when it is the cause of overflows or bypasses, or the cost to transport and treat exceeds the cost to eliminate it. In cases where the I&I may not be considered “excessive” from a cost-to-eliminate perspective but causes health or environmental risks, corrective actions are required.

Even where a system is not suffering from sanitary sewer overflows (SSOs), systems experiencing surcharging may be good candidates for further I&I investigation, as are systems where significant new growth is expected and existing collection system capacity may be inadequate or marginal for handling new customers.

State Revolving Loan Fund (SRF) applicants are generally required to evaluate the impacts of I&I on their overall system. This evaluation usually begins with an initial screening to determine whether a more complete I&I analysis will be required. The screening compares the sewered population to the treatment plant flow to determine gallons per day per person (gpdpp). The gpdpp is compared to a standard to determine if there is excessive infiltration. The states’ standards vary between 100 and 150 gpdpp. The existing EPA guidance, which uses 120 gpdpp, was published in 1985 when 3.5 gallon-per-flush toilets were standard (the Energy Policy Act of 1992 required that toilets installed in new construction use a maximum of 1.6 gallon per flush (low-flow toilets)).

Some guidance documents use the term excessive infiltration/inflow. This can mean quantities of I&I which can be economically eliminated from a sewer system as determined in a cost-effectiveness analysis that compares the costs for correcting the I&I conditions to the total costs for transportation and treatment of the infiltration/inflow. I&I which causes SSOs is considered excessive.

Municipalities will be well served to understand the dimensions and nature of any I&I problems. A clear set of goals is important for keeping an I&I program focused.

The following is a sample of possible goals:

- To reduce ratepayer costs for transporting and treating wastewater by implementing all cost-effective I&I reduction projects within 10 years.
- To minimize liability from water pollution and public health risks by eliminating sanitary sewer overflows in storm events.
- To eliminate sufficient I&I to avoid the capital costs of wastewater treatment plant capacity expansion in anticipation of 10% population growth over the next 20 years.
- To eliminate sufficient I&I to avoid the capital costs of interceptor expansion which will be needed to support the build-out of certain neighborhoods.
- To eliminate enough I&I to offset the environmental and regulatory impact of sewer system expansion and increased water demand over the next 15 years.

In some cases, high levels of infiltration can lower groundwater levels and can cause significant hydrologic impacts to nearby streams. The health of tributary streams is critical to the health of main stem rivers, and reduced flows can impair the fish community by decreasing dissolved oxygen and available habitat, increasing water temperatures, and concentrating pollutant levels.

Finally, just as collection system capacity problems may indicate excessive inflow, the same can be said for treatment plant capacity problems. Your state agency can provide you with treatment plant design standards which can then be compared with your influent flow data. The Ten States Standards for Wastewater Facilities is also a good reference source.

#### **Data Collection**

To assess extraneous water entering your system at least a year of influent flow data to the treatment facility should be examined.

For infiltration analysis, flow data collected during the high groundwater periods is used. The Average Dry Weather (ADW) flow can be determined from analyzing a one to two week period during seasonal high water that is not influenced by rainfall. For the northeast, this is usually in the spring when the frost line is receding and the snow is melting. The ADW flow includes the sanitary flow plus infiltration, which can be separated into its individual components.

For inflow analysis, the Average Wet Weather (AWW) flow can be estimated from flow data for a one week period when there has been significant rain. If a single storm event is used to analyze wet weather inflow, it should be an event large enough to cause surface ponding and runoff.

**Definitions of terms used in Calculating Inflow and Infiltration**

Average Annual Flow - The total annual volume divided by 365 days. This value is approximated by the mean of the twelve monthly average flows.

Average Annual Infiltration - The average of the monthly minimum flows.

Average Annual Inflow - From the average annual flow, subtract the base sanitary flow and average annual infiltration.

Average Dry Weather Flow (ADW) - Flow during a period of extended dry weather (7 to 14 days) and seasonally high groundwater. Flow includes sanitary flow and infiltration, and excludes significant industrial and commercial flows (assumes no inflow during dry weather conditions).

Base Sanitary Flow (BSF) - The portion of wastewater which includes domestic, commercial, institutional, and industrial sewage and specifically excludes infiltration and inflow. (See Estimating Base Flow, below).

Delayed Inflow volume - The portion of total inflow which is generated from indirect connections to the collection system or connections which produce inflow after a significant time delay from the beginning of a storm. Delayed inflow sources include: sump pumps, foundation drains, indirect sewer/drain cross-connections, etc. Rainfall-induced infiltration cannot be distinguished from delayed inflow and is therefore included as part of delayed inflow. Delayed inflow sources have a gradual impact on the collection system and flow decreases gradually upon conclusion of the rainfall event, and after peak inflow caused by direct connections.

Direct Inflow Volume - The portion of total inflow volume which is from direct connections to the collection system such as catch basins, roof leaders, manhole covers, etc. These inflow sources allow stormwater runoff to rapidly impact the collection system.

Dry Weather Flow (DWF) - All flow in a sewer (includes sanitary flow and infiltration) except that caused directly by rainfall. Measured during a period of extended dry weather (7 to 14 days) and seasonally high groundwater.

Groundwater Infiltration (GWI) - Measured during average dry weather flow period (see above). The average of the low nighttime flows (midnight to 6 am) per day for the same time period, minus significant industrial or commercial nighttime flows.

Hydrograph - A graph showing stage (the height of a water surface above an established datum plane), flow, velocity, or other property of water with respect to time.

Infiltration - Water other than sanitary wastewater that enters a sewer system from the ground through defective pipes, pipe joints, connections, or manholes. Infiltration does not include inflow.

Inflow - Water other than sanitary wastewater that enters a sewer system from sources such as roof leaders, cellar/foundation drains, yard drains, area drains, drains

from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, and catch basins. Inflow does not include infiltration.

Inflow volume - The total volume of inflow from a single storm event including both direct and delayed inflow. Total inflow is the area between the storm event hydrograph and the dry weather hydrograph.

Maximum Daily Flow - The highest flow during a 24 hour period.

Maximum Daily Infiltration - The highest daily flow at seasonal high groundwater after a dry period of three days or more minus the base sanitary flow.

Maximum Weekly Infiltration - The highest 7 day average flow at high groundwater after a dry period of three or more days minus the base sanitary flow.

Maximum Monthly Infiltration - The highest monthly average flow during dry or minimal rain period minus the base sanitary flow.

Maximum Daily Inflow - The highest daily wet weather flow minus the base sanitary flow and the infiltration prior to the rain event.

Maximum Weekly Inflow (includes delayed infiltration) - The highest 7 day average wet weather flow minus the base sanitary flow and the infiltration prior to the rain event.

Maximum Monthly Inflow - The highest monthly flow after subtracting the base sanitary flow and infiltration.

Peak Hourly Dry Weather Flow - The highest one hour flow after a dry period of three or more days.

Peak Hourly Inflow - The highest one hour flow rate during wet weather minus the base sanitary flow and the infiltration prior to the rain event.

Peak Hourly Wet Weather Flow – The highest one hour flow during a significant rain event.

Peak Infiltration- The highest nighttime (midnight to 6 am) flow during high groundwater (usually in early spring).

Peak Instantaneous Wet Weather Flow - The peak flow during a significant rain event day when the ground water is seasonally high.

Peaking Factor - The ratio of peak hourly flow to average daily flow.

Rainfall-Induced Infiltration - The short-term increase in infiltration which is the result of a rain event. Rainfall-induced infiltration is a portion of delayed inflow.

Wet Weather Flow- The highest daily flow during and immediately after a significant storm event. Includes sanitary flow, infiltration and inflow.



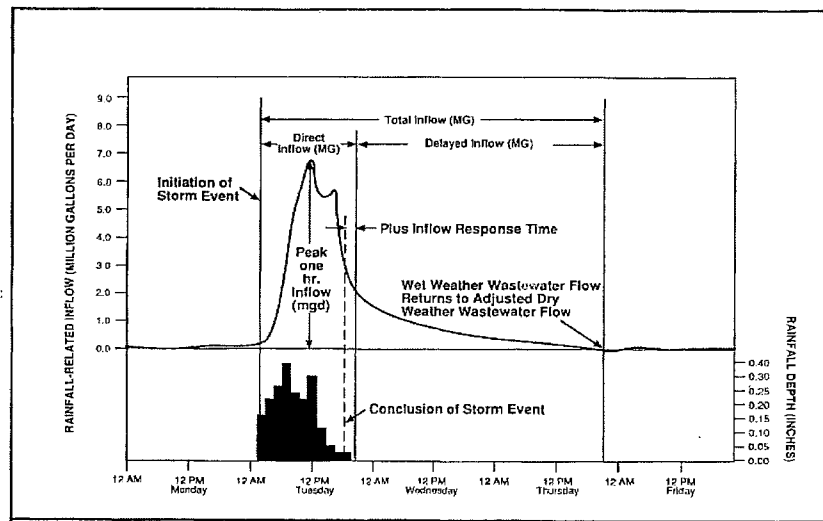


Figure 1: Hydrograph helps visualize inflow as the response to wet weather flow (from MassDEP 1993)

### Estimating Base Sanitary Flow

The sanitary portion of the wastewater flow can be estimated through two methods, which can be used to 'check' each other - flow meter data and water consumption (if all sewer customers are on metered water).

The first method is to analyze the wastewater flow data at the treatment facility during a dry weather period of 7 to 14 days. It is useful to choose the dry weather period during seasonal high water as you will be able to determine the peak infiltration rate at the same time. From the flow data, calculate the average daily flow for the dry weather period (Average Dry Weather - ADW - flow). The base sanitary flow (BSF) can be estimated by subtracting the groundwater infiltration (GWI) flow from the average daily dry weather wastewater (ADW) flow. (See Estimating Infiltration below).

In the second method, water usage records can be used to estimate the base sanitary flow for the sewered population. The best time to estimate flow using this method would be when outdoor water uses are low and wastewater from a residential area can be assumed to be the same as the billed water use. In the northeast, this would typically be in the winter months prior to landscaping and swimming pool use. Groundwater infiltration can be estimated as the difference between the monitored wastewater flow and the billed water use.

### Estimating Infiltration

Groundwater infiltration (GWI) can be estimated from influent flow data collected during a dry weather period at high groundwater. The dry weather period selected should be the same period as for estimating the BSF, however, it is more important to estimate GWI during high seasonal ground water. Dry weather is defined as when it has been at least three days without a rain event. During dry weather, inflow is expected to be zero.

During seasonal high groundwater, which usually occurs after snow melt and soil thaw, infiltration will be at its highest. During this period, the infiltration rate can be quantified by averaging the

nighttime flows (midnight to 6 am) over several days, during dry weather conditions. The nighttime flows can be assumed to be mostly groundwater (after subtracting significant industrial or commercial nighttime flows).

In most cases, the GWI rate will approximate the maximum weekly infiltration. The maximum daily infiltration will be higher and maximum monthly infiltration will be lower.

#### **Estimating Inflow**

Inflow represents the influence of wet weather on the sewer system and is calculated by subtracting out the sanitary wastewater and infiltration flow during a time that the system has been influence by rain. Flow data during a significant storm event should be compared to the dry weather data immediately preceding the storm when groundwater conditions are similar. The rate and volume of inflow can be estimated by subtracting the base sanitary flow and infiltration flow data from the wet weather flow data.

The peak inflow rate and the total inflow volume can be calculated from the flow records. The peak inflow rate is the largest rate difference, over a one hour period, between the storm event flow data and the dry weather flow prior to the event. The total inflow volume from a storm event can be apportioned into two components: direct inflow and delayed inflow.

*Direct inflow* is the portion of the inflow which rapidly increases soon after the start of the storm and decreases swiftly upon conclusion of the event. The time it takes for inflow from the nearest sub-basin to reach the treatment facility can be estimated as the time difference between initiation of the storm event and the increase in observed flow. The direct inflow ends at a time after the conclusion of the storm approximately equal to the inflow response time from the furthest sub-basin.

*Delayed inflow* is the portion of the inflow which decreases gradually upon conclusion of the storm and after the peak inflow caused by direct connections. Delayed inflow is the inflow Beginning at the conclusion of direct inflow and ending at a time when dry weather flow resumes. It is expected that a portion of the delayed inflow includes rainfall-induced infiltration.

In some cases, a second storm will impact the flow data before dry weather flow resumes. When this occurs, the expected delayed inflow can be extrapolated from the flow data collected prior to the second storm.

#### **Estimating Infiltration and Inflow (I&I)**

*Maximum monthly I&I rate* can be estimated by subtracting the BSF from the maximum monthly average flow.

*Average annual I&I rate* can be estimated by subtracting the BSF rate from average annual flow rate.

*Annual I&I volume* can be estimated by multiplying the average annual I&I rate by 365 days.

### Summary

Sewers and treatment facilities are designed around expected average and maximum flows. Excess storm and groundwater entering the sewer system through I&I robs the system of its valuable capacity, puts a burden on operation and maintenance, and reduces the life expectancy of the treatment facility. Sewer surcharging, back-ups and overflows all require emergency response and contribute to disruption of operations.

Integrating I&I investigation and corrective action into a municipality's normal public works budget can allow an incremental approach to continuous improvement and help defer capacity expansion projects.

### References

Computer Tools for Sanitary Sewer System Capacity Analysis and Planning  
EPA/600/R-07/111, October 2007

Design Flow and Loading Determination Guidelines for Wastewater Treatment Plants  
Minnesota Pollution Control Agency (MNPCA) February, 2002

Guidance for evaluating Infiltration and Inflow for State Revolving Fund Projects  
Louisiana DEQ (LA DEQ) October, 2001

Guidelines for Performing Infiltration/Inflow Analyses and Sewer System Evaluation Survey  
MassDEP January, 1993

Infiltration/Inflow - I/I Analysis and Project Certification  
EPA May, 1985

Minimizing Municipal Costs for Infiltration & Inflow Remediation  
Massachusetts EOEA June, 2007

Recommended Standards for Wastewater Facilities, 2004 Edition  
(Ten States Standards)

*Tippecanoe County*  
*IN0043273*



**Lakeland  
InnovaTech**

*Where Engineering Begins and Service Never Ends*

DO #09714

IDENT  
OFFICE OF  
WATER QUALITY  
2009 AUG 31 P 3:46

DATE: August 25, 2009

TO: Indiana Department of Environmental Management  
100 North Senate Avenue  
Indianapolis, IN 46204

ATTENTION: Donald R. Daily, Inspections Section Chief  
Compliance Branch  
Office of Water Quality

SUBJECT: Inspection Summary  
Carriage Estates Wastewater Treatment Facility  
NPDES Permit No. IN0043273  
West Lafayette, Tippecanoe County, Indiana

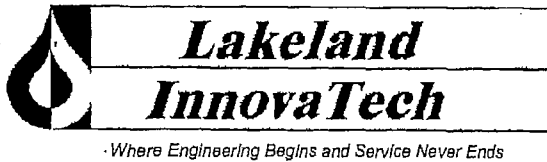
PROJECT NO.: 08-140  
Please refer to this number when corresponding.

Dear Mr. Daily:

This is to inform you that we are finalizing the plans and specifications for the improvements to the Carriage Estates Wastewater Treatment which we are planning to submit for a construction permit in September, 2009. We believe that the improvements we are planning will resolve all the issues stated in your Inspection Summary/Referral to the Office of Water Quality Enforcement Section letter dated August 11, 2009.

The following are the improvements we are planning:

1. We are proposing to install macerators after the influent lift station which will reduce the solids to a size which can directly flow into the CSBR tanks. This will then allow us to remove the barscreen and dumpster which will result in a cleaner site.
2. We are proposing to remove the existing chlorination and dechlorination facilities and replace them with an ultraviolet disinfection unit. This will allow us to redesign the existing chlorine contact tank so that any solids within the tank will not be discharged into the effluent.
3. A new effluent flow measuring structure will be installed which will allow us to install a flow meter which then can be used to provide a 4-20mA signal to a new sampler. This will allow for flow proportional sampling. (Please note that the plant's current NPDES permit allows for time based sampling.)
4. We are also proposing to install additional sludge storage tanks which will allow for better sludge management and better plant maintenance and operation.
5. A standby generator will be proposed for installation.



We know that these improvements will allow for better plant operations and maintenance. This will then solve all of the existing situations which are listed in your letter of August 11, 2009.

Thank you and please do not hesitate to contact us if we can be of any additional assistance.

Very truly yours,

*Lakeland InnovaTech*

A handwritten signature in dark ink, appearing to read "Edward J. Serowka", is written over a horizontal line.

Edward J. Serowka, P.E.  
President

Copy: Mark W. Stanifer  
Chief, Water Section Enforcement  
Office of Water Quality



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

July 27, 2011

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

Mr. Scott Lods, President  
American Suburban Utilities  
3350 W. 250 N  
West Lafayette, Indiana 47906

Re: **Inspection Summary/ Referral to the Office of Water  
Quality Enforcement Section**  
American Suburban Utilities Wastewater Treatment  
Facility (Carriage Estates)  
NPDES Permit No. IN0043273  
West Lafayette, Tippecanoe County

Dear Mr. Lods:

On June 24, 2011, a representative of the Indiana Department of Environmental Management, Office of Water Quality, conducted an inspection of the American Suburban Utilities Wastewater Treatment Facility, located in West Lafayette, Indiana. This inspection was conducted pursuant to IC 13-14-2-2. For your information, and in accordance with IC 13-14-5, a summary of the inspection is provided below:

Type of Inspection: Compliance Evaluation Inspection

Results of            Violations were observed but corrected during the inspection.  
Inspection:            Violations were observed.  
  X   Violations were observed and will be referred to the Enforcement Section.

The following specific items were noted:

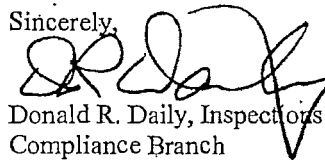
1. The CSO/SSO evaluation generated an unsatisfactory rating due to the facility experiencing a sanitary sewer overflow/bypass in violation of Part II. B. 1 of the permit which states, in part, that all waste collection, control, treatment, and disposal facilities shall be operated as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants, with adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to ensure compliance with the conditions of this permit. This includes the collection system. From June 22, 2010 to June 21, 2011 overflows occurred on 5 days.
2. Facility/Site was rated as marginal. Access to the influent bar screen is limited and needs to be improved. This will be addressed within 120 days of the effective date of the Agreed Order.
3. Maintenance was rated as marginal due to inadequate maintenance of the collection system. The facility needs to continually investigate sources of inflow and infiltration (I/I), document known sources and repair if feasible. Part II. B. 1 of the permit which states, in part, that all waste collection, control, treatment, and disposal facilities shall be operated and maintained as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants. During 5 months of 12 reviewed, the total flow for the month was in excess of 100% of the

capacity of the plant. Specifically in March and April of 2011, the flow was above the design capacity on all but 2 days for the month.

4. Sludge Disposal was rated as marginal due to the current solids inventory throughout the facility. The sludge lagoons are very full and the digesters are nearly full. Sludge will need to be removed from the plant very soon. Facility land applies sludge in accordance with land application permit INLA000078. Approximately 750,000 gallons of sludge was hauled and land applied in December 2010.
5. Self-Monitoring was rated as marginal. Facility needs to improve the documentation of effluent sampling. Composite sample log does not always match up with sample days on MRO. Also, daily monitoring records for pH, DO, and chlorine should be kept on-site and available for inspection and review at all times.

This information is being forwarded to the OWQ Enforcement Section for consideration in conjunction with your existing Agreed Order, Case No. 2009-18688-W. As items 1, 3, 4 and 5 listed above is not addressed within your existing agreed order, a written detailed response documenting correction of this item and/or a plan for assuring future compliance must be submitted to this office within thirty (30) days of receipt of this letter. Failure to respond adequately to this letter may result in an additional referral to the OWQ Enforcement Section. Please direct your response to this letter to the attention of Becky Ruark. Any questions regarding this matter should be directed to Becky Ruark at 317-691-1909 or by email to [bruark@idem.IN.gov](mailto:bruark@idem.IN.gov). Thank you for your attention to this matter.

Sincerely,



Donald R. Daily, Inspection Section Chief  
Compliance Branch  
Office of Water Quality

Enclosure

Cc: Mark Stanifer, OWQ Enforcement Section



# Wastewater Facility Notice of Inspection

State Form 54290 (5-10)  
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

| FACILITY AND INSPECTION INFORMATION                                                                                                                                                                                                                |                                          |                    |                                                                                                                                                                                        |                                     |                                                                                      |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------------------------------------------------------|--|
| NPDES Permit Number<br><b>IN0043273</b>                                                                                                                                                                                                            | Facility Type Code<br><b>Semi-Public</b> |                    | Major                                                                                                                                                                                  |                                     | Classification Per Permit<br><b>III</b>                                              |  |
| This is to notify you that on June 24, 2011, an inspection of the specified facility was conducted by the undersigned representative of the Indiana Department of Environmental Management, Office of Water Quality.                               |                                          |                    |                                                                                                                                                                                        |                                     |                                                                                      |  |
| Type Of Inspection: <b>Compliance Evaluation Inspection</b>                                                                                                                                                                                        |                                          |                    |                                                                                                                                                                                        |                                     |                                                                                      |  |
| Name and Location of Facility Inspected<br><b>American Suburban Utilities WWTF Carriage Estates</b><br><b>4100 Bridgeway Dr</b><br><b>West Lafayette, Indiana 47906</b>                                                                            |                                          |                    | Receiving Waters/POTW<br><b>Indian Creek</b>                                                                                                                                           |                                     | Permit Expiration Date<br><b>1/31/2016</b><br>Facility Design Flow<br><b>1.5 MGD</b> |  |
| On Site Representative(s)                                                                                                                                                                                                                          |                                          |                    |                                                                                                                                                                                        |                                     |                                                                                      |  |
| Name                                                                                                                                                                                                                                               | Title                                    | Facility phone     | Cell phone                                                                                                                                                                             | Email                               |                                                                                      |  |
| Gary Yoder                                                                                                                                                                                                                                         | Operator                                 | 765-463-3856       |                                                                                                                                                                                        |                                     |                                                                                      |  |
| Heather                                                                                                                                                                                                                                            | Administration                           | 765-463-3856       |                                                                                                                                                                                        |                                     |                                                                                      |  |
| Dennis Crandall (by phone)                                                                                                                                                                                                                         |                                          | 765-463-3856       |                                                                                                                                                                                        |                                     |                                                                                      |  |
| Certified Operator<br><b>Dennis Crandall</b>                                                                                                                                                                                                       | Number<br><b>15007</b>                   | Class<br><b>IV</b> | Renewal Effective Date<br><b>7/1/2010</b>                                                                                                                                              | Expiration Date<br><b>6/30/2012</b> | Hours/Week                                                                           |  |
| Responsible Official<br><b>Mr. Scott Lods</b><br><b>American Suburban Utilities</b><br><b>3350 W 250 N</b><br><b>West Lafayette, Indiana 47906</b>                                                                                                 |                                          |                    | Title<br><b>President</b><br>Email<br><br>Telephone <b>765-463-3856</b><br>Fax<br><br>Contacted?                                                                                       |                                     |                                                                                      |  |
| AREAS EVALUATED DURING INSPECTION                                                                                                                                                                                                                  |                                          |                    |                                                                                                                                                                                        |                                     |                                                                                      |  |
| (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated, NA = Not Applicable)                                                                                                                                                       |                                          |                    |                                                                                                                                                                                        |                                     |                                                                                      |  |
| S Receiving Waters                                                                                                                                                                                                                                 | M Facility/Site                          | M Self-Monitoring  | NA Compliance Schedules                                                                                                                                                                |                                     |                                                                                      |  |
| S Effluent Appearance                                                                                                                                                                                                                              | S Operation                              | S Flow Measurement | NA Pretreatment                                                                                                                                                                        |                                     |                                                                                      |  |
| S Permit                                                                                                                                                                                                                                           | M Maintenance                            | N Laboratory       | S Effluent Limits Violations                                                                                                                                                           |                                     |                                                                                      |  |
| U CSO/SSO (Sewer Overflow)                                                                                                                                                                                                                         | M Sludge                                 | S Records/Reports  | N Other:                                                                                                                                                                               |                                     |                                                                                      |  |
| PRELIMINARY INSPECTION/SCREENING FINDINGS*                                                                                                                                                                                                         |                                          |                    |                                                                                                                                                                                        |                                     |                                                                                      |  |
| *These findings are considered preliminary and identify specific compliance issues discovered during the above noted inspection that the designated agent of IDEM believes may be a violation of statute(s), rule(s), or permit(s) issued by IDEM. |                                          |                    |                                                                                                                                                                                        |                                     |                                                                                      |  |
| SINGLE MEDIA INSPECTION:                                                                                                                                                                                                                           |                                          |                    |                                                                                                                                                                                        |                                     |                                                                                      |  |
| No violations were discovered with respect to the particular items observed during the inspection. (5)                                                                                                                                             |                                          |                    |                                                                                                                                                                                        |                                     |                                                                                      |  |
| Violations were discovered but corrected during the inspection. (4)                                                                                                                                                                                |                                          |                    |                                                                                                                                                                                        |                                     |                                                                                      |  |
| Violations were discovered and require a submittal from you and/or a follow-up inspection by IDEM. (2)                                                                                                                                             |                                          |                    |                                                                                                                                                                                        |                                     |                                                                                      |  |
| • Violations were discovered and may subject you to an appropriate enforcement response. (1)                                                                                                                                                       |                                          |                    |                                                                                                                                                                                        |                                     |                                                                                      |  |
| Additional Information/review is required to evaluate overall compliance. (6)                                                                                                                                                                      |                                          |                    |                                                                                                                                                                                        |                                     |                                                                                      |  |
| Potential problems were discovered or observed. (3)                                                                                                                                                                                                |                                          |                    |                                                                                                                                                                                        |                                     |                                                                                      |  |
| Comments Regarding Ratings:                                                                                                                                                                                                                        |                                          |                    |                                                                                                                                                                                        |                                     |                                                                                      |  |
| The Following Facility Records Were Reviewed:<br>Discharge Monitoring Reports<br>Monthly Report of Operations<br>Bypass/Overflow Report<br><br>DMRs and MROs reviewed: from 5/10 to 4/11.                                                          |                                          |                    | The Following Laboratory Records Were Reviewed:<br>TSS Bench Sheet, CBOD Bench Sheet<br>Ammonia Bench Sheet<br>pH bench sheet<br>DO bench sheet<br>Process Control/ 30 minute settling |                                     |                                                                                      |  |



The CSO/SSO evaluation generated an unsatisfactory rating due to the facility experiencing a sanitary sewer overflow/bypass in violation of Part II. B. 1 of the permit which states, in part, that all waste collection, control, treatment, and disposal facilities shall be operated as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants, with adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to ensure compliance with the conditions of this permit. This includes the collection system. From June 22, 2010 to June 21, 2011 overflows occurred on 5 days.

Access to the influent bar screen is limited and needs to be improved. This will be addressed within 120 days of the effective date of the Agreed Order.

Maintenance was rated as marginal due to inadequate maintenance of the collection system. The facility needs to continually investigate sources of inflow and infiltration (I/I), document known sources and repair if feasible. Part II. B. 1 of the permit which states, in part, that all waste collection, control, treatment, and disposal facilities shall be operated and maintained as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants. During 5 months of 12 reviewed, the total flow for the month was in excess of 100% of the capacity of the plant. Specifically in March and April of 2011, the flow was above the design capacity on all but 2 days for the month.

Sludge Disposal was rated as marginal due to the current solids inventory throughout the facility. The sludge lagoons are very full and the digesters are nearly full. Sludge will need to be removed from the plant very soon. Facility land applies sludge in accordance with land application permit INLA000078. Approximately 750,000 gallons of sludge was hauled and land applied in December 2010.

Facility needs to improve the documentation of effluent sampling. Composite sample log does not always match up with sample days on MRO.

Receiving Waters appearance was visibly free of solids, color and sheen.

Effluent Appearance was free of visual solids, color and foam.

The facility has a valid permit and the facility description is accurate.

Good mixing and color was noted in the SBR tanks. At the time of the inspection reactors 1 and 2 were decanting. Effluent from these reactors was clear and free of excessive solids.

Maintenance records for treatment facility reviewed during inspection. Maintenance program is well implemented and executed.

The final flow meter last calibrated 5-25-11.

Records reviewed were on site and available. All appear complete and accurate.

A records review during the inspection indicated no effluent violations have been reported during the period reviewed.

No milestone activities are due yet in new agreed order.

Need to add thermometer inside refrigerated sampler. Sample temp must be documented.

Daily monitoring records (pH and DO) should be kept on-site. Calibration records for pH and DO meters should also be available for review.

**MULTI-MEDIA SCREENING** (please note that a multi-media screening is not a comprehensive evaluation of the compliance status of the facility):

Multi-media screening not conducted.

**POLLUTION PREVENTION**

Pollution prevention is the preferred means of environmental protection in Indiana. The goal of pollution prevention is to promote changes in business and commercial operation, especially manufacturing processes, so that Indiana businesses increase productivity, generate less environmental waste, reduce their regulatory responsibilities and become more profitable. Your participation in Indiana's pollution prevention program is entirely voluntary. If you have any pollution prevention questions, you may contact our Office of Pollution Prevention and Technical Assistance (OPPTA) at 317 232-8172 or (800) 988-7901, or visit OPPTA's Web site at [www.idem.IN.gov/oppta/p2/](http://www.idem.IN.gov/oppta/p2/). Would your company like to be contacted by IDEM's Office of Pollution Prevention and Technical Assistance? No

**COMPLIANCE ASSISTANCE**

In addition to the compliance assistance offered by IDEM's individual programs, IDEM's Compliance and Technical Assistance Program (CTAP) offers free, confidential assistance to regulated entities, including small businesses and municipalities, throughout Indiana. In the future, if you would like to request free, confidential compliance assistance, call 317 232-8172 or (800) 988-7901, or visit CTAP's Web site at [www.idem.IN.gov/oppta/ctap/](http://www.idem.IN.gov/oppta/ctap/).

**SUMMARY AND CORRECTION INFORMATION**

A summary of violations and concerns noted during the inspection was verbally communicated to the undersigned representative during the inspection. The facility should correct any deficiencies noted as soon as possible. Corrections made and verified during the inspection may still be cited as violations.

Written report provided at the conclusion of the inspection. If upon subsequent review, any changes to this report are deemed necessary, a revised report will be sent to the responsible official within 45 days.

**IDEM REPRESENTATIVE:**

|                                              |                                 |                                         |                              |                            |
|----------------------------------------------|---------------------------------|-----------------------------------------|------------------------------|----------------------------|
| Inspector Name<br><b>Becky Ruark</b>         | Signature<br><i>Becky Ruark</i> | Telephone Number<br><b>317-691-1909</b> | Date<br><b>June 24, 2011</b> |                            |
| Inspector Email<br><b>bruark@idem.IN.gov</b> |                                 |                                         | Time In<br><b>10:45 AM</b>   | Time Out<br><b>3:00 PM</b> |

**FACILITY REPRESENTATIVE:**

|                                          |                                       |                                |                                         |                          |
|------------------------------------------|---------------------------------------|--------------------------------|-----------------------------------------|--------------------------|
| Printed name<br><b>Heather Philhower</b> | Signature<br><i>Heather Philhower</i> | Title<br><b>Administration</b> | Telephone Number<br><b>765-463-3856</b> | Date<br><b>24-JUN-11</b> |
|------------------------------------------|---------------------------------------|--------------------------------|-----------------------------------------|--------------------------|

**FOR IDEM INTERNAL USE:**

|                                           |                        |                                                                                                                                                          |
|-------------------------------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| IDEM Manager Review<br><i>[Signature]</i> | Date<br><b>7-25-11</b> | For:<br><input type="checkbox"/> Follow up <input type="checkbox"/> Enforcement<br><input type="checkbox"/> NPDES permits <input type="checkbox"/> Other |
|-------------------------------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|

## NPDES Facility Compliance Evaluation Checklist

IN0043273

American Suburban Utilities WWTF

6/24/2011

All evaluations indicated on this form are based upon the Inspector's observations at the time of the inspection.

### Areas Evaluated

#### A. Receiving Waters Appearance

|     |                                                                                        |
|-----|----------------------------------------------------------------------------------------|
| Yes | 1. The receiving stream is visibly free of excessive deposits of settled solids.       |
| Yes | 2. The receiving stream is visibly free of excess floating debris, oil, scum, or foam. |

#### B. Effluent Appearance

|     |                                                                                                                      |
|-----|----------------------------------------------------------------------------------------------------------------------|
| Yes | 1. Treated effluent is essentially free of excessive deposits of settled solids, floating debris, oil, scum or foam. |
|-----|----------------------------------------------------------------------------------------------------------------------|

#### C. Permit

|     |                                                                                                       |
|-----|-------------------------------------------------------------------------------------------------------|
| Yes | 1. Was a permit renewal application submitted to IDEM at least 180 days prior to the expiration date? |
| Yes | 2. The facility description, including the receiving waters, is complete and accurate                 |
| N/A | 3. The permit has been properly transferred                                                           |

#### D. CSO/SSO (Sewer Overflow)

|     |                                                                          |
|-----|--------------------------------------------------------------------------|
| N/A | 1. CSOs are adequately monitored and maintained.                         |
| No  | 2. The facility has had zero SSO/overflow events in the past six months. |

#### E. Facility/Site

|     |                                                                                                                                           |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------|
| Yes | 1. The facility has standby power or equivalent provision.                                                                                |
| N/E | 2. An adequate alarm or notification system for power or equipment failure is available for the treatment facility and for lift stations. |
| No  | 3. Safe and adequate access is provided for inspection of all treatment units, lift stations, and outfalls.                               |
| N/E | 3. The facility housekeeping is adequate.                                                                                                 |

#### F. Operation

|     |                                                                                                                                        |
|-----|----------------------------------------------------------------------------------------------------------------------------------------|
| Yes | 1. All facilities and systems necessary for achieving compliance with the terms and conditions of the permit are operated efficiently. |
| Yes | 2. An adequate, qualified operating staff is provided to carry out the operation of the facility.                                      |
| Yes | 3. Sufficient solids are wasted from the treatment system, at proper intervals, to maintain process efficiency.                        |
| Yes | 4. Wasting of solids is based on pre-determined values and valid process control testing.                                              |

G. Maintenance

|     |                                                                                                                                |
|-----|--------------------------------------------------------------------------------------------------------------------------------|
| Yes | 1. A maintenance record system has been established and includes maintenance/repair history and preventative maintenance plan. |
| N/E | 2. Lift station inspections, cleaning and maintenance procedures are adequate.                                                 |
| No  | 3. Collection system maintenance is adequate.                                                                                  |

H. Sludge Disposal

|    |                                                                                                               |
|----|---------------------------------------------------------------------------------------------------------------|
| No | 1. Sludges, screenings, and slurries are disposed of properly to maintain overall efficiency of the facility. |
|----|---------------------------------------------------------------------------------------------------------------|

I. Self-Monitoring Program

|     |                                                                                                            |
|-----|------------------------------------------------------------------------------------------------------------|
| Yes | 1. The sampling protocol and procedure, including locations, type and frequency, is accurate and adequate. |
| No  | 2. Sampling and analysis data and documentation is accurate.                                               |
| N/A | 3. NPDES Permit Whole Effluent Toxicity (WET) testing requirements are being met.                          |

J. Flow Measurement

|     |                                                                  |
|-----|------------------------------------------------------------------|
| Yes | 1. Flow is properly monitored as required by the permit.         |
| Yes | 2. Flow charts and calibration records are available for review. |
| Yes | 3. Effluent flow is used in calculating effluent loadings.       |

K. Laboratory

|                                                    |                                                                                                                                       |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 1. The following laboratory records were reviewed: |                                                                                                                                       |
|                                                    | TSS Bench Sheet<br>CBOD Bench Sheet<br>Ammonia Bench Sheet<br>pH bench sheet<br>DO bench sheet<br>Process Control/ 30 minute settling |
| N/E                                                | 2. All laboratory practices and protocol reviewed, including bench sheets were adequate.                                              |

L. Records/Reports

|                                                  |                                                                                        |
|--------------------------------------------------|----------------------------------------------------------------------------------------|
| 1. The following facility records were reviewed: |                                                                                        |
|                                                  | Discharge Monitoring Reports<br>Monthly Report of Operations<br>Bypass/Overflow Report |
| Yes                                              | 2. All records reviewed were accurate and available.                                   |

M. Compliance Schedules

|     |                                                                                  |
|-----|----------------------------------------------------------------------------------|
| N/A | 1. The Schedule of Compliance monitoring and reporting milestones have been met. |
| N/A | 2. Agreed Order compliance milestones have been met.                             |

|  |
|--|
|  |
|--|

N. Pretreatment

|     |                                                                                                                      |
|-----|----------------------------------------------------------------------------------------------------------------------|
| N/A | 1. The pretreatment records, including inventory, monitoring, inspection and enforcement, are complete and accurate. |
| N/A | 2. For both Delegated and Non-Delegated, the program is regulated as required.                                       |
| N/A | 3. The SUO/ERG has been developed or updated as required for NON-Delegated programs.                                 |

O. Effluent Limits Violations

|            |                                                  |
|------------|--------------------------------------------------|
| Yes        | 1. Reviewed DMRs and MROs during the inspection. |
| From: 5/10 | To: 4/11                                         |
| No         | 2. Were effluent violations reported?            |
|            |                                                  |
|            |                                                  |
|            |                                                  |

## IDEM WASTEWATER PRE-INSPECTION CHECKLIST

| Name and Location of Facility to be Inspected                                             | NPDES Permit # | GPS Coordinates Recorded | Date to be Inspected | Inspector   |
|-------------------------------------------------------------------------------------------|----------------|--------------------------|----------------------|-------------|
| Name: American Suburban Utilities WWTF<br>Town/City: West Lafayette<br>County: Tippecanoe | IN0043273      | No                       | 6/24/2011            | Becky Ruark |

|                                             |     |
|---------------------------------------------|-----|
| 1. PRE-INSPECTION FILE REVIEW WAS CONDUCTED | Yes |
|---------------------------------------------|-----|

|                                                           |     |
|-----------------------------------------------------------|-----|
| 2. REVIEW RELEVANT PROGRAM PERMIT AND PERMIT APPLICATIONS | Yes |
|-----------------------------------------------------------|-----|

| Info Source    | Date Reviewed | Inspector Notations Pertinent to Upcoming Inspection |
|----------------|---------------|------------------------------------------------------|
| Inspector file | 5/31/2011     | Reviewed current permit.                             |

|                                                                                                                                   |     |
|-----------------------------------------------------------------------------------------------------------------------------------|-----|
| 3. REVIEW PRIOR INSPECTION HISTORY & REPORTS RELEVANT TO THE PROGRAM INSPECTION PARTICULARLY ANY OUTSTANDING OR UNRESOLVED ISSUES | Yes |
|-----------------------------------------------------------------------------------------------------------------------------------|-----|

| Info Source    | Date Reviewed | Inspector Notations Pertinent to Upcoming Inspection |
|----------------|---------------|------------------------------------------------------|
| Inspector file | 5/31/2011     | Reviewed previous inspection reports.                |

|                                                                                                                                                           |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 4. REVIEW PRIOR COMPLIANCE AND ENFORCEMENT HISTORY RELEVANT TO PROGRAM INSPECTION PARTICULARLY WARNINGS AND MINOR VIOLATIONS FORMAL ACTIONS (OE & OR EPA) | Yes |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----|

No recent activity.

| Info Source    | Date Reviewed | Inspector Notations Pertinent to Upcoming Inspection |
|----------------|---------------|------------------------------------------------------|
| Inspector file | 5/31/2011     | Reviewed Agreed Order                                |

|                                                  |    |
|--------------------------------------------------|----|
| 5. REVIEW FACILITY RESPONSES TO ALL OF THE ABOVE | No |
|--------------------------------------------------|----|

No recent correspondence

| Info Source    | Date Reviewed | Inspector Notations Pertinent to Upcoming Inspection |
|----------------|---------------|------------------------------------------------------|
| Inspector file | 5/31/2011     |                                                      |

|                                                                               |    |
|-------------------------------------------------------------------------------|----|
| 6. REVIEW FACILITY RECORDS, REPORTS, SELF-MONITORING DATA CURRENTLY AVAILABLE | No |
|-------------------------------------------------------------------------------|----|

Will review data on site.

| Info Source | Date Reviewed | Inspector Notations Pertinent to Upcoming Inspection |
|-------------|---------------|------------------------------------------------------|
|-------------|---------------|------------------------------------------------------|

|                |           |  |
|----------------|-----------|--|
| Inspector file | 5/31/2011 |  |
|----------------|-----------|--|

|                                                                             |    |
|-----------------------------------------------------------------------------|----|
| 7. REVIEW MAPS SHOWING FACILITY LAYOUT AND WASTE MANAGEMENT/DISCHARGE SITES | No |
|-----------------------------------------------------------------------------|----|

No layout information in file.

| Info Source    | Date Reviewed | Inspector Notations Pertinent to Upcoming Inspection |
|----------------|---------------|------------------------------------------------------|
| Inspector file | 5/31/2011     |                                                      |

|                                           |     |
|-------------------------------------------|-----|
| 8. REVIEW RECORDS OF CITIZEN'S COMPLAINTS | Yes |
|-------------------------------------------|-----|

None known.

| Info Source    | Date Reviewed | Inspector Notations Pertinent to Upcoming Inspection |
|----------------|---------------|------------------------------------------------------|
| Inspector file | 5/31/2011     | Reviewed complaint investigation from 2010.          |

|                                   |     |
|-----------------------------------|-----|
| 9. REVIEW ANY PROCESS INFORMATION | Yes |
|-----------------------------------|-----|

| Info Source    | Date Reviewed | Inspector Notations Pertinent to Upcoming Inspection |
|----------------|---------------|------------------------------------------------------|
| Inspector file | 5/31/2011     | Reviewed process information in briefing memo.       |

|                                                  |     |
|--------------------------------------------------|-----|
| 10. REVIEW AND DETERMINE APPLICABLE REQUIREMENTS | Yes |
|--------------------------------------------------|-----|

| Info Source    | Date Reviewed | Inspector Notations Pertinent to Upcoming Inspection |
|----------------|---------------|------------------------------------------------------|
| Inspector file | 5/31/2011     | NPDES                                                |



IDEM  
OFFICE OF  
WATER QUALITY  
2011 DEC -2 A 11:46

DATE: 30 November, 2011

TO: Indiana Department of Environmental Management  
100 North Senate Avenue  
Indianapolis, Indiana 46204

ATTENTION: Mr. Donald R. Daily  
Inspection Section Chief  
Compliance Branch  
Office of Water Quality

SUBJECT: Wastewater Treatment Plant  
Carriage Estates  
American Suburban Utilities, Inc.  
West Lafayette, Tippecanoe County, Indiana  
NPDES Permit No. IN0043273

PROJECT NO.: 11-019  
Please refer to this number when corresponding.

Dear Mr. Daily:

We have been requested by American Suburban Utilities, Inc. to review your Inspection Summary/Referral to the Office of Water Quality Enforcement Section letter dated July 29, 2011 and provide their responses and data to your comments and address your concerns. These comments were in reference to IDEM's site inspection of June 24, 2011.

We will address the comments in the same order that they were listed in the July 29, 2011 letter.

1. ASU Response to IDEM Comment One

Manhole Overflow Data (June, 2010 to August, 2011)

| <u>DATE</u>    | <u>Manhole</u> | <u>Precipitation</u><br>inches | <u>Plant Flow</u><br>MGD | <u>Effluent</u>                 |                    |                                |
|----------------|----------------|--------------------------------|--------------------------|---------------------------------|--------------------|--------------------------------|
|                |                |                                |                          | <u>CBOD<sub>5</sub></u><br>mg/l | <u>TSS</u><br>mg/l | <u>NH<sub>3</sub>N</u><br>mg/l |
| June 22, 2010  | CE-11          | 3.3                            | 1.7296                   | 8.67                            | 9.14               | 0.91                           |
| April 20, 2011 | CE-13          | 1.3                            | 2.1683                   | 11.77                           | 11.46              | 1.04                           |
| April 28, 2011 | CE-13          | 1.5                            | 2.1683                   | 11.77                           | 11.46              | 1.04                           |
| June 20, 2011  | CE-11          | 2.4                            | 1.7646                   | 12.35                           | 8.55               | 1.0                            |
|                | CE-12          |                                |                          |                                 |                    |                                |



We could find in our records that manhole overflows occurred on four (4) days and not five (5) as listed in your comment.

It should be noted that these overflows occurred during days of heavy rain falls and at manholes prior to the Carriage Estates Wastewater Treatment Plant, which are the lowest in the system and inundated with storm water as the result of infiltration and inflow (I/I).

We have reviewed the same documents but have come to a totally different conclusion. Our conclusion is based on the fact that no sanitary sewer system, whether sanitary only or combined sewers, is designed to handle all possible wet weather events. Each sewer system has to be designed to handle anticipated design flows. Therefore, there are some site conditions which will cause manhole overflows and/or plant bypassing, such as intense short duration rain events, quick snow melts, flooding, heavy rains over several days or on frozen ground. When these events occur, no properly designed and maintained sewer system can possibly handle the resulting I/I. Therefore, if you review the fourteen (14) months of data from June, 2010 to August, 2011 you find that there were six (6) rain events out of total of eighty-two (82) rain days (not including snow melting days) were severe enough to cause an overflowing situation, of these six rain events, four caused overflow of manholes located prior to the Carriage Estates Wastewater Treatment Plant.

The above is not an indication of a poorly maintained sanitary sewer system, but of the inability of the Carriage Estates Plant's Influent Lift Station to handle the "in rush" of I/I which resulted in the manhole overflows. We estimate, that the June 20, 2011 storm in which 2.4 inches of rain fell within approximately 1.0 hour, that the plant's influent lift station could not handle the additional 1,000 GPM of I/I. However, even with the significant rain event for this day and the other storm days in which manholes overflowed, the Carriage Estates Treatment Plant met its NPDES permit limits.

American Suburban Utilities has undertaken a long term project over the years of repairing and replacing older sewer lines and lift stations as development in the Carriage Estates service area is expanded. A number of lift stations have been removed and hundreds of feet of new PVC sewer line have been installed to replace older sewers. The Utility has also undertaken a sanitary sewer system maintenance program which checks each lift station every day, a minimum of three (3) manholes are completely inspected every week and fifteen percent (15%) of sewer lines are televised each year. The Utility also owns and uses its vacuum pumping truck to clean sewer lines on a rotating basis and whenever a problem is encountered. The Utility takes very seriously its responsibility to maintain not only its treatment plants, but also its sanitary collection systems.

We therefore feel that the Utility should be complemented on its sanitary sewer system maintenance and plant operation and not criticized.

## **2. ASU Response to IDEM Comment Two**

American Suburban Utilities, Inc. has completed the requirements of Agreed Order Cause No. 2009-18688-W within the specified time limits. Mr. Nicholas Kile of Barnes & Thornburg

was informed of the Utility's completion of the agreed order requirements to provide suitable access stairway for the influent screen/flow divider box and to properly maintain the screening container lining. Photos showing the newly installed access stairway were also sent.

Please note that Mr. Kile forwarded this data to IDEM's legal representative on July 27, 2011.

**3. ASU Response to IDEM Comment Three**

Once again, we do not feel that there is a proper understanding of how a treatment plant is designed and operated. The Carriage Estates Wastewater Treatment Plant was designed based on the following hydraulic flow rates:

|                              |          |
|------------------------------|----------|
| Average Daily Flow (ADF)     | 1.50 MGD |
| Peak Dry Weather Flow (PDWF) | 3.30 MGD |
| Peak Wet Weather Flow (PWWF) | 4.50 MGD |

Therefore, it is necessary to look at those days with minimum rain events or snow melting to determine the actual Average Daily Flow (ADF) rate that the plant is receiving. A review of the August 2011 MRO report shows that there were only four (4) rain days with a total rain fall of 1.2 inches. Under these conditions the average daily plant flow for the month was 1.16239 MGD. Using this criteria, the treatment plant's average daily flow rates for the "dry" months are as follows:

| <u>Month/Year</u>        | <u>Average Flow (MGD)</u> |
|--------------------------|---------------------------|
| September, 2010          | 1.12523                   |
| October, 2010            | 1.10819                   |
| November, 2010           | 1.08177                   |
| December, 2010           | 1.14381                   |
| January, 2011            | 1.126397                  |
| August, 2011             | 1.16239                   |
| TOTAL                    | 6.88536                   |
| Average Daily Flow (ADF) | 1.14756 MGD               |

Therefore, the treatment plant is operating at 76.5 percent of the design average daily flow rate of 1.50 MGD.

In reviewing the flow data for the months of June, 2010 thru August, 2011 it can be seen that the Carriage Estates Wastewater Treatment Plant is capable of handling not only the Average Daily Flow, but also the Peak Dry Weather Flows and Peak Wet Weather Flows.

We have discussed our position concerning the Carriage Estates Sanitary Sewer System in American Suburban Utilities Response to IDEM's Comment One listed above.

**4. ASU Response to IDEM Comment Four**

Once again, we believe it is the responsibility of the plant operator to control the plant's sludge inventory and to determine when sludge must be removed from the plant site. Since it is expensive to remove sludge and land apply it, the operator wants to make sure that the sludge thickness is around two (2) percent solids which allows for the maximum amount of solids to be removed.

When the IDEM inspector visited the plant, the aerobic digester had just received waste sludge from the CSBR Treatment Tanks and it was not concentrated which was explained to her. It took several weeks to decant the supernatant from the digesters which has freed up room in the digesters.

We have full confidence in the operator to make the decision as to when and how much sludge is to be removed and in fact, sludge has recently been removed from Carriage Estates by Merrill Brothers.

**5. ASU Response to IDEM Comment Five**

We agree that the effluent sampling form had to be improved in order to have better documentation of the effluent sampling. A new sampling form will be used.

We are also improving our record keeping procedures and will have all the required documentation available for IDEM's inspection at the Carriage Estates Wastewater Treatment Plant.

We hope the above meets with your approval and please do not hesitate to contact us if we can provide you with any additional information.

Thank you.

Very truly yours,

***Lakeland InnovaTech***



Edward J. Serowka, P.E.  
President

Copy: Scott Lods, Howard County Utilities  
Nicholas Kile, Barnes & Thornburg  
Mark Stanifer, OWQ Enforcement Section



DATE: January 13, 2012

TO: Indiana Department of Environmental Management  
100 North Senate Avenue  
MC65-42 IGCN 1255  
Indianapolis, IN 46204-2251

ATTENTION: Jerry Dittmer  
Section Chief  
Municipal NPDES Permits Section

SUBJECT: Carriage Estates III  
American Suburban Utilities, Inc.  
West Lafayette, Tippecanoe County, Indiana

PROJECT NUMBER: 11-014  
Please refer to this number when corresponding.

Gentlemen:

We previously requested on July 12, 2011 tentative effluent limits for a 500,000 GPD plant expansion for the existing Carriage Estates III Wastewater Treatment Plant from 1.50 MGD to 2.00 MGD. We received these tentative limits on September 12, 2011. Unfortunately, the Facility Construction Section of IDEM would not grant us a permit for this expansion without adding additional CSBR tanks. It is however more cost effective to convert the existing CSBR system to a conventional plug flow activated sludge system by converting the CSBR basins into aeration only tanks and constructing new final sludge clarifiers.

Therefore, we are requesting tentative effluent limits for an average design flow of 6.80 MGD for the Carriage Estates Wastewater Treatment Plant.

We are planning to modify the existing plant to handle the additional 5.30 MGD along with the following changes:

- a. Replace the existing static type bar screen with macerators.
- b. Replace the existing chlorination/dechlorination disinfection system with ultraviolet disinfection.
- c. Add additional sludge holding tank capacity.



- d. Replace the existing effluent flow metering system with a new primary measuring device and flow meter.
- e. Furnish a new effluent flow proportional sampler.

We are attaching for your use and information the following data:

- 1. September 12, 2011 Preliminary Effluent Limitations letter.
- 2. Section 1 "General Information", Part B "Project Location".
- 3. State Map showing location of Carriage Estates Wastewater Treatment Plant.
- 4. Tippecanoe County Map.
- 5. Local Area Map.
- 6. Topographic Map.
- 7. Treatment Plant Site Legal Description.
- 8. Aerial Map showing plant site and receiving creek.
- 9. IDEM NPDES Discharge Permit No. IN0043273, Pages 1, 2, and 3.

Thank you for all your help and do not hesitate to contact us if we can be of any additional assistance.

Very truly yours,

*Lakeland InnovaTech*

A handwritten signature in black ink, appearing to read 'Edward J. Serowka', with a long, sweeping horizontal line extending to the right.

Edward J. Serowka, P.E.  
President

CC: Scott Lods  
American Suburban Utilities, Inc.



# NPDES Wastewater Facility Inspection Report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                          |                                               |                                             |                                    |                  |   |                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-----------------------------------------------|---------------------------------------------|------------------------------------|------------------|---|----------------------------|
| NPDES Permit Number:<br><b>IN0043273</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Facility Type:<br><b>Mixed Ownership</b> | Facility Classification:<br><b>Major</b>      | TEMPO AID<br><b>III</b>                     | <b>55359</b>                       |                  |   |                            |
| This is to notify you that on July 26, 2012, an inspection of the specified facility was conducted by the undersigned representative of the Indiana Department of Environmental Management, Office of Water Quality.                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                          |                                               |                                             |                                    |                  |   |                            |
| Type of Inspection: <b>Reconnaissance Inspection</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                          |                                               |                                             |                                    |                  |   |                            |
| Name and Location of Facility Inspected:<br><b>Carriage Estates WWTP</b><br><b>4100 BRIDGEWAY DR</b><br><b>West Lafayette IN 47906</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          | Receiving Waters/POTW:<br><b>Indian Creek</b> | Permit Expiration Date:<br><b>1/31/2016</b> |                                    |                  |   |                            |
| County:<br><b>Tippecanoe</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                          | Design Flow:<br><b>1.5MGD</b>                 |                                             |                                    |                  |   |                            |
| On Site Representative(s):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                          |                                               |                                             |                                    |                  |   |                            |
| First Name<br><b>Eric</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Last Name<br><b>Klopfenstein</b>         | Title<br><b>Maintenance</b>                   | Email<br><b></b>                            | Phone<br><b>765-463-3856</b>       |                  |   |                            |
| Certified Operator:<br><b>Dennis Crandall</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Number:<br><b>15007</b>                  | Class:<br><b>IV</b>                           | Renewal Effective Date:<br><b>7-1-12</b>    | Expiration Date:<br><b>6-30-14</b> |                  |   |                            |
| Responsible Official:<br><b>Mr. Scott Lods, Owner</b><br><b>3350 W 250 N</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                          | Permittee: <b>American Suburban Utilities</b> |                                             |                                    |                  |   |                            |
| <b>West Lafayette, Indiana 47906</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                          | Email: <b>asu-inc@hotmail.com</b>             |                                             | Contacted?<br><b>No</b>            |                  |   |                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                          | Phone: <b>765-463-3856</b>                    |                                             |                                    |                  |   |                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                          | Fax: <b></b>                                  |                                             |                                    |                  |   |                            |
| <b>INSPECTION FINDINGS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                          |                                               |                                             |                                    |                  |   |                            |
| SINGLE MEDIA INSPECTION OVERALL RATING:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                          |                                               |                                             |                                    |                  |   |                            |
| <input type="radio"/> No violations were discovered with respect to the particular items observed during the inspection. (5)<br><input type="radio"/> Violations were discovered but corrected during the inspection. (4)<br><input type="radio"/> Violations were discovered and require a submittal from you and/or a follow-up inspection by IDEM. (2)<br><input type="radio"/> Violations were discovered and may subject you to an appropriate enforcement response. (1)<br><input type="radio"/> Additional information/review is required to evaluate overall compliance. (6)<br><input checked="" type="radio"/> Potential problems were discovered or observed. (3) |                                          |                                               |                                             |                                    |                  |   |                            |
| <b>AREAS EVALUATED DURING INSPECTION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                          |                                               |                                             |                                    |                  |   |                            |
| (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                          |                                               |                                             |                                    |                  |   |                            |
| S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Receiving Waters                         | S                                             | Facility/Site                               | M                                  | Self-Monitoring  | N | Compliance Schedules       |
| S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Effluent Appearance                      | S                                             | Operation                                   | S                                  | Flow Measurement | N | Pretreatment               |
| S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Permit                                   | M                                             | Maintenance                                 | N                                  | Laboratory       | S | Effluent Limits Violations |
| S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | CSO/SSO (Sewer Overflow)                 | S                                             | Sludge                                      | S                                  | Records/Reports  | N | Other:                     |
| <b>DETAILED AREA EVALUATIONS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                          |                                               |                                             |                                    |                  |   |                            |
| <b>Receiving Waters:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                          |                                               |                                             |                                    |                  |   |                            |
| Comments:<br>The receiving stream was viewed from the top of outfall structure from a distance. The stream was low due to dry weather conditions but appeared to be free of notable foam, algae or solids.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                          |                                               |                                             |                                    |                  |   |                            |
| <b>Effluent Appearance:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                          |                                               |                                             |                                    |                  |   |                            |
| Comments:<br>The effluent was observed from the outfall pipe and appeared to be free of visible solids, color and foam at the time of the inspection.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                          |                                               |                                             |                                    |                  |   |                            |
| <b>Permit:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                          |                                               |                                             |                                    |                  |   |                            |
| Comments:<br>The facility has a valid permit and the facility description, including units of treatment and receiving stream, is accurate. Facility does have an influent flow meter that is not in facility description of current permit, but may just want to wait till next permit cycle to add it.                                                                                                                                                                                                                                                                                                                                                                      |                                          |                                               |                                             |                                    |                  |   |                            |
| <b>CSO/SSO:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                          |                                               |                                             |                                    |                  |   |                            |
| Comments:<br>The facilities collection system by design is 100% separated sanitary sewer and has not reported any Bypass/Overflows in the past six months.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                          |                                               |                                             |                                    |                  |   |                            |

**Facility/Site:**

**Comments:**

The facility has a portable generator that is tested every two weeks and can run entire sewage plant during power outages, but is shared with County Home WWTP. The main lift station at sewage plant has an auto dialer alarm system that calls when problems are detected and also has a backup portable pump to bypass lift station. The facility grounds around lagoons, SBR tanks, outfall and buildings were well maintained.

**Operation:**

**Comments:**

At the time of inspection all units of treatment appeared to be operating efficiently. One of the sequential batch reactors was in the process of decanting, one was in the process of aerating and mixing and the final two reactors had just finished decanting and waiting to be filled. The reactor that was aerating had good color and mixing during the inspections. The wasting of the reactors is determined by the certified operator and e-mailed to onsite personal each week. Then onsite personal waste by schedule and record on daily wasting log.

**Maintenance:**

**Comments:**

Maintenance was rated as marginal due to the facility continuing to have excessive inflow and infiltration (I/I) in the collection system. Part II. B. 1. e of the permit which states, in part, that the facility shall have an ongoing preventative maintenance program for the sanitary sewer system. During the review of the last six months of MRO's, two of those months were above the 100% capacity of the plants design, especially in Jan. 2012. (141%) The facility needs to continually investigate sources of I/I, document known sources and repair if feasible.

**Sludge:**

**Comments:**

A records review during the inspection showed adequate wasting, handling, and disposal of sludge. Facility hired Merrell Bros. to haul 584,022 gallons of sludge in April 2012 and land applied final solids in accordance with American Suburban utilities Land Application Permit No. 000078.

**Self-Monitoring:**

**Comments:**

The Self Monitoring Program was rated as marginal due to the auto sampler tubing and sampler container in need of cleaning. The sampler tubing had brown and red scum noticeable on the inside of tubing and needs replaced. The sampler container collecting the sample had brown scum noticeable on the inside and needs cleaned.

**Flow Measurement:**

**Comments:**

Final flow monitoring is accurate and representative. The effluent flow meter and influent flow meter were last calibrated in April 2012 by B.L. Anderson.

**Effluent Limits Violations:**

Yes 1. Were DMRs reviewed as part of the inspection?

DMRs for the period of January/2012 to June/2012 were reviewed as part of the inspection.

No 2. Were violations noted during the review of DMRs?

N 3. Overflow/Bypass and Noncompliance reporting.

|                                 |                                         |                                         |
|---------------------------------|-----------------------------------------|-----------------------------------------|
| IDEM REPRESENTATIVE             |                                         |                                         |
| Inspector Name:<br>Aaron Deeter | Inspector Email:<br>adeeter@idem.IN.gov | Inspector Phone Number:<br>317-691-1915 |
| Inspection Date:<br>7/26/2012   | Time In:<br>9:30 AM                     | Time Out:<br>12:30 PM                   |
| IDEM MANAGER REVIEW             |                                         |                                         |
| IDEM Manager:                   | Date:<br>8-13-12                        |                                         |



## NOTICE OF INSPECTION FOR WASTEWATER FACILITIES

State Form 55071 (R/2-13)  
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
Office of Water Quality, Wastewater Facilities Inspection Section

This is to notify you that on 8/27/13 an inspection of CARRIAGE ESTATES WWTTP  
WEST LAFA YETTE (NPDES # IN 0043273) was conducted by the  
undersigned representative of the Indiana Department of Environmental Management (IDEM), Office of Water Quality.

### Type of Inspection:

- ☐ Compliance Evaluation Inspection  
☒ Reconnaissance Inspection  
☐ Industrial User Inspection

- ☐ Complaint Investigation  
☐ Multi-Media Screening Evaluation  
☐ Other \_\_\_\_\_

### Preliminary Inspection/Screening Findings:

These findings are considered preliminary and may identify compliance issues discovered during the inspection that the designated agent of IDEM believes to be a violation of a statute(s), rule(s) or permit(s) issued by IDEM.

### Single Media Inspection:

- ☐ No violations were discovered with respect to the particular items observed during the inspection.  
☐ Violations were discovered but corrected during the inspection.  
☐ Violations were discovered and required a submittal from you and/or follow-up inspection by IDEM.  
☐ Violations were discovered and may subject you to an appropriate enforcement response.  
☒ Additional information/review is required to evaluate overall compliance.  
☐ Potential problems were discovered or observed.

### Multi-Media Screening (Please note that a multi-media screening is not a comprehensive evaluation of the compliance status of the facility):

- ☒ Multi-media screening not conducted.  
☐ No violations were discovered with respect to the limited multi-media screening conducted by IDEM.  
☐ Potential violations were discovered but corrected during the inspection.  
☐ Potential problems were discovered and may be further investigated.

### Pollution Prevention:

Pollution prevention is the preferred means of environmental protection in Indiana. The goal of pollution prevention is to promote changes in business and commercial operation, especially manufacturing processes, so that Indiana businesses increase productivity, generate less environmental wastes, reduce their regulatory responsibilities and become more profitable. Your participation in Indiana's pollution prevention program is entirely voluntary. If you have any pollution prevention questions, you may contact our Office of Pollution Prevention & Technical Assistance (OPPTA) at (317) 232-8172 or (800) 988-7901, or visit OPPTA's website at [www.idem.IN.gov/5489.htm](http://www.idem.IN.gov/5489.htm).

### Compliance Assistance:

In addition to the assistance offered by IDEM's individual programs, IDEM's Compliance and Technical Assistance Program (CTAP) offers free, confidential compliance assistance to entities throughout Indiana. If you would like to request assistance, call (317) 232-8172 or (800) 988-7901, or visit CTAP's website at [www.idem.IN.gov/ctap/](http://www.idem.IN.gov/ctap/).

A summary of violations and concerns noted during the inspection was verbally communicated to the undersigned representative during the inspection. The facility should correct any violations noted as soon as possible. Violations identified and corrected during the inspection may still be cited as violations.

A written inspection summary will be provided within forty-five (45) days. Matters not evident to IDEM at the time of the inspection might not be included in either the verbal or written inspection summary.

### IDEM Representative:

| Printed Name | Signature | Telephone Number | Date (month, day, year) | Time                         |
|--------------|-----------|------------------|-------------------------|------------------------------|
| ARON DEESTER |           | 317-691-1915     | 8/27/13                 | In: 11:30 AM<br>Out: 2:00 PM |

### Owner/Agent Representative:

| Printed Name    | Signature | Title    | Telephone Number | Date (month, day, year) |
|-----------------|-----------|----------|------------------|-------------------------|
| Dennis Crandall |           | operator | 765 465 3856     | 8-27-13                 |

DISTRIBUTION: White - IDEM Public File; Canary - Owner/Agent Representative





INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204  
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence  
Governor

September 27, 2013

Thomas W. Easterly  
Commissioner

Mr. Scott Lods, Owner  
American Suburban Utilites  
3350 W 250 N.  
West Lafayette, Indiana 47906

Dear Mr. Lods:

Re: **Inspection Summary/ Violation Letter**  
American Suburban Utilities Carriage Estates  
WWTP  
NPDES Permit No. IN0043273  
West Lafayette, Tippecanoe County

An inspection of the above-referenced facility or location was conducted by a representative of the Indiana Department of Environmental Management, Office of Water Quality, pursuant to IC 13-18-3-9. A summary of the inspection is provided below:

Date(s) of Inspection: August 27, 2013  
Type of Inspection: Reconnaissance Inspection  
Inspection Results: Violations were observed.

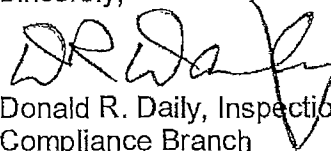
The following concerns were noted:

1. The Receiving Waters Appearance was rated as unsatisfactory due to the dead aquatic life in the receiving stream from high ammonia levels discharged from the treatment plant. Part I. A. 2 a. (4) of the permit states, in part, the discharge from any and all point sources specified within this permit shall not cause receiving waters, including the mixing zone, to contain substances, materials, floating debris, oil, scum or other pollutants: 4) which are in the amounts sufficient to be acutely toxic to, or to otherwise severely injure or kill aquatic life, other animals, plants or humans.
2. Facility/Site was rated unsatisfactory for lack of a properly working alarm system for the facility. This is a violation of Part II. B. 1. b. of the permit that requires the facility be operated in a manner which will minimize discharges of excessive pollutants. An adequate alarm system is necessary to alert operators of equipment failure during hours when no attendant is on site. At the time of inspection the facility's blowers system had failed on 8-25-13 and caused high ammonia levels to be discharged to the receiving stream resulting in a fish kill. The autodialer did not alert facility personnel about the blower system failing and was found the next day by the certified operator.

3. Operations was rated as unsatisfactory due to inadequate operation during the period of getting treatment plant back in compliance during the fish kill. This is a violation of 327 IAC 5-2-8(8) which states, in part, that the permittee shall at all times maintain in good working order and efficiently operate all facilities and systems (and related appurtenances) for collection and treatment which are installed or used by the permittee and which are necessary for achieving compliance with the terms and conditions of the permit. At the time of inspection the facility did not utilize the deactivated lagoon by not fully discharging raw influent to its capacity, not reseeding plant from sister WWTP and not manually running SBR to maintain more aeration time during the SBR's cycle time.

Within 30 days of receipt of this letter, a written detailed response documenting correction of each of the concerns listed above and/or a plan for assuring future compliance must be submitted to this office. Failure to respond adequately to this letter may result in a referral to Office of Water Quality's Enforcement Section. Please direct your response to this letter and any questions to Aaron Deeter at 317-691-1915 or by email to [adeeter@idem.IN.gov](mailto:adeeter@idem.IN.gov). A copy of the NPDES Wastewater Facility Inspection Report is enclosed for your records. Thank you for your attention to this matter.

Sincerely,



Donald R. Daily, Inspections Section Chief  
Compliance Branch  
Office of Water Quality

Enclosure



# NPDES Wastewater Facility Inspection Report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

|                                                                                                                                                       |                                            |                                                                                                                         |                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| NPDES Permit Number:<br><b>IN0043273</b>                                                                                                              | Facility Type:<br>Mixed Ownership<br>Major | Facility Classification:<br>III                                                                                         | TEMPO AI ID<br>55359                                                          |
| Date(s) of Inspection: August 27, 2013                                                                                                                |                                            |                                                                                                                         |                                                                               |
| Type of Inspection: Reconnaissance Inspection                                                                                                         |                                            |                                                                                                                         |                                                                               |
| Name and Location of Facility Inspected:<br><b>American Suburban Utilities Carriage Estates WWTP</b><br>4100 Bridgeway Dr.<br>West Lafayette IN 47906 |                                            | Receiving Waters:<br>Indian Creek                                                                                       | Permit Expiration Date:<br>1/31/2016<br>Design Flow:<br>1.5MGD                |
| County:<br>Tippecanoe                                                                                                                                 |                                            |                                                                                                                         |                                                                               |
| On Site Representative(s):                                                                                                                            |                                            |                                                                                                                         |                                                                               |
| First Name<br>Dennis<br>Ed                                                                                                                            | Last Name<br>Crandell<br>Serowka           | Title<br>Cert. Operator<br>Engineer                                                                                     | Email<br>NA<br>serowka270@earthlink.net                                       |
| Phone<br>765-465-3856<br>317-796-5273                                                                                                                 |                                            |                                                                                                                         |                                                                               |
| Certified Operator:<br>Dennis Crandall                                                                                                                | Number:<br>15007                           | Class:<br>IV                                                                                                            | Effective Date:<br>7-1-12<br>Expiration Date:<br>6-30-14<br>Hours/Week:<br>NA |
| Responsible Official:<br>Mr. Scott Lods, Owner<br>3350 W 250 N.<br>West Lafayette, Indiana 47906                                                      |                                            | Permittee: American Suburban Utilities<br>Email: asu-inc@hotmail.com<br>Phone: 765-463-3856<br>Fax:<br>Contacted?<br>No |                                                                               |

## INSPECTION FINDINGS

- ☐ No violations were discovered with respect to the particular items observed during the inspection. (5)
- ☐ Violations were discovered but corrected during the inspection. (4)
- ☐ Potential problems were discovered or observed. (3)
- ☒ Violations were discovered and require a submittal from you and/or a follow-up inspection by IDEM. (2)
- ☐ Violations were discovered and may subject you to an appropriate enforcement response. (1)

## AREAS EVALUATED DURING INSPECTION

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

|   |                          |   |               |   |                  |   |                            |
|---|--------------------------|---|---------------|---|------------------|---|----------------------------|
| U | Receiving Waters         | U | Facility/Site | N | Self-Monitoring  | N | Compliance Schedules       |
| N | Effluent Appearance      | U | Operations    | N | Flow Measurement | N | Pretreatment               |
| N | Permit                   | N | Maintenance   | N | Laboratory       | N | Effluent Limits Compliance |
| N | CSO/SSO (Sewer Overflow) | N | Sludge        | N | Records/Reports  | N | Other:                     |

## DETAILED AREA EVALUATIONS

### Receiving Waters:

#### Comments:

The Receiving Waters Appearance was rated as unsatisfactory due to the dead aquatic life in the receiving stream from high ammonia levels discharged from the treatment plant. Part I. A. 2 a. (4) of the permit states, in part, the discharge from any and all point sources specified within this permit shall not cause receiving waters, including the mixing zone, to contain substances, materials, floating debris, oil, scum or other pollutants: 4) which are in the amounts sufficient to be acutely toxic to, or to otherwise severely injure or kill aquatic life, other animals, plants or humans.

### Facility/Site:

#### Comments:

Facility/Site was rated unsatisfactory for lack of a properly working alarm system for the facility. This is a violation of Part II. B. 1. b. of the permit that requires the facility be operated in a manner which will minimize discharges of excessive pollutants. An adequate alarm system is necessary to alert operators of equipment failure during hours when no attendant is on site. At the time of inspection the facility's blowers system had failed on 8-25-13 and caused high ammonia levels to be discharged to the receiving stream resulting in a fish kill. The autodialer did not alert facility personnel about the blower system failing and was found the next day by the certified operator.

**Operations:**

Comments:

Operations was rated as unsatisfactory due to inadequate operation during the period of getting treatment plant back in compliance during the fish kill. This is a violation of 327 IAC 5-2-8(8) which states, in part, that the permittee shall at all times maintain in good working order and efficiently operate all facilities and systems (and related appurtenances) for collection and treatment which are installed or used by the permittee and which are necessary for achieving compliance with the terms and conditions of the permit. At the time of inspection the facility did not utilize the deactivated lagoon by not fully discharging raw influent to the lagoon's capacity, not reseeding plant from sister WWTP and not manually running SBR to maintain more aeration time during the SBR's cycle time.

**Effluent Limits Compliance:**

No 1. Were DMRs reviewed as part of the inspection?

Comments:

**IDEM REPRESENTATIVE**

Inspector Name:

Aaron Deeter

Email:

adeeter@idem.IN.gov

Phone Number:

317-691-1915

Other staff participating in the inspection:

Name(s)

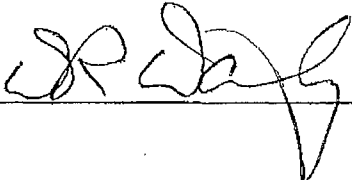
Brian Smith-IDEM Emergency Response

Phone Number(s)

317-232-8612

**IDEM MANAGER REVIEW**

IDEM Manager:



Date:

9-26-13



# BYPASS / OVERFLOW INCIDENT REPORT

State Form 46373 (R5 / 4-13)  
Indiana Department of Environmental Management  
Office of Water Quality

*INC 48241  
AI 55359*

☐ Follow-up to Bypass report previously sent on: \_\_\_\_\_

**INSTRUCTIONS:** Complete all parts of this form and fax it to the Office of Water Quality (OWQ) at (317) 232-8637 or 232-8406. Or email signed copies to [wyreports@idem.in.gov](mailto:wyreports@idem.in.gov). Submittal of this report will satisfy the Office of Water Quality (OWQ) telephone and written bypass / overflow reporting requirements of your NPDES permit. To speak with someone in OWQ, call (317) 232-8670.

To report a spill or if the release is resulting in a fish kill or other severe environmental damage, immediately report the release to the Emergency Response Section spill response line at: (317) 233-7745 or toll free within Indiana at (888) 233-7745.

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                     |                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                        |                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Facility Name: (Organization)<br><b>Carriage Estates</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Mailing Address: (reporting organization)<br><b>3350 W 250 N West Lafayette, IN 47906</b>                                                                                                                                           | County:<br><b>Tippecanoe</b>                                                                                         | NPDES Permit #:<br><b>IN0043273</b>                                                                                                                                                                                                                                                                                                                                    | Permit Outfall:<br><b>001</b>                                         |
| Individual Making Report: (printed)<br><b>Edward Serowka</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Telephone Number:<br><b>765-463-3856</b>                                                                                                                                                                                            | Contact Email:<br><b>asu-inc@hotmail.com</b>                                                                         | Date/Time IDEM Notified:<br><b>3-Apr-14 12:30</b>                                                                                                                                                                                                                                                                                                                      | <input type="checkbox"/> AM<br><input checked="" type="checkbox"/> PM |
| RELEASE INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                     |                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                        |                                                                       |
| Date (mm/dd/yy) & Time<br>Release Began:<br><b>04/03/14 11:00</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Date (mm/dd/yy) & Time<br>Release Stopped:<br><b>04/03/14 12:00</b>                                                                                                                                                                 | Location of Release: (streets address or Manhole, Lift Station, Force Main, etc.)<br><b>Kimberly Estates Manhole</b> | Latitude:<br>(Deg Min Sec)<br><b>Unknown</b>                                                                                                                                                                                                                                                                                                                           | Longitude:<br>(Deg Min Sec)<br><b>Unknown</b>                         |
| Amount of Flow Released:<br>Check one: <input checked="" type="checkbox"/> Estimated <input type="checkbox"/> Actual<br><b>5000</b> gallons                                                                                                                                                                                                                                                                                                                                                                            | (always provide a volume)                                                                                                                                                                                                           | WWTP Flow During Release:<br><b>Unknown</b> MGD                                                                      | WWTP Peak Design Flow:<br><b>1.5</b> MGD                                                                                                                                                                                                                                                                                                                               |                                                                       |
| Overflow Type: (select one)<br><input checked="" type="checkbox"/> Sanitary Sewer Overflow<br><input type="checkbox"/> Treatment Bypass (of wastewater plant)                                                                                                                                                                                                                                                                                                                                                          | Describe any damage to aquatic life or receiving stream:<br><b>None</b>                                                                                                                                                             |                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                        |                                                                       |
| Reason for Bypass/Overflow: (select one or more)<br><input type="checkbox"/> Construction Related <input type="checkbox"/> Power Failure <input type="checkbox"/> Equipment Failure <input type="checkbox"/> Unknown <input type="checkbox"/> Exceeded Max Capacity <input checked="" type="checkbox"/> Precipitation <b>3</b> inches                                                                                                                                                                                  |                                                                                                                                                                                                                                     |                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                        |                                                                       |
| System Component(s): (select one or more)<br><input checked="" type="checkbox"/> Manhole<br><input type="checkbox"/> House Lateral<br><input type="checkbox"/> Pipe Failure<br><input type="checkbox"/> Pump Station Failure<br><input type="checkbox"/> Treatment Bypassed<br><input type="checkbox"/> Other<br>Describe Other: (in the box below)                                                                                                                                                                    | Additional Description of the Bypass/Overflow Event:<br><b>Kimberly Lift Station had one (1) pump out for servicing and then experienced a heavy 3" per hour rain event and was unable to keep up and backed up the sewer line.</b> |                                                                                                                      | Description of the Area Impacted: (Check All That Apply)<br><input checked="" type="checkbox"/> Affected Private Property<br><input type="checkbox"/> Basement Backup<br><input type="checkbox"/> Occurred at Treatment Plant<br><input type="checkbox"/> Reached Public Land<br><input type="checkbox"/> Reached Receiving Water<br>Name of Receiving Water Impacted: |                                                                       |
| Organizations Notified by Facility: (select one or more)<br><input type="checkbox"/> IDEM Emergency Response <input type="checkbox"/> Health Dept <input type="checkbox"/> DNR Fish & Wildlife <input type="checkbox"/> Local Emergency Management <input checked="" type="checkbox"/> Other: IDEM                                                                                                                                                                                                                     |                                                                                                                                                                                                                                     |                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                        |                                                                       |
| Actions Taken to Prevent, Minimize, or Mitigate Damage including Clean-up and Treatment of Affected Area:<br>(Select one or more of the following, then add a written description)<br><input type="checkbox"/> Removed Blockage <input type="checkbox"/> Repaired Pipe <input type="checkbox"/> Repaired Pump Station <input checked="" type="checkbox"/> Other<br><b>Portable pump was used to assist Kimberly Lift Station. A replacement pump had already been ordered and is scheduled to be received shortly.</b> |                                                                                                                                                                                                                                     |                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                        |                                                                       |
| Resolution: Actions Taken or Planned to Prevent Recurrence:<br><b>Kimberly Lift Station is currently scheduled to be removed from service and replaced with gravity sewer line to the utilities County Home WWTP later this year.</b>                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                     |                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                        |                                                                       |

(ATTACH ADDITIONAL SHEETS IF NECESSARY.)

## CERTIFICATION AND SIGNATURE

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (The area below is for a handwritten signature or an electronic substitute then fax or scan to PDF for emailing.)

SIGNATURE: *Edward J. Smith*

DATE (month, day, year): **04/03/2014**

**ENTERED AUG 7**

Received Time May, 28, 2014 9:48AM No. 0730



# BYPASS / OVERFLOW INCIDENT REPORT

State Form 48373 (R5 / 4-13)  
Indiana Department of Environmental Management  
Office of Water Quality

INC 48242  
AI 55359

☐ Follow-up to Bypass report  
previously sent on: \_\_\_\_\_

**INSTRUCTIONS:** Complete all parts of this form and fax it to the Office of Water Quality (OWQ) at (317) 232-8837 or 232-8406. Or email signed copies to [owqreports@idem.in.gov](mailto:owqreports@idem.in.gov). Submittal of this report will satisfy the Office of Water Quality (OWQ) telephone and written bypass / overflow reporting requirements of your NPDES permit. To speak with someone in OWQ, call (317) 232-8870.

To report a spill or if the release is resulting in a fish kill or other severe environmental damage, immediately report the release to the Emergency Response Section spill response line at: (317) 233-7745 or toll free within Indiana at (888) 233-7745.

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                                                                    |                                              |                                                  |                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------------------------|-------------------------------------|
| Facility Name: (Organization)<br><b>Carriage Estates</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | Mailing Address: (reporting organization)<br>3350 W 250 N West Lafayette, IN 47906 |                                              | County:<br><b>Tippecanoe</b>                     | NPDES Permit #:<br><b>IN0043273</b> |
| Individual Making Report: (printed)<br><b>Edward Serowka</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | Telephone Number:<br><b>765-463-3856</b>                                           | Contact Email:<br><b>asu-inc@hotmail.com</b> | Date/Time IDEM Notified:<br><b>3-Apr-14 4:00</b> | Permit Outfall:<br><b>001</b>       |
| <div> <div>Date (mm/dd/yy) &amp; Time Release Began:<br/><b>04/03/14 1:00</b></div> <div> <input type="checkbox"/> AM<br/> <input checked="" type="checkbox"/> PM </div> </div> <div> <div>Date (mm/dd/yy) &amp; Time Release Stopped:<br/><b>04/03/14 3:00</b></div> <div> <input type="checkbox"/> AM<br/> <input checked="" type="checkbox"/> PM </div> </div> <div>Location of Release: (streets address or Manhole, Lift Station, Force Main, etc.)<br/><b>4088 Ridgefield Court</b></div> <div>Latitude: (Deg Min Sec)<br/><b>Unknown</b></div> <div>Longitude: (Deg Min Sec)<br/><b>Unknown</b></div> |  |                                                                                    |                                              |                                                  |                                     |

(ATTACH ADDITIONAL SHEETS IF NECESSARY.)

## CERTIFICATION AND SIGNATURE

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (The area below is for a handwritten signature or an electronic substitute then fax or scan to PDF for emailing.)

SIGNATURE: Edward Serowka by all per ES verbal

DATE (month, day, year): **04/03/2014**

American Suburban Utilities, Inc.

3350 W. 250 N.  
West Lafayette, IN 47906  
Tel. 765-463-3856  
Fax 765-463-3855

DO# 14142

11 April, 2014

Mr. Donald R. Daily, Inspections Section Chief  
Indiana Department of Environmental Management  
Office of Water Quality/Compliance Branch  
100 N. Senate Avenue, Room 1GCN-1255  
Indianapolis, IN 46204

Re: Response to IDEM's March 27, 2014  
Inspection Summary/Violation Letter  
American Suburban Utilities Carriage Estates WWTP  
NPDES Permit No. IN0043273  
West Lafayette, Tippecanoe County

Mr. Daily:

Please note that American Suburban Utilities letter dated 30 October, 2013 which was our response to IDEM's 27 September, 2013 Inspection Summary/Violation Letter for the Carriage Estates II Wastewater Treatment Plant's low oxygen effluent discharge due to a blower failure which resulted in the violations listed in your 2 April, 2014 letter is still applicable as is our response to the listed ammonia nitrogen violations for August and September, 2013.

In addition, the listed ammonia nitrogen violation was one of the issues noted in IDEM's Notice of Violation dated November 12, 2013, Case No. 2013-21924-W. The "Notice of Violation" was discussed in a meeting held at IDEM on January 22, 2014 which was attended not only by Mary E. Hoover, Section Chief, Enforcement Section but also Kim Rohr who represented your Section as the new IDEM inspector for American Suburban Utilities. As a result of this meeting, Mr. Michael T. Scanlon of Barnes & Thornburg, who is representing American Suburban Utilities, submitted additional information and data to Ms. Amari Farren, the Enforcement Case Manager.

It was our understanding that all data including the above information was going to be available to all interested IDEM parties. If our assumption was incorrect, we have included a copy with this response.

Thank you and please contact us if you require additional information.

Sincerely,

American Suburban Utilities, Inc.  
3350 West 250 North  
West Lafayette, IN 47906

TEL: 765-463-3856  
FAX: 765-463-3855  
E-mail: [asu-inc@hotmail.com](mailto:asu-inc@hotmail.com)

cc: Michael Scanlon Barnes & Thornburg  
Mary Hoover IDEM Enforcement  
Amari Farren IDEM Enforcement  
Kim Rohr IDEM Inspection

## PERMITTEE NAME/ADDRESS

NAME CARRIAGE ESTATES WWTP  
ADDRESS AMERICAN SUBURBAN UTILITIES INC.  
3350 W.250 N  
WEST LAFAYETTE IN 47906

FACILITY CARRIAGE ESTATES WWTP  
LOCATION WEST LAFAYETTE IN  
ATTN: MR. SCOTT LODS, PRESIDENT

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)Revised: ☐

|                   |     |                   |             |     |      |
|-------------------|-----|-------------------|-------------|-----|------|
| IN0043273         |     | 001 A             |             |     |      |
| PERMIT NUMBER     |     | PERMITTED FEATURE |             |     |      |
| MONITORING PERIOD |     |                   |             |     |      |
| MO                | DAY | YEAR              | MO          | DAY | YEAR |
| FROM 04/01/14     |     |                   | TO 04/30/14 |     |      |

Form Approved

OMB No. 2040-004

Approval Expires 05-31-98

TEMPO AI ID: 55359



\* 1 N 0 0 4 3 2 7 3 0 0 1 A 4 2 0 1 4 \*

For any questions call Julie Bye at 317-233-9610

\*\*\* Mark box if NO DISCHARGE ☐ \*\*\*

NOTE: Read instructions before completing this form

| PARAMETER                                |                    | QUANTITY OR LOADING |         |       | QUALITY OR CONCENTRATION |         |          | NO. EX    | Frequency of Analysis | Sample Type   |        |
|------------------------------------------|--------------------|---------------------|---------|-------|--------------------------|---------|----------|-----------|-----------------------|---------------|--------|
|                                          |                    | Average             | Maximum | Units | Minimum                  | Average | Maximum  |           |                       |               |        |
| Oxygen, dissolved (DO)                   | SAMPLE MEASUREMENT | *****               | *****   |       | 6.1                      | *****   | *****    | mg/L      | 0                     | 5-7           | Grab   |
| 00300 1 2 0                              | PERMIT REQUIREMENT |                     |         |       | 5                        |         |          |           |                       | Five Per Week | GRAB-4 |
| Effluent Gross                           |                    |                     |         |       | DLYAVMIN                 |         |          |           |                       |               |        |
| pH                                       | SAMPLE MEASUREMENT | *****               | *****   |       | 7.4                      | *****   | 8.0      | SU        | 0                     | 5-7           | Grab   |
| 00400 1 0 0                              | PERMIT REQUIREMENT |                     |         |       | 6                        |         | 9        |           |                       | Five Per Week | GRAB   |
| Effluent Gross                           |                    |                     |         |       | DAILY MN                 |         | DAILY MX |           |                       |               |        |
| Solids, total suspended                  | SAMPLE MEASUREMENT | 161                 | 202     | lb/d  | *****                    | 10.3    | 11.2     | mg/L      | 0                     | 5-7           | Comp   |
| 00530 1 2 0                              | PERMIT REQUIREMENT | 375.5               | 563.3   |       |                          | 30      | 45       |           |                       | Five Per Week | COMPL4 |
| Effluent Gross                           |                    | MO AVG              | MX WKAV |       |                          | MO AVG  | MX WKAV  |           |                       |               |        |
| Nitrogen, ammonia total (as N)           | SAMPLE MEASUREMENT | 27.7                | 33.1    | lb/d  | *****                    | 1.8     | 1.9      | mg/L      | 1                     | 5-7           | Comp   |
| 00610 1 2 0                              | PERMIT REQUIREMENT | 23.8                | 36.3    |       |                          | 1.9     | 2.9      |           |                       | Five Per Week | COMPL4 |
| Effluent Gross                           |                    | MO AVG              | MX WKAV |       |                          | MO AVG  | MX WKAV  |           |                       |               |        |
| Flow, in conduit or thru treatment plant | SAMPLE MEASUREMENT | 1.82                | *****   | MGD   | *****                    | *****   | *****    |           | 0                     | 5-7           | Cont   |
| 50050 1 0 0                              | PERMIT REQUIREMENT | Report              |         |       |                          |         |          |           |                       | Five Per Week | TOTALZ |
| Effluent Gross                           |                    | MO AVG              |         |       |                          |         |          |           |                       |               |        |
| Chlorine, total residual                 | SAMPLE MEASUREMENT | *****               | *****   |       | *****                    | .02     | .08      | mg/L      | 1                     | 5-7           | Grab   |
| 50060 1 0 0                              | PERMIT REQUIREMENT |                     |         |       |                          | .06     | .06      |           |                       | Five Per Week | GRAB   |
| Effluent Gross                           |                    |                     |         |       |                          | MO AVG  | DAILY MX |           |                       |               |        |
| E. coli, colony forming units (CFU)      | SAMPLE MEASUREMENT | *****               | *****   |       | *****                    | 75      | 130      | CFU/100mL | 0                     | 5-7           | Grab   |
| 51041 1 0 0                              | PERMIT REQUIREMENT |                     |         |       |                          | 125     | 235      |           |                       | Five Per Week | GRAB   |
| Effluent Gross                           |                    |                     |         |       |                          | MO GEO  | DAILY MX |           |                       |               |        |

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

EDWARD J. STROWLA

317 796-5173

5 27 14

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO.

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS: (Reference all attachments here)

FLOW METER(S) SHALL BE CALIBRATED AT LEAST ONCE ANNUALLY. SEMI-PUBLIC TIPPECANOE COUNTY

EPA FORM 3320-1(03-99) Revised by Indiana (June 2007). (Replaces EPA FORM T-40 WHICH MAY NOT BE USED - Mail Forms To IDEM (No Photo Copies)

Tippecanoe Major IN0043273001A4/30/2014 - Page 1 of 2



PERMITTEE NAME/ADDRESS  
 NAME CARRIAGE ESTATES WWTP  
 ADDRESS AMERICAN SUBURBAN UTILITIES INC.  
 3350 W 250 N  
 WEST LAFAYETTE IN 47906  
 FACILITY CARRIAGE ESTATES WWTP  
 LOCATION WEST LAFAYETTE IN  
 ATTN: MR. SCOTT LODS, PRESIDENT

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
 DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

|                   |     |                   |    |
|-------------------|-----|-------------------|----|
| IN0043273         |     | 001 A             |    |
| PERMIT NUMBER     |     | PERMITTED FEATURE |    |
| MONITORING PERIOD |     |                   |    |
| MO                | DAY | YEAR              | MO |
| 04                | 01  | 14                | 04 |
| FROM              |     | TO                |    |
| 04/01/14          |     | 04/30/14          |    |

Form Approved  
 OMB No. 2040-004  
 Approval Expires 05-31-98 TEMPO AI ID: 55359



\*\*\* Mark box if NO DISCHARGE ☐ \*\*\*

NOTE: Read Instructions before completing this form

| PARAMETER                                                                           |                    | QUANTITY OR LOADING |          |            | QUALITY OR CONCENTRATION |         |           | NO. EX              | Frequency of Analysis | Sample Type |
|-------------------------------------------------------------------------------------|--------------------|---------------------|----------|------------|--------------------------|---------|-----------|---------------------|-----------------------|-------------|
|                                                                                     |                    | Average             | Maximum  | Units      | Minimum                  | Average | Maximum   |                     |                       |             |
| E. coli, maximum daily sample result<br>51041 Y 0 0<br>Effluent Gross (Supplemen    | SAMPLE MEASUREMENT | *****               | *****    |            | *****                    | *****   | 130       | CFU/100 mL          | 0                     | 5-7         |
|                                                                                     | PERMIT REQUIREMENT |                     |          |            |                          |         | Report    |                     |                       | GRAB        |
|                                                                                     |                    |                     |          |            |                          |         | DAILY MAX |                     |                       |             |
| E. coli, total number of sample results<br>51484 Y 0 0<br>Effluent Gross (Supplemen | SAMPLE MEASUREMENT | *****               | 22       | Total Days | *****                    | *****   | 0         | # of Days above 235 | 0                     | 22          |
|                                                                                     | PERMIT REQUIREMENT |                     | Report   | Sample     |                          |         | Report    |                     |                       | RCOTOT      |
|                                                                                     |                    |                     | MO TOTAL | d          |                          |         | MO TOTAL  |                     |                       |             |
| BOD <sub>5</sub> carbonaceous, 05 day, 20 C<br>80082 1 2 0<br>Effluent Gross        | SAMPLE MEASUREMENT | 130                 | 158      | lb/d       | *****                    | 8.3     | 9.2       | mg/L                | 0                     | 5-7         |
|                                                                                     | PERMIT REQUIREMENT | 312.9               | 500.7    |            |                          | 25      | 40        |                     |                       | COMB        |
|                                                                                     |                    | MO AVG              | MX WKAV  |            |                          | MO AVG  | MX WKAV   |                     |                       |             |
| Flow, total<br>82220 1 0 0<br>Effluent Gross                                        | SAMPLE MEASUREMENT | *****               | 54.616   | Mgal/mo    | *****                    | *****   | *****     |                     | 0                     | 30-30       |
|                                                                                     | PERMIT REQUIREMENT |                     | Report   |            |                          |         |           |                     |                       | Cont        |
|                                                                                     |                    |                     | MO TOTAL |            |                          |         |           |                     |                       | RCOTOT      |

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

EDWARD J. SIEROWKA

Edward J. Sierowka

317 746-5293

5 27 14

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO.

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS: (Reference all attachments here)

FLOW METER(S) SHALL BE CALIBRATED AT LEAST ONCE ANNUALLY. SEMI PUBLIC TIPPECANOE COUNTY

**Carriage Estates II Wastewater Treatment Plant Comments**

- 1 Due to several heavy rainfall events, the monthly average loading for  $\text{NH}_3\text{N}$  was exceeded. The NPDES permitted average monthly loading limit was 23.8 lbs/day whereas the April Monthly Average loading was 27.7 lbs/day. Neither the maximum weekly average nor the monthly average and maximum weekly average concentration for  $\text{NH}_3\text{N}$  was exceeded.
- 2 As the result of an equipment failure of the sulfur dioxide feed system, there was a daily maximum effluent total residual chlorine concentration of 0.08 instead of the permitted limits of 0.06 daily maximum. The equipment was repaired and the sulfur dioxide feed system is operating properly.



# NONCOMPLIANCE 24-HOUR NOTIFICATION REPORT

State Form 52415 (R / 10-13)  
Indiana Department of Environmental Management  
Office of Water Quality

**INSTRUCTIONS:** Complete all sections of this form and email it to Office of Water Quality, Compliance Data Section at [wwreports@idem.IN.gov](mailto:wwreports@idem.IN.gov). Thorough completion of this report will satisfy the Office of Water Quality (OWQ) telephone and 5-day written noncompliance notification reporting requirements of your NPDES permit. To speak with someone in OWQ, call (317) 232-8670.

Additionally, any noncompliance which may pose a significant danger to human health or the environment (including a fish kill) must be immediately reported to the Emergency Response Section spill response line at: (317) 233-7745 or toll free within Indiana at (888) 233-7745.

| FACILITY INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |         |                  |                                               |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------------------|-----------------------------------------------|-----------------|
| Facility Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |         | County           | NPDES Permit Number                           |                 |
| Carriage Estates WWTP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         | Tippecanoe       | IN0043273                                     |                 |
| Individual Reporting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |         | Telephone Number | Reporting Date (month, day, year)             |                 |
| Edward J. Serowka                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |         | (765) 463-3856   | August 13, 2014                               |                 |
| Email Address                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |         |                  |                                               |                 |
| asu-inc@hotmail.com                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         |                  |                                               |                 |
| NONCOMPLIANCE INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |         |                  |                                               |                 |
| Date (month, day, year)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Outfall | Parameter        | Permit Limit (Units/Daily/Weekly/Ave/Max/Min) | Monitored Value |
| Date (month, day, year)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Outfall | Parameter        | Permit Limit (Units/Daily/Weekly/Ave/Max/Min) | Monitored Value |
| Description of the Noncompliance and its Cause:<br>The Carriage Estates effluent flow meter has been inaccurately recording the plant's final effluent. As a result, there have been incorrectly calculated mass loadings based on the inaccurate significantly higher effluent flows being recorded.                                                                                                                                                                                                                                                                                                                                                           |         |                  |                                               |                 |
| Description of the Period of Noncompliance, Including Exact Dates and Time, and if the Noncompliance has not been Corrected, the Anticipated Time it is Expected to Continue:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |         |                  |                                               |                 |
| Steps Taken or Planned to Reduce, Eliminate, and Prevent Recurrence of the Noncompliance:<br>The effluent flow meter has been recalibrated several times, but is still not accurately reading the plant effluent flow. One problem that was investigated was the effluent measuring weir and it was determined that the weir plate must be replaced. Once this is done, the flow meter will be recalibrated and if it cannot be made to properly function then it will be replaced. In the interim, the influent flow meter recordings will be used to calculate the mass loading.                                                                              |         |                  |                                               |                 |
| CERTIFICATION AND SIGNATURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |         |                  |                                               |                 |
| I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. |         |                  |                                               |                 |
| SIGNATURE: <u>Edward J. Serowka</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         |                  | DATE (month, day, year): <u>08-13-2014</u>    |                 |



# BYPASS / OVERFLOW INCIDENT REPORT

Slate Form 48373 (R5 / 4-13)  
Indiana Department of Environmental Management  
Office of Water Quality

☐ Follow-up to Bypass report  
previously sent on: \_\_\_\_\_

**INSTRUCTIONS:** Complete all parts of this form and fax it to the Office of Water Quality (OWQ) at (317) 232-8637 or 232-8406. Or email signed copies to [waterquality@ind.in.gov](mailto:waterquality@ind.in.gov). Submittal of this report will satisfy the Office of Water Quality (OWQ) telephone and written bypass / overflow reporting requirements of your NPDES permit. To speak with someone in OWQ, call (317) 232-8670.

To report a spill or if the release is resulting in a fish kill or other severe environmental damage, immediately report the release to the Emergency Response Section spill response line at: (317) 233-7745 or toll free within Indiana at (888) 233-7745.

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                             |                                       |                                                                                                                                                                                                                                                                                                                                                                           |                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Facility Name: (Organization)<br>American Suburban Utilities                                                                                                                                                                                                                                                                                                                                                       |  | Mailing Address: (reporting organization)<br>3350 W 250 N, W. Laf, IN 47906 |                                       | County:<br>Tippecanoe                                                                                                                                                                                                                                                                                                                                                     | NPDES Permit #:<br>IN0043273                                          |
| Individual Making Report: (printed)<br>Edward J. Serowka                                                                                                                                                                                                                                                                                                                                                           |  | Telephone Number:<br>765-463-3856                                           | Contact Email:<br>asu-inc@hotmail.com | Date/Time IDEM Notified:<br>2:00                                                                                                                                                                                                                                                                                                                                          | <input type="checkbox"/> AM<br><input checked="" type="checkbox"/> PM |
| RELEASE INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                             |                                       |                                                                                                                                                                                                                                                                                                                                                                           |                                                                       |
| Date (mm/dd/yy) & Time<br>Release Began:<br>10/03/14 5:30                                                                                                                                                                                                                                                                                                                                                          |  | Date (mm/dd/yy) & Time<br>Release Stopped:<br>10/03/14 11:30                |                                       | Location of Release: (streets address or<br>Manhole, Lift Station, Force Main etc.)<br>Two (2) Manholes Prior to CEIL WWTP Influent L.S.                                                                                                                                                                                                                                  | Latitude:<br>(Deg Min Sec)<br>40 27 32                                |
| <input checked="" type="checkbox"/> AM<br><input type="checkbox"/> PM                                                                                                                                                                                                                                                                                                                                              |  | <input checked="" type="checkbox"/> AM<br><input type="checkbox"/> PM       |                                       |                                                                                                                                                                                                                                                                                                                                                                           | Longitude:<br>(Deg Min Sec)<br>86 59 02                               |
| Amount of Flow Released:<br>Check one: <input checked="" type="checkbox"/> Estimated <input type="checkbox"/> Actual                                                                                                                                                                                                                                                                                               |  | (always provide a volume)<br>180000 gallons                                 |                                       | WWTP Flow During Release:<br>2.5 MGD                                                                                                                                                                                                                                                                                                                                      | WWTP Peak Design Flow:<br>3.75 MGD                                    |
| Overflow Type: (select one)<br><input checked="" type="checkbox"/> Sanitary Sewer Overflow<br><input type="checkbox"/> Treatment Bypass (at wastewater plant)                                                                                                                                                                                                                                                      |  | Describe any damage to aquatic life or receiving stream:<br>None            |                                       |                                                                                                                                                                                                                                                                                                                                                                           |                                                                       |
| Reason for Bypass/Overflow: (select one or more)<br><input type="checkbox"/> Construction Related <input type="checkbox"/> Power Failure <input type="checkbox"/> Equipment Failure <input type="checkbox"/> Unknown <input type="checkbox"/> Exceeded Max Capacity <input checked="" type="checkbox"/> Precipitation 3.5 Inches                                                                                   |  |                                                                             |                                       |                                                                                                                                                                                                                                                                                                                                                                           |                                                                       |
| System Component(s):<br>(select one or more)<br><input checked="" type="checkbox"/> Manhole<br><input type="checkbox"/> House Lateral<br><input type="checkbox"/> Pipe Failure<br><input type="checkbox"/> Pump Station Failure<br><input type="checkbox"/> Treatment Bypassed<br><input type="checkbox"/> Other<br>Describe Other: (in the box below)                                                             |  | Additional Description of the Bypass/Overflow Event:                        |                                       | Description of the Area Impacted:<br>(Check All That Apply)<br><input checked="" type="checkbox"/> Affected Private Property<br><input type="checkbox"/> Basement Backup<br><input type="checkbox"/> Occurred at Treatment Plant<br><input type="checkbox"/> Reached Public Land<br><input type="checkbox"/> Reached Receiving Water<br>Name of Receiving Water Impacted: |                                                                       |
| Organizations Notified by Facility: (select one or more)<br><input type="checkbox"/> IDEM Emergency Response <input type="checkbox"/> Health Dept <input type="checkbox"/> DNR Fish & Wildlife <input type="checkbox"/> Local Emergency Management <input checked="" type="checkbox"/> Other: None                                                                                                                 |  |                                                                             |                                       |                                                                                                                                                                                                                                                                                                                                                                           |                                                                       |
| Actions Taken to Prevent, Minimize, or Mitigate Damage including Clean-up and Treatment of Affected Area:<br>(Select one or more of the following, then add a written description)<br><input type="checkbox"/> Removed Blockage <input type="checkbox"/> Repaired Pipe <input type="checkbox"/> Repaired Pump Station <input checked="" type="checkbox"/> Other<br>Installed two (2) portable engine driven pumps. |  |                                                                             |                                       |                                                                                                                                                                                                                                                                                                                                                                           |                                                                       |
| Resolution: Actions Taken or Planned to Prevent Recurrence:<br>Utility has obtained construction permit to expand plant capacity.                                                                                                                                                                                                                                                                                  |  |                                                                             |                                       |                                                                                                                                                                                                                                                                                                                                                                           |                                                                       |

(ATTACH ADDITIONAL SHEETS IF NECESSARY.)

| CERTIFICATION AND SIGNATURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (The area below is for a handwritten signature or an electronic substitute then fax or scan to PDF for emailing.) |                                    |
| SIGNATURE: <u>Edward J. Serowka</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | DATE (month, day, year): 10/3/2014 |



# NONCOMPLIANCE 24-HOUR NOTIFICATION REPORT

State Form 52415 (R / 10-13)  
Indiana Department of Environmental Management  
Office of Water Quality

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Additionally, any noncompliance which may pose a significant danger to human health or the environment (including a fish kill) must be immediately reported to the Emergency Response Section spill response line at: (317) 233-7745 or toll free within Indiana at (888) 233-7745.

| FACILITY INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                       |                                         |                                                                         |                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------|
| Facility Name<br><b>Carriage Estates II WWTP</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | County<br><b>Tippecanoe</b>             |                                                                         | NPDES Permit Number<br><b>IN0043273</b>                     |
| Individual Reporting<br><b>Edward J. Serowka</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       | Telephone Number<br><b>765-463-3856</b> |                                                                         | Reporting Date (month, day, year)<br><b>20-October-2014</b> |
| Email Address                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                       |                                         |                                                                         |                                                             |
| NONCOMPLIANCE INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |                                         |                                                                         |                                                             |
| Date (month, day, year)<br><b>17-Oct-14</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Outfall<br><b>001</b> | Parameter<br><b>NH3-N</b>               | Permit Limit (Units/Daily/Weekly/Ave/Max/Min)<br><b>2.0 MG/L Weekly</b> | Monitored Value<br><b>6.1</b>                               |
| Date (month, day, year)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Outfall               | Parameter                               | Permit Limit (Units/Daily/Weekly/Ave/Max/Min)                           | Monitored Value                                             |
| Description of the Noncompliance and its Cause:<br><i>The NH3-N has been high due to the recent heavy rain events over the last several weeks.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                       |                                         |                                                                         |                                                             |
| Description of the Period of Noncompliance, Including Exact Dates and Time, and if the Noncompliance has not been Corrected, the Anticipated Time it is Expected to Continue:<br><i>Occurred over the week of 13-Oct-14 thru 17-Oct-14. We are re-seeding and will get the plant into compliance if the weather permits.</i>                                                                                                                                                                                                                                                                                                                                    |                       |                                         |                                                                         |                                                             |
| Steps Taken or Planned to Reduce, Eliminate, and Prevent Reoccurrence of the Noncompliance:<br><i>The plant is currently under going a major expansion.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |                                         |                                                                         |                                                             |
| CERTIFICATION AND SIGNATURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |                                         |                                                                         |                                                             |
| I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. |                       |                                         |                                                                         |                                                             |
| SIGNATURE: <u>Edward Serowka - JAH</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                                         | DATE (month, day, year): <u>20-Oct-14</u>                               |                                                             |



# NONCOMPLIANCE 24-HOUR NOTIFICATION REPORT

State Form 52415 (R / 10-13)  
Indiana Department of Environmental Management  
Office of Water Quality

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Additionally, any noncompliance which may pose a significant danger to human health or the environment (including a fish kill) must be immediately reported to the Emergency Response Section spill response line at: (317) 233-7745 or toll free within Indiana at (888) 233-7745.

| FACILITY INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                         |                                                             |                                                                         |                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------|
| Facility Name<br><b>Carriage Estates II WWTP</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | County<br><b>Tippecanoe</b>             | NPDES Permit Number<br><b>IN0043273</b>                     |                                                                         |                               |
| Individual Reporting<br><b>Edward J. Serowka</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Telephone Number<br><b>765-463-3856</b> | Reporting Date (month, day, year)<br><b>27-October-2014</b> |                                                                         |                               |
| Email Address                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                                             |                                                                         |                               |
| NONCOMPLIANCE INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                         |                                                             |                                                                         |                               |
| Date (month, day, year)<br><b>24-Oct-14</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Outfall<br><b>001</b>                   | Parameter<br><b>NH3-N</b>                                   | Permit Limit (Units/Daily/Weekly/Ave/Max/Min)<br><b>2.0 MG/L Weekly</b> | Monitored Value<br><b>4.4</b> |
| Date (month, day, year)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Outfall                                 | Parameter                                                   | Permit Limit (Units/Daily/Weekly/Ave/Max/Min)                           | Monitored Value               |
| Description of the Noncompliance and its Cause:<br>The NH3-N has been high due to the recent heavy rain events over the last several weeks.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                         |                                                             |                                                                         |                               |
| Description of the Period of Noncompliance, including Exact Dates and Time, and if the Noncompliance has not been Corrected, the Anticipated Time it is Expected to Continue:<br>Occurred over the week of 20-October-14 thru 24-October-14. We are re-seeding and will get the plant into compliance if the weather permits.                                                                                                                                                                                                                                                                                                                                   |                                         |                                                             |                                                                         |                               |
| Steps Taken or Planned to Reduce, Eliminate, and Prevent Reoccurrence of the Noncompliance:<br>The plant is currently under going a major expansion. Additionally, cycle times have been changed along with reprogramming adding more aeration time to the plant. The plant should be within limits by the end of the week                                                                                                                                                                                                                                                                                                                                      |                                         |                                                             |                                                                         |                               |
| CERTIFICATION AND SIGNATURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                         |                                                             |                                                                         |                               |
| I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. |                                         |                                                             |                                                                         |                               |
| SIGNATURE: <u>Edward J. Serowka JTH</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                         |                                                             | DATE (month, day, year): <u>27-Oct-14</u>                               |                               |



**Lakeland**  
**InnovaTech**

*Where Engineering Begins and Service Never Ends*

DATE: November 26, 2014

TO: Indiana Department of Environmental Management  
100 N. Senate Avenue  
Indianapolis, IN 46204

ATTENTION: Mark W. Stanifer, Chief  
Compliance Branch  
Office of Water Quality

REFERENCE: Carriage Estates Wastewater Treatment Plant  
West Lafayette, Indiana  
NPDES Permit # IN0043273  
American Suburban Utilities, Inc.

Mark:

This will confirm the information Scott and I provided you in our meeting on Thursday, November 20, 2014.

American Suburban Utilities Carriage Estates Wastewater Treatment Plant had difficulty in September and October of this year meeting its permitted ammonia nitrogen effluent limits.

One of the problems was that the plant was receiving higher than normal influent flows which would normally mean that the influent ammonia nitrogen levels should have been lower than the historical average of 15.0 mg/l. However, the influent ammonia nitrogen levels were double or triple the average of 15.0 mg/l. The Utility therefore undertook an analysis of its sanitary collection system to determine what was causing the high influent ammonia nitrogen which then resulted in the higher effluent limits which exceeded the permitted limits. After four weeks of analyzing the collection system, no outstanding sources of the higher ammonia nitrogen limits were discovered. The utility then decided that it needed to treat the higher influent flows and ammonia nitrogen limits in the plant and therefore undertook a modification of the existing four (4) tank CSBR System to better handle this situation.

In studying the CSBR system it was determined that there was uneven hydraulic flow to the various tanks along with an inability to increase the dissolved oxygen in the tanks. The solution was then to modify the four (4) tank system to a two (2) tank system. This was accomplished as follows:

1. The tanks inlet valves were removed which allowed a more even distribution of the hydraulic flow to each tank. This prevented uneven hydraulic loading to each tank.



2. A hole was drilled in the wall between tanks 1 and 2 and tanks 3 and 4 which allowed two (2) of the tanks to operate as a single tank with uniform levels. This allowed the double tank configuration to provide a longer detention time and therefore better sludge inventory control.
3. The dual tank configuration also allowed more air to be provided to the tanks since there was less backpressure as the result of two (2) aeration grid system operating together which permitted the positive displacement blowers to operate at their optimum condition point. This allowed the tanks dissolved oxygen to be increased from 3.0/4.0 mg/l to 5.0/6.0 mg/l which resulted in improved process operation.
4. The CSBR PLC controller was reprogrammed to allow two (2) tanks to aerate, settle and decant simultaneously.

The modified CSBR system is providing superior process operation which is handling the higher influent flows while producing a high quality effluent with ammonia-nitrogen effluent limits less than 1.0 mg/l. This modification will allow the current CSBR system to continue to provide quality effluent over the next several years while the plant expansion is under construction.

Thank you and please do not hesitate to contact us if we can be of any additional assistance.

Very truly yours,

*Lakeland InnovaTech*

A handwritten signature in cursive script, appearing to read 'Edward J. Serowka'.

E. J. Serowka, P.E.

EJS/mjp





# NONCOMPLIANCE 24-HOUR NOTIFICATION REPORT

State Form 52415 (R / 10-13)  
Indiana Department of Environmental Management  
Office of Water Quality

INSTRUCTIONS: Complete all sections of this form and email it to Office of Water Quality, Compliance Data Section at [reports@idem.in.gov](mailto:reports@idem.in.gov). Thorough completion of this report will satisfy the Office of Water Quality (OWQ) telephone and 5-day written noncompliance notification reporting requirements of your NPDES permit. To speak with someone in OWQ, call (317) 232-8670.

Additionally, any noncompliance which may pose a significant danger to human health or the environment (including a fish kill) must be immediately reported to the Emergency Response Section spill response line at: (317) 233-7745 or toll free within Indiana at (888) 233-7745.

| FACILITY INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                         |                                                             |                                                                         |                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------|
| Facility Name<br><b>Carriage Estates II WWTP</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | County<br><b>Tipton</b>                 | NPDES Permit Number<br><b>IN0043273</b>                     |                                                                         |                               |
| Individual Reporting<br><b>Edward J. Serowka</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Telephone Number<br><b>765-463-3856</b> | Reporting Date (month, day, year)<br><b>20-October-2014</b> |                                                                         |                               |
| Email Address                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                                             |                                                                         |                               |
| NONCOMPLIANCE INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                         |                                                             |                                                                         |                               |
| Date (month, day, year)<br><b>17-Oct-14</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Outfall<br><b>001</b>                   | Parameter<br><b>NH3-N</b>                                   | Permit Limit (Units/Daily/Weekly/Ave/Max/Min)<br><b>2.0 MG/L Weekly</b> | Monitored Value<br><b>6.1</b> |
| Date (month, day, year)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Outfall                                 | Parameter                                                   | Permit Limit (Units/Daily/Weekly/Ave/Max/Min)                           | Monitored Value               |
| Description of the Noncompliance and its Cause:<br><b>The NH3-N has been high due to the recent heavy rain events over the last several weeks.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                         |                                                             |                                                                         |                               |
| Description of the Period of Noncompliance, including Exact Dates and Time, and if the Noncompliance has not been Corrected, the Anticipated Time it is Expected to Continue:<br><b>Occurred over the week of 13-Oct-14 thru 17-Oct-14. We are re-seeding and will get the plant into compliance if the weather permits.</b>                                                                                                                                                                                                                                                                                                                                    |                                         |                                                             |                                                                         |                               |
| Steps Taken or Planned to Reduce, Eliminate, and Prevent Reoccurrence of the Noncompliance:<br><b>The plant is currently under going a major expansion.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                         |                                                             |                                                                         |                               |
| CERTIFICATION AND SIGNATURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                         |                                                             |                                                                         |                               |
| I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. |                                         |                                                             |                                                                         |                               |
| SIGNATURE: <u><b>Edward Serowka - JAH</b></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                                             | DATE (month, day, year): <u><b>20-Oct-14</b></u>                        |                               |



# NONCOMPLIANCE 24-HOUR NOTIFICATION REPORT

State Form 52415 (R / 10-13)  
Indiana Department of Environmental Management  
Office of Water Quality

**INSTRUCTIONS:** Complete all sections of this form and email it to Office of Water Quality, Compliance Data Section at [wwreports@dem.in.gov](mailto:wwreports@dem.in.gov). Thorough completion of this report will satisfy the Office of Water Quality (OWQ) telephone and 5-day written noncompliance notification reporting requirements of your NPDES permit. To speak with someone in OWQ, call (317) 232-8670.

Additionally, any noncompliance which may pose a significant danger to human health or the environment (including a fish kill) must be immediately reported to the Emergency Response Section spill response line at: (317) 233-7745 or toll free within Indiana at (888) 233-7745.

| FACILITY INFORMATION                             |                                         |                                                             |
|--------------------------------------------------|-----------------------------------------|-------------------------------------------------------------|
| Facility Name<br><b>Carriage Estates II WWTP</b> | County<br><b>Tippecanoe</b>             | NPDES Permit Number<br><b>IN0043273</b>                     |
| Individual Reporting<br><b>Edward J. Serowka</b> | Telephone Number<br><b>765-463-3856</b> | Reporting Date (month, day, year)<br><b>27-October-2014</b> |
| Email Address                                    |                                         |                                                             |

| NONCOMPLIANCE INFORMATION                   |                       |                           |                                                                         |                               |
|---------------------------------------------|-----------------------|---------------------------|-------------------------------------------------------------------------|-------------------------------|
| Date (month, day, year)<br><b>24-Oct-14</b> | Outfall<br><b>001</b> | Parameter<br><b>NH3-N</b> | Permit Limit (Units/Daily/Weekly/Ave/Max/Min)<br><b>2.0 MG/L Weekly</b> | Monitored Value<br><b>4.4</b> |
| Date (month, day, year)                     | Outfall               | Parameter                 | Permit Limit (Units/Daily/Weekly/Ave/Max/Min)                           | Monitored Value               |

**Description of the Noncompliance and its Cause:**

The NH3-N has been high due to the recent heavy rain events over the last several weeks.

**Description of the Period of Noncompliance, Including Exact Dates and Time, and if the Noncompliance has not been Corrected, the Anticipated Time it is Expected to Continue:**

Occurred over the week of 20-October-14 thru 24-October-14. We are re-seeding and will get the plant into compliance if the weather permits.

**Steps Taken or Planned to Reduce, Eliminate, and Prevent Reoccurrence of the Noncompliance:**

The plant is currently under going a major expansion. Additionally, cycle times have been changed along with reprogramming adding more aeration time to the plant. The plant should be within limits by the end of the week.

## CERTIFICATION AND SIGNATURE

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SIGNATURE: Edward J. Serowka JTH

DATE (month, day, year): 27-Oct-14



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204  
(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

Michael R. Pence  
Governor

Thomas W. Easterly  
Commissioner

December 05, 2014

Via Email to: [asu-inc@hotmail.com](mailto:asu-inc@hotmail.com)

Mr. Scot Lods, Owner  
America Suburban Utilities  
3350 W 250 N  
West Lafayette, Indiana 47906

Dear Mr. Lods:

Re: **Inspection Summary/ Violation Letter**  
American Suburban Utilities, Carriage Estates  
WWTP  
NPDES Permit No. IN0043273  
West Lafayette, Tippecanoe County

An inspection of the above-referenced facility or location was conducted by a representative of the Indiana Department of Environmental Management, Office of Water Quality, pursuant to IC 13-18-3-9. A summary of the inspection is provided below:

Date(s) of Inspection: November 24, 2014  
Type of Inspection: Compliance Evaluation Inspection  
Inspection Results: Violations were observed.

IDEM recommends the permittee begin the process of registering for NetDMR. Information on NetDMR can be obtained at <http://www.in.gov/idem/6765.htm>.

The following concerns were noted:

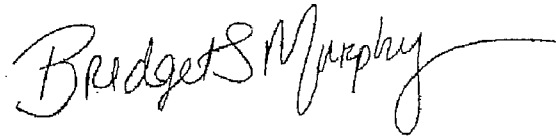
Maintenance was rated as unsatisfactory due to an inadequate preventative maintenance program. This is a violation of Part II. B. 1 of the permit which states, in part, that all facilities shall be operated and maintained as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants. This is covered in the facility's Compliance Plan and does not require a response.

Flow measurement is rated as marginal due to the facility estimating effluent flow based on the influent flow meter. The effluent flow meter has not been operating properly. Replacing the effluent flow meter is in the first phase of construction. The influent flow meter was last calibrated in May 2014 by BL Anderson.

The Effluent Limits Compliance area was rated unsatisfactory due to self-reported violations of the limits detailed in Part I. A. of the NPDES Permit. Review of DMRs revealed 26 Ammonia violations for the period reviewed.

This information is being forwarded to the OWQ Enforcement Section for consideration in conjunction with your Agreed Order, Case No. 2014-21924-W. As item 2 listed above is not addressed within your existing agreed order, a written detailed response documenting correction and/or a plan for assuring future compliance must be submitted to this office within 30 days of receipt of this letter. Failure to respond adequately to this letter may result in additional enforcement action. Please direct your response to this letter to the attention of Bridget S. Murphy, at our letterhead address or via email to [wwViolationResponse@idem.IN.gov](mailto:wwViolationResponse@idem.IN.gov). Any questions should be directed to Kim Rohr at 317-719-1666 or by email to [vrohr@idem.IN.gov](mailto:vrohr@idem.IN.gov). Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink that reads "Bridget S. Murphy". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Bridget S. Murphy, Inspections Section Chief  
Compliance Branch  
Office of Water Quality

Enclosure

Cc: Mary Hoover, Water Enforcement Section Chief



# NPDES Wastewater Facility Inspection Report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------------|---------------|----------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------|----------------------------|
| NPDES Permit Number:<br><b>IN0043273</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          | Facility Type:<br>Mixed Ownership      Major |               | Facility Classification:<br>III                                                                    |                             | TEMPO AI ID<br>55359                                               |                            |
| Date(s) of Inspection: November 24, 2014                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| Type of Inspection: Compliance Evaluation Inspection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| Name and Location of Facility Inspected:<br><b>American Suburban Utilities, Carriage Estates WWTP</b><br>4100 Bridgeway Drive<br>West Lafayette      IN 47906      Tippecanoe County:                                                                                                                                                                                                                                                                                                                                                                |                          |                                              |               | Receiving Waters:<br>Indian Creek                                                                  |                             | Permit Expiration Date:<br>1/31/2016<br><br>Design Flow:<br>1.5MGD |                            |
| On Site Representative(s):<br>First Name      Last Name      Title      Email      Phone<br>Ed      Serowka      Engineer      eserowka@earthlink.net      317-796-5273                                                                                                                                                                                                                                                                                                                                                                              |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| Was a verbal summary of findings presented to the on-site representative? <b>Yes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| Certified Operator:<br>Dennis Crandall                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          | Number:<br>15007                             | Class:<br>IV  | Effective Date:<br>7-1-14                                                                          | Expiration Date:<br>6-30-16 | Email:<br>dc0866@yahoo.com                                         |                            |
| Responsible Official:<br>Mr. Scot Lods, Owner<br>3350 W 250 N<br>West Lafayette, Indiana 47906                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                                              |               | Permittee: America Suburban Utilities<br>Email: asu-inc@hotmail.com<br>Phone: 765-463-3856<br>Fax: |                             | Contacted?<br>No                                                   |                            |
| <b>INSPECTION FINDINGS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| <input type="radio"/> Conditions evaluated were found to be satisfactory at the time of the inspection. (5)<br><input type="radio"/> Violations were discovered but corrected during the inspection. (4)<br><input type="radio"/> Potential problems were discovered or observed. (3)<br><input checked="" type="radio"/> Violations were discovered and require a submittal from you and/or a follow-up inspection by IDEM. (2)<br><input type="radio"/> Violations were discovered and may subject you to an appropriate enforcement response. (1) |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| <b>AREAS EVALUATED DURING INSPECTION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Receiving Waters         | S                                            | Facility/Site | S                                                                                                  | Self-Monitoring             | S                                                                  | Compliance Schedules       |
| S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Effluent Appearance      | S                                            | Operation     | M                                                                                                  | Flow Measurement            | S                                                                  | Pretreatment               |
| S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Permit                   | U                                            | Maintenance   | S                                                                                                  | Laboratory                  | U                                                                  | Effluent Limits Compliance |
| M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | CSO/SSO (Sewer Overflow) | S                                            | Sludge        | S                                                                                                  | Records/Reports             | N                                                                  | Other:                     |
| <b>DETAILED AREA EVALUATIONS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| IDEM recommends the permittee begin the process of registering for NetDMR. Information on NetDMR can be obtained at <a href="http://www.in.gov/idem/6765.htm">http://www.in.gov/idem/6765.htm</a> .                                                                                                                                                                                                                                                                                                                                                  |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| <b>Receiving Waters:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| S 1. The receiving stream is visibly free of excessive deposits of settled solids, floating debris, oil, scum, or billowy foam.                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| Comments:<br>The receiving stream was free of notable foam, algae or solids.                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| <b>Effluent Appearance:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| S 1. Treated effluent is free of excessive solids, floating debris, oil, scum, or billowy foam.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| Comments:<br>The effluent was clear and free of color at the time of the inspection.                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| <b>Permit:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| S 1. Does the facility have a current copy of the permit available for reference?                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| N 2. If the permit expires within 180 days, has a renewal application been submitted?                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |
| S 3. Receiving waters are accurately described in permit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                              |               |                                                                                                    |                             |                                                                    |                            |

- N 4. The permit has been properly transferred if there is a new owner.

Comments:

The facility has a valid permit and the facility description, including units of treatment and receiving stream, is accurate.

**CSO/SSO:**

- N 1. CSO's are adequately monitored and maintained.  
M 2. No unauthorized overflow events in last 12 months.  
S 3. Facility has met SSO and dry weather CSO reporting requirements  
N 4. Any adverse impacts from SSO and CSO events have been properly mitigated.

Comments:

CSO/SSO was rated as marginal for having three days with sewer overflows for the past 12 months.

**Facility/Site:**

- S 1. The facility has standby power or equivalent provision.  
S 2. An adequate alarm or notification system for power or equipment failure is available for the treatment facility and lift stations.  
S 3. Safe and adequate access is provided for inspection of all units and outfalls.  
S 4. Facilities and equipment do not appear beyond their useful life.  
5. List any safety concerns:

Comments:

The facility has a standby generator that is tested on a regular basis. There is an alarm with auto-dialer that is currently checked monthly by tripping random alarms. The facility is considering testing weekly.

**Operation:**

- S 1. All facilities and systems necessary for achieving compliance with the terms and conditions of the permit are operated efficiently, including an anticipated bypass report for steps of treatment taken out of service.  
S 2. An adequate, qualified operating staff is provided to carry out the operation of the facility, including:  
a. Certified Operator's on-site attendance and/or qualified operations personnel attendance is adequate.  
b. Adequate documentation of operational activities, including system monitoring and cleaning.  
c. Adequate funding to ensure proper operation.  
S 3. Solids handling procedures include:  
a. Sufficient solids are wasted from the treatment system, in a timely manner, to maintain process efficiency.  
b. Wasting of solids is based on appropriate operational targets and valid process control testing.  
c. Adequate documentation of solids removal, handling, or control is available for review.  
S 4. The facility is operated efficiently during wet weather events.

Comments:

All units of treatment appear to be operating efficiently. The facility has had major Ammonia problems for the past couple months. They made the four SBRs into two SBRs. This increases aeration detention time and has lowered Ammonia numbers dramatically. Ammonia field test was performed on effluent with a result of <1 mg/L.

**Maintenance:**

- U 1. A maintenance record system has been established and includes maintenance/repair history and preventative maintenance plan.  
M 2. Facility maintenance activities appear adequate.  
S 3. Lift stations are adequately inspected, cleaned, and maintained, with adequate documentation of activities.  
S 4. Collection system maintenance activities appear adequate.

Comments:

Maintenance was rated as **unsatisfactory** due to an inadequate preventative maintenance program. This is a violation of Part II. B. 1 of the permit which states, in part, that all facilities shall be operated and maintained as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants. This is covered in the facility's Compliance Plan and does not require a response.

The facility also had sanitary debris in and around the sludge lagoons that should be cleaned up. The facility has been using a maintenance log for any activities performed as well as a sheet dedicated to blower maintenance. All lift stations checked every day.

**Sludge:**

- S 1. Sludges, screenings, and slurries are handled and disposed of properly.

Comments:

A records review during the inspection showed adequate wasting, handling, and disposal of sludge. May 2014 125.01 dry tons of sludge were land applied.

**Self-Monitoring:**

- S 1. Samples are taken at pre-designated locations and are representative.
- N 2. Flow-proportioned samples are obtained where needed.
- S 3. The facility conducts sampling of all waste streams, including type and frequency, as required in the permit.
- S 4. Sample collection procedures, including automatic sampling, include:
  - a. Samples are refrigerated during compositing.
  - b. Proper preservation techniques are used.
  - c. Containers and holding times conform to 40 CFR 136.3.
- S 5. Sample documentation is adequate and includes:
  - a. Dates, times, and locations of sampling.
  - b. Name of individual performing sampling.
  - c. Instantaneous flow for flow-weighted aliquots.
  - d. Chain of Custody records.
- N 6. NPDES Permit Whole Effluent Toxicity (WET) testing requirements are being met.

**Comments:**

The Self Monitoring Program was rated as satisfactory. All sampling practices, including raw and intermediate unit process testing, are conducted accurately and at the frequency required by the permit.

**Flow Measurement:**

- M 1. Flow is properly monitored as required by the permit.
- S 2. Flow data and calibration records are available for review.

**Comments:**

Flow measurement is rated as **marginal** due to the facility estimating effluent flow based on the influent flow meter. The effluent flow meter has not been operating properly. Replacing the effluent flow meter is in the first phase of construction. The influent flow meter was last calibrated in May 2014 by BL Anderson.

**Laboratory:**

The following laboratory records were reviewed:

|                      |                       |                   |
|----------------------|-----------------------|-------------------|
| D. O. Bench Sheets   | Chlorine Bench Sheets | CBOD Bench Sheets |
| TSS Bench Sheets     | Ammonia Bench Sheets  | pH Bench Sheets   |
| E. coli Bench Sheets | Chain-of-Custody      | Sample Log        |

Calibration Log

- S 1. The laboratory practices and protocol reviewed were adequate, including:
  - a. Written laboratory QA/QC manual.
  - b. Samples are properly stored.
  - c. Approved analytical methods are used.
  - d. Calibration and maintenance of instruments is adequate.
  - e. QA/QC procedures are adequate.
  - f. Dates of analyses. (and times where required)
  - g. Name of person performing analyses.

**Contract Lab Information**

County Home WWTP

West Lafayette, IN

**Comments:**

The facility performs pH, DO and Chlorine testing on-site. All other parameters are tested at County Home WWTP.

**Records/Reports:**

The following records/reports were reviewed:

DMRs for the period of February 2014 to October 2014 were reviewed as part of the inspection.

- S 1. All facility records for the period including the previous three years were available for review.
- S 2. DMRs and MROs are completed properly and accurately including:
  - a. "No Ex" column is accurate.
  - b. Signatory requirements are met.
  - c. Reports are prepared by or under the direction of a certified operator.
- S 3. Bypass and Noncompliance reporting are adequate.

Comments:

The requested records were available and appear complete and accurate.

**Compliance Schedules:**

- N 1. The NPDES Permit Schedule of Compliance monitoring and reporting milestones have been met.
- S 2. Agreed Order compliance milestones have been met.

Comments:

The facility has a new Agreed Order effective 09/22/14. The facility has 90 days of the effective date to reach most milestones. Milestones that were to be met immediately were being met on day of inspection.

**Pretreatment:**

- S 1. No evidence of interference from industrial or other sources of toxic substances was noted.
- N 2. For both Delegated and Non-Delegated pretreatment programs:
  - a. Industrial or commercial dischargers are regulated as required.
  - b. The permittee enforces the Sewer Use Ordinance (SOU) and the Enforcement Response Plan (ERP).
  - c. The permittee submitted its annual pretreatment report to IDEM by April 1.
- N 3. Non-Delegated pretreatment programs have:
  - a. Developed the Sewer Use Ordinance and submitted it to IDEM.
  - b. Developed the Enforcement Response Plan and submitted it to IDEM.
  - c. The permittee submitted sludge monitoring data (Cd, Cu, Pb, Hg, Mo, Ni, Zn) twice per year to IDEM's Pretreatment Group.
- N 4. Pretreatment records and procedures were adequate and include:
  - a. Inventory of Industrial Waste Contributors/Industrial Survey.
  - b. Keeping records of all Industrial User (IU) self-monitoring data.
  - c. Conducting compliance monitoring at all Significant Industrial Users (SIUs) for all parameters in the industry's permit.
  - d. Conducting annual inspections at all SIUs and documenting them with inspection reports.
  - e. For any IU in noncompliance in the past year, the permittee has taken enforcement actions.
- N 5. If the non-delegated permittee accepts hauled waste:
  - a. Does the POTW provide written permission to haulers?
  - b. Does the POTW obtain samples from each hauled waste load and retain them for at least 48 hours?
  - c. Does the POTW retain records of each load?

Comments:

The facility has no industrial sources.

**Effluent Limits Compliance:**

Yes 1. Were DMRs reviewed as part of the inspection?

DMRs for the period of February 2014 to October 2014 were reviewed as part of the inspection.

Yes 2. Were violations noted during the review of DMRs?

Comments:

The Effluent Limits Compliance area was rated unsatisfactory due to self-reported violations of the limits detailed in Part I. A. of the NPDES Permit. Review of DMRs revealed 26 Ammonia violations for the period reviewed.

|                            |                   |               |
|----------------------------|-------------------|---------------|
| <b>IDEM REPRESENTATIVE</b> |                   |               |
| Inspector Name:            | Email:            | Phone Number: |
| Kim Rohr                   | krohr@idem.IN.gov | 317-719-1666  |
| <b>IDEM MANAGER REVIEW</b> |                   |               |
| IDEM Manager:              | Date:             |               |
| Bridget S. Murphy          | 12/3/2014         |               |





DATE: December 16, 2014

TO: Indiana Department of Environmental Management  
100 N. Senate Avenue  
Indianapolis, IN 46204

ATTENTION: Bridget S. Murphy, Inspection Section Chief  
Compliance Branch  
Office of Water Quality

REFERENCE: Inspection Summary/Violation Letter  
Carriage Estates Wastewater Treatment Plant  
West Lafayette, Tippecanoe County, Indiana  
NPDES Permit # IN0043273

Gentlemen:

The following are American Suburban Utilities responses to the issues stated in IDEM's Inspection Summary/Violation Letter dated December 5, 2014 for the Carriage Estates Wastewater Treatment Plant's inspection on November 24, 2014.

**Issue One (1)**

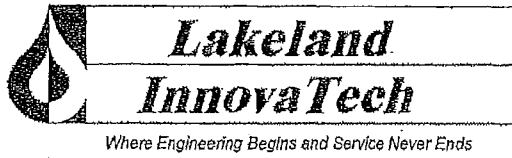
American Suburban Utilities will submit to the IDEM's Water Enforcement Section it's Preventive Maintenance Schedule for the Carriage Estates Wastewater Treatment Plant on Wednesday, December 17, 2014. ASU has implemented the preventive program and will maintain all the necessary maintenance records for review by IDEM inspectors.

**Issue Two (2)**

ASU has received Construction Permit No. 20788 which will allow it to replace the old effluent metering structure with a new structure, Palmer-Bowlus Flume and effluent flow meter. ASU is currently obtaining pricing for all the equipment for the effluent flow structure and is planning on starting construction as soon as the weather permits.

**Issue Three (3)**

ASU has documented the modifications made to the existing CSBR system which has significantly improved its operation so that it is meeting the permitted ammonia-nitrogen limits as shown in the attached November 2014 MRO and DMR.



Thank you.

Very truly yours,

*Lakeland InnovaTech*

A handwritten signature in cursive script, appearing to read "E. J. Serowka".

E. J. Serowka, P.E.

CC: American Suburban Utilities, Inc.  
EJS/mjp



Monthly Report of Operation  
Sequencing Batch Reactor  
Wastewater Treatment Plant

State Form 10829 (R/12-2005)  
Page 1 of 4

|                                                         |              |                              |                                  |
|---------------------------------------------------------|--------------|------------------------------|----------------------------------|
| Name of Facility<br>Carriage Estates WWTP               |              | Permit Number<br>IN0043273   |                                  |
| Month<br>November                                       | Year<br>2014 | Plant Design Flow<br>1.5 mgd | Telephone Number<br>765/463-3856 |
| Facility's e-mail address (if available): wwtp@city.org |              |                              |                                  |
| Certified Operator Name<br>Dennis Crandall              |              | Class<br>IV                  | Certificate Number<br>15007      |
|                                                         |              | Expiration Date<br>6/30/2016 |                                  |

| Day Of Month | Day of Week | Man-Hours at Plant<br>(Plants less than 1 MGD only) | Air Temperature (optional) | Total= 1.9 | Bypass At Plant Site<br>("x" if Occurred) | Collection System Overflow<br>("x" if Occurred) | CHEMICALS<br>USED |            |            | RAW SEWAGE                  |        |              |             |                     |                    |                              |                |
|--------------|-------------|-----------------------------------------------------|----------------------------|------------|-------------------------------------------|-------------------------------------------------|-------------------|------------|------------|-----------------------------|--------|--------------|-------------|---------------------|--------------------|------------------------------|----------------|
|              |             |                                                     |                            |            |                                           |                                                 | Chlorine - Lbs    | Lbs or Gal | Lbs or Gal | Influent Flow Rate<br>(MGD) | pH     | CBOD5 - mg/l | CBOD5 - lbs | Susp. Solids - mg/l | Susp. Solids - lbs | Mercury (low level)-<br>ng/L | Ammonia - mg/l |
| 1            | Sat         |                                                     |                            |            |                                           |                                                 |                   |            | 1.807      |                             |        |              |             |                     |                    |                              |                |
| 2            | Sun         |                                                     |                            |            |                                           |                                                 |                   |            | 1.865      |                             |        |              |             |                     |                    |                              |                |
| 3            | Mon         |                                                     |                            |            |                                           |                                                 |                   |            | 1.881      | 7.8                         | 109    | 1709.9       | 109         | 1709.9              |                    | 14.8                         |                |
| 4            | Tue         |                                                     |                            |            |                                           |                                                 |                   |            | 1.622      | 7.6                         | 102    | 1379.8       | 124         | 1677.4              |                    | 21.2                         |                |
| 5            | Wed         |                                                     |                            | 0.7        |                                           |                                                 |                   |            | 1.912      | 7.8                         | 85     | 1355.4       | 110         | 1754.1              |                    | 34.9                         |                |
| 6            | Thu         |                                                     |                            |            |                                           |                                                 |                   |            | 1.84       | 7.7                         | 95     | 1457.8       | 134         | 2056.3              |                    | 23.8                         |                |
| 7            | Fri         |                                                     |                            |            |                                           |                                                 |                   |            | 1.829      | 7.8                         | 97     | 1479.6       | 102         | 1555.9              |                    | 35.3                         |                |
| 8            | Sat         |                                                     |                            |            |                                           |                                                 |                   |            | 1.787      |                             |        |              |             |                     |                    |                              |                |
| 9            | Sun         |                                                     |                            |            |                                           |                                                 |                   |            | 1.791      |                             |        |              |             |                     |                    |                              |                |
| 10           | Mon         |                                                     |                            |            |                                           |                                                 |                   |            | 1.812      | 7.8                         | 126    | 1904.1       | 102         | 1541.4              |                    | 44.7                         |                |
| 11           | Tue         |                                                     |                            |            |                                           |                                                 |                   |            | 1.797      | 7.7                         | 102    | 1528.7       | 110         | 1648.6              |                    | 43.9                         |                |
| 12           | Wed         |                                                     |                            |            |                                           |                                                 |                   |            | 1.754      | 7.6                         | 107    | 1565.2       | 124         | 1813.9              |                    | 31.3                         |                |
| 13           | Thu         |                                                     |                            |            |                                           |                                                 |                   |            | 1.703      | 8.0                         | 172    | 2442.9       | 88          | 1249.9              |                    | 13.7                         |                |
| 14           | Fri         |                                                     |                            |            |                                           |                                                 |                   |            | 1.879      | 7.6                         | 151    | 2366.3       | 108         | 1692.5              |                    | 26.4                         |                |
| 15           | Sat         |                                                     |                            |            |                                           |                                                 |                   |            | 1.48       |                             |        |              |             |                     |                    |                              |                |
| 16           | Sun         |                                                     |                            |            |                                           |                                                 |                   |            | 1.711      |                             |        |              |             |                     |                    |                              |                |
| 17           | Mon         |                                                     |                            |            |                                           |                                                 |                   |            | 1.755      | 8.0                         | 106    | 1551.5       | 124         | 1815                |                    | 12.2                         |                |
| 18           | Tue         |                                                     |                            |            |                                           |                                                 |                   |            | 1.666      | 8.0                         | 158    | 2195.3       | 102         | 1417.2              |                    | 11.2                         |                |
| 19           | Wed         |                                                     |                            |            |                                           |                                                 |                   |            | 1.62       | 7.8                         | 284    | 3837.1       | 110         | 1486.2              |                    | 29.3                         |                |
| 20           | Thu         |                                                     |                            |            |                                           |                                                 |                   |            | 1.709      | 8.0                         | 156    | 2223.5       | 134         | 1909.9              |                    | 18.7                         |                |
| 21           | Fri         |                                                     |                            |            |                                           |                                                 |                   |            | 1.414      | 8.0                         | 164    | 1934         | 120         | 1415.1              |                    | 29                           |                |
| 22           | Sat         |                                                     |                            |            |                                           |                                                 |                   |            | 1.645      |                             |        |              |             |                     |                    |                              |                |
| 23           | Sun         |                                                     |                            |            |                                           |                                                 |                   |            | 1.73       |                             |        |              |             |                     |                    |                              |                |
| 24           | Mon         |                                                     |                            | 1.2        |                                           |                                                 |                   |            | 2.814      | 7.7                         | 98     | 2299.9       | 89          | 2088.7              |                    | 12.4                         |                |
| 25           | Tue         |                                                     |                            |            |                                           |                                                 |                   |            | 2.45       | 7.7                         | 97     | 1982         | 108         | 2206.8              |                    | 19.9                         |                |
| 26           | Wed         |                                                     |                            |            |                                           |                                                 |                   |            | 2.137      | 7.7                         | 110    | 1960.5       | 124         | 2210                |                    | 18.4                         |                |
| 27           | Thu         |                                                     |                            |            |                                           |                                                 |                   |            | 2.013      | 7.6                         | 109    | 1829.9       | 120         | 2014.6              |                    | 16.9                         |                |
| 28           | Fri         |                                                     |                            |            |                                           |                                                 |                   |            | 1.96       | 7.7                         | 119    | 1945.2       | 104         | 1700                |                    | 6.7                          |                |
| 29           | Sat         |                                                     |                            |            |                                           |                                                 |                   | 1.856      | 18.56      |                             |        |              |             |                     |                    |                              |                |
| 30           | Sun         |                                                     |                            |            |                                           |                                                 |                   |            | 1.834      |                             |        |              |             |                     |                    |                              |                |
| Average      |             |                                                     |                            |            |                                           |                                                 |                   | 1.836      | 2.39257    |                             | 127    | 1947.4       | 112         | 1748.2              |                    | 23.24                        |                |
| Maximum      |             |                                                     |                            | 1.2        |                                           |                                                 |                   | 2.814      | 18.56      | 8.0                         | 284    | 3837.1       | 134         | 2210                |                    | 44.7                         |                |
| Minimum      |             |                                                     |                            |            |                                           |                                                 |                   | 1.414      | 7.6        | 85                          | 1355.4 | 88           | 1249.9      |                     | 6.7                |                              |                |
| No. of Data  |             |                                                     |                            | 2          | 0                                         | 0                                               | 0                 | 0          | 0          | 30                          | 20     | 20           | 20          | 20                  | 20                 | 0                            | 20             |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

*Dennis Crandall* 12-4-14  
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)  
*Edmund J. Smith* 12-4-14  
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Monthly Report of Operation  
Sequencing Batch Reactor  
Wastewater Treatment Plant

Name of Facility: Carriage Estates WWTP  
Permit Number: IN0043273  
For Month Of: November  
Year: 2014  
Page 2 of 4  
State Form 10829 (R/12-2005)

*Danielle Lull* 12-4-14  
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)  
*Edward L. Smith* 12-4-14  
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

| Day Of Month | Temperature in Reactors | REACTOR # 1                       |                     |                           |                         | REACTOR # 2                       |                     |                           |                         | REACTOR # 3                       |                     |                           |                         | FINAL EFFLUENT                   |                           |                         |     |                         |                            |
|--------------|-------------------------|-----------------------------------|---------------------|---------------------------|-------------------------|-----------------------------------|---------------------|---------------------------|-------------------------|-----------------------------------|---------------------|---------------------------|-------------------------|----------------------------------|---------------------------|-------------------------|-----|-------------------------|----------------------------|
|              |                         | Settleable Solids % in 30 minutes | Susp. Solids - mg/l | Sludge Vol. Index - ml/gm | Dissolved Oxygen - mg/l | Settleable Solids % in 30 minutes | Susp. Solids - mg/l | Sludge Vol. Index - ml/gm | Dissolved Oxygen - mg/l | Settleable Solids % in 30 minutes | Susp. Solids - mg/l | Sludge Vol. Index - ml/gm | Dissolved Oxygen - mg/l | Residual Chlorine - Contact Tank | Residual Chlorine - Final | E. Coli - colony/100 ml | pH  | Dissolved Oxygen - mg/l | Mercury (low level) - ng/L |
| 1            |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                            |
| 2            |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                            |
| 3            |                         | 51                                | 2800                | 182                       |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.7 | 7.1                     |                            |
| 4            |                         |                                   |                     |                           |                         | 32                                | 2500                | 128                       |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.8 | 7.2                     |                            |
| 5            |                         |                                   |                     |                           |                         |                                   |                     |                           |                         | 54                                | 3100                | 174                       |                         |                                  |                           |                         | 7.8 | 7.3                     |                            |
| 6            |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.8 | 7.7                     |                            |
| 7            |                         | 50                                | 2900                | 172                       |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 8.2 | 6.9                     |                            |
| 8            |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                            |
| 9            |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                            |
| 10           |                         | 34                                | 2750                | 124                       |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.9 | 7                       |                            |
| 11           |                         |                                   |                     |                           |                         | 50                                | 3000                | 167                       |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.8 | 7.3                     |                            |
| 12           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         | 38                                | 3700                | 103                       |                         |                                  |                           |                         | 7.7 | 7.6                     |                            |
| 13           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 8.1 | 7.1                     |                            |
| 14           |                         | 36                                | 2700                | 133                       |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.9 | 8                       |                            |
| 15           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                            |
| 16           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                            |
| 17           |                         | 37                                | 2800                | 132                       |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 8.3 | 8.6                     |                            |
| 18           |                         |                                   |                     |                           |                         | 48                                | 2900                | 166                       |                         |                                   |                     |                           |                         |                                  |                           |                         | 8.1 | 8.1                     |                            |
| 19           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         | 40                                | 2850                | 140                       |                         |                                  |                           |                         | 8.1 | 7.5                     |                            |
| 20           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 8.2 | 8.4                     |                            |
| 21           |                         | 38                                | 2750                | 138                       |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 8.2 | 7.5                     |                            |
| 22           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                            |
| 23           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                            |
| 24           |                         | 62                                | 3100                | 168                       |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.5 | 7.6                     |                            |
| 25           |                         |                                   |                     |                           |                         | 35                                | 2500                | 140                       |                         |                                   |                     |                           |                         |                                  |                           |                         | 8.1 | 8.3                     |                            |
| 26           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         | 40                                | 2600                | 154                       |                         |                                  |                           |                         | 8.1 | 7.3                     |                            |
| 27           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.7 | 8.2                     |                            |
| 28           |                         | 50                                | 2900                | 172                       |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.5 | 7.9                     |                            |
| 29           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                            |
| 30           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                            |
| Avg.         |                         | 44                                | 2838                | 153                       |                         | 41                                | 2725                | 150                       |                         | 43                                | 3063                | 143                       |                         |                                  |                           |                         |     | 7.625                   |                            |
| Max.         |                         | 52                                | 3100                | 182                       |                         | 50                                | 3000                | 167                       |                         | 54                                | 3700                | 174                       |                         |                                  |                           |                         | 8.3 | 8.6                     |                            |
| Min.         |                         | 34                                | 2700                | 124                       |                         | 32                                | 2500                | 128                       |                         | 38                                | 2800                | 103                       |                         |                                  |                           |                         | 7.5 | 6.9                     |                            |
| Data         |                         | 0                                 | 8                   | 8                         | 8                       | 0                                 | 4                   | 4                         | 4                       | 0                                 | 4                   | 4                         | 4                       | 0                                | 0                         | 0                       | 0   | 20                      | 20                         |

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc.):

Monthly Report of Operation  
Sequencing Batch Reactor  
Wastewater Treatment Plant

Name of Facility: Carriage Estates V  
Permit Number: IN0043273  
For Month Of: November  
Year: 2014

*Dani Andall* 12-4-14  
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)  
*Richard J. Smith* 12-4-14  
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

| Day Of Month | FINAL EFFLUENT           |                              |              |                             |             |                                |                        |                                    |                    |                                       |                |                               |               |                                  |       |  |
|--------------|--------------------------|------------------------------|--------------|-----------------------------|-------------|--------------------------------|------------------------|------------------------------------|--------------------|---------------------------------------|----------------|-------------------------------|---------------|----------------------------------|-------|--|
|              | Flow                     |                              | BOD          |                             |             |                                | Total Suspended Solids |                                    |                    |                                       | Ammonia        |                               |               |                                  | Other |  |
|              | Effluent Flow Rate (MGD) | Effluent Flow Weekly Average | CBOD5 - mg/l | CBOD5 - mg/l Weekly Average | CBOD5 - lbs | CBOD5 - lbs/day Weekly Average | Susp. Solids - mg/l    | Susp. Solids - mg/l Weekly Average | Susp. Solids - lbs | Susp. Solids - lbs/day Weekly Average | Ammonia - mg/l | Ammonia - mg/l Weekly Average | Ammonia - lbs | Ammonia - lbs/day Weekly Average |       |  |
| 1            | 1.807                    |                              |              |                             |             |                                |                        |                                    |                    |                                       |                |                               |               |                                  |       |  |
| 2            | 1.865                    |                              |              |                             |             |                                |                        |                                    |                    |                                       |                |                               |               |                                  |       |  |
| 3            | 1.881                    |                              | 5            |                             | 78.485      |                                | 5                      |                                    | 78.485             |                                       | 0.4            |                               | 6.2788        |                                  |       |  |
| 4            | 1.622                    |                              | 6            |                             | 81.214      |                                | 7                      |                                    | 94.749             |                                       | 0.34           |                               | 4.6021        |                                  |       |  |
| 5            | 1.912                    |                              | 2            |                             | 31.911      |                                | 7                      |                                    | 111.69             |                                       | 0.4            |                               | 6.3823        |                                  |       |  |
| 6            | 1.84                     |                              | 5            |                             | 76.774      |                                | 6                      |                                    | 92.129             |                                       | 0.32           |                               | 4.9135        |                                  |       |  |
| 7            | 1.829                    |                              | 5            |                             | 76.315      |                                | 5                      |                                    | 76.315             |                                       | 0.28           |                               | 4.2736        |                                  |       |  |
| 8            | 1.787                    | 1.81943                      |              | 4.6                         |             | 68.94                          |                        | 6                                  |                    | 90.673                                |                | 0.348                         |               | 5.2901                           |       |  |
| 9            | 1.791                    |                              |              |                             |             |                                |                        |                                    |                    |                                       |                |                               |               |                                  |       |  |
| 10           | 1.812                    |                              | 5            |                             | 75.606      |                                | 9                      |                                    | 136.09             |                                       | 0.47           |                               | 7.1069        |                                  |       |  |
| 11           | 1.797                    |                              | 6            |                             | 89.976      |                                | 9                      |                                    | 134.96             |                                       | 0.26           |                               | 3.899         |                                  |       |  |
| 12           | 1.754                    |                              | 7            |                             | 102.46      |                                | 7                      |                                    | 102.46             |                                       | 0.44           |                               | 6.4403        |                                  |       |  |
| 13           | 1.703                    |                              | 6            |                             | 85.269      |                                | 5                      |                                    | 71.058             |                                       | 0.18           |                               | 2.5581        |                                  |       |  |
| 14           | 1.879                    |                              | 6            |                             | 94.082      |                                | 6                      |                                    | 94.082             |                                       | 0.19           |                               | 2.9792        |                                  |       |  |
| 15           | 1.48                     | 1.74514                      |              | 6                           |             | 89.478                         |                        | 7.2                                |                    | 107.73                                |                | 0.308                         |               | 4.5967                           |       |  |
| 16           | 1.711                    |                              |              |                             |             |                                |                        |                                    |                    |                                       |                |                               |               |                                  |       |  |
| 17           | 1.755                    |                              | 7            |                             | 102.52      |                                | 11                     |                                    | 161.1              |                                       | 0.15           |                               | 2.1968        |                                  |       |  |
| 18           | 1.666                    |                              | 7            |                             | 97.319      |                                | 7                      |                                    | 97.319             |                                       | 0.1            |                               | 1.3903        |                                  |       |  |
| 19           | 1.62                     |                              | 7            |                             | 94.632      |                                | 8                      |                                    | 108.15             |                                       | 0.4            |                               | 5.4076        |                                  |       |  |
| 20           | 1.709                    |                              | 7            |                             | 99.831      |                                | 5                      |                                    | 71.308             |                                       | 0.23           |                               | 3.2802        |                                  |       |  |
| 21           | 1.414                    |                              | 7            |                             | 82.599      |                                | 6                      |                                    | 70.799             |                                       | 0.19           |                               | 2.242         |                                  |       |  |
| 22           | 1.845                    | 1.64571                      |              | 7                           |             | 95.38                          |                        | 7.4                                |                    | 101.74                                |                | 0.214                         |               | 2.9034                           |       |  |
| 23           | 1.73                     |                              |              |                             |             |                                |                        |                                    |                    |                                       |                |                               |               |                                  |       |  |
| 24           | 2.814                    |                              | 6            |                             | 140.9       |                                | 10                     |                                    | 234.83             |                                       | 0.73           |                               | 17.142        |                                  |       |  |
| 25           | 2.45                     |                              | 5            |                             | 102.23      |                                | 9                      |                                    | 184.01             |                                       | 0.29           |                               | 5.9291        |                                  |       |  |
| 26           | 2.137                    |                              | 7            |                             | 124.83      |                                | 9                      |                                    | 160.5              |                                       | 0.27           |                               | 4.815         |                                  |       |  |
| 27           | 2.013                    |                              | 5            |                             | 83.892      |                                | 6                      |                                    | 100.79             |                                       | 0.36           |                               | 6.0476        |                                  |       |  |
| 28           | 1.96                     |                              | 6            |                             | 98.137      |                                | 7                      |                                    | 114.49             |                                       | 0.28           |                               | 4.5797        |                                  |       |  |
| 29           | 18.56                    | 4.52343                      |              | 5.8                         |             | 110.02                         |                        | 8.2                                |                    | 168.92                                |                | 0.386                         |               | 7.7028                           |       |  |
| 30           | 1.834                    |                              |              |                             |             |                                |                        |                                    |                    |                                       |                |                               |               |                                  |       |  |
| Avg          | 2.39257                  |                              | 5.85         |                             | 90.954      |                                | 7.2                    |                                    | 114.77             |                                       | 0.314          |                               | 6.1232        |                                  |       |  |
| Max          | 18.56                    | 4.52343                      | 7            | 7                           | 140.9       | 110.02                         | 11                     | 8.2                                | 234.83             | 168.92                                | 0.73           | 0.386                         | 17.142        | 7.7028                           |       |  |
| Min          | 1.414                    | 1.64571                      | 2            | 4.6                         | 31.911      | 68.94                          | 5                      | 6                                  | 70.799             | 90.673                                | 0.1            | 0.214                         | 1.3903        | 2.9034                           |       |  |
| Data         | 30                       | 4                            | 20           | 4                           | 20          | 4                              | 20                     | 4                                  | 20                 | 4                                     | 20             | 4                             | 20            | 4                                | 0     |  |

| MONTHLY REMOVAL SUMMARY                  |      |      |         |            | Total Monthly Flow:<br>(million gallons) |
|------------------------------------------|------|------|---------|------------|------------------------------------------|
| Percent Removal                          | BOD5 | S.S. | Ammonia | Phosphorus | 71.777                                   |
|                                          | 95   | 94   | 99      | NA         |                                          |
| Percent Capacity<br>(actual flow/design) |      |      |         |            | 160%                                     |

Monthly Report of Operation  
Sequencing Batch Reactor  
Wastewater Treatment Plant

Name of Facility: Carriage Estates WWSW  
Permit Number: IN0043273  
For Month Of: November  
Year: 2014  
Page 4 of 4  
State Form 10829 (R/12-2005)

*Doni M. Dall* 12-4-14  
(SIGNATURE OF CERTIFIED OPERATOR) (Date)  
*Edward J. Smith* 12-11-14  
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (Date)

| Day Of Month | SLUDGE TO DIGESTER    |      | DIGESTER OPERATION |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               | REACTOR #4                        |                     |                           |                         |
|--------------|-----------------------|------|--------------------|---|---|-------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------------------|-----------------------------------|---------------------|---------------------------|-------------------------|
|              | Waste Act. Sludge HRS |      | Anaerobic Only     |   |   | Supernatant Withdrawn hrs. or Gal. x 1000 | Supernatant BOD5 mg/l or NH3-N mg/l | Total Solids in Incoming Sludge - % | Total Solids in Digested Sludge - % | Volatile Solids in Incoming Sludge - % | Volatile Solids in Digested Sludge - % | Digested Sludge Withdrawn hrs. or Gal. x 1000 | Settleable Solids % in 30 minutes | Susp. Solids - mg/l | Sludge Vol. Index - ml/gm | Dissolved Oxygen - mg/l |
| 1            |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 2            |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 3            |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 4            |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 5            |                       | 3    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 6            |                       | 3    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               | 53                                | 3050                | 174                       |                         |
| 7            |                       | 3    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 8            |                       | 3    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 9            |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 10           |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 11           |                       | 3    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 12           |                       | 6    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 13           |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               | 58                                | 3100                | 187                       |                         |
| 14           |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 15           |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 16           |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 17           |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 18           |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 19           |                       | 13   |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 20           |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               | 55                                | 3150                | 175                       |                         |
| 21           |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 22           |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 23           |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 24           |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 25           |                       | 8    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 26           |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 27           |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               | 65                                | 3300                | 197                       |                         |
| 28           |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 29           |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 30           |                       |      |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| Avg.         |                       | 5.25 |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               | 57.75                             | 3150                | 183.11                    |                         |
| Max.         |                       | 13   |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               | 65                                | 3300                | 196.97                    |                         |
| Min.         |                       | 3    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               | 53                                | 3050                | 173.77                    |                         |
| Data         | 0                     | 8    | 0                  | 0 | 0 | 0                                         | 0                                   | 0                                   | 0                                   | 0                                      | 0                                      | 0                                             | 4                                 | 4                   | 4                         |                         |

Send completed forms by the 28th of the month to:  
Indiana Department of Environmental Management  
Office of Water Quality, Mail Code 65-42  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence  
Governor

January 26, 2015

Thomas W. Easterly  
Commissioner

Via Certified Mail No.: 91 7190 0005 2710 0037 7470

Scott Lods, President and Registered Agent  
American Suburban Utilities, Inc.  
Carriage Estates WWTP  
3350 W. 250 N  
West Lafayette, IN 47906

Dear Mr. Lods:

Re: Compliance and Emergency  
Response Plan Technical  
Review/Deficiency Notification  
American Suburban Utilities, Inc.  
Carriage Estates WWTP  
Case No. 2013-21924-W  
NPDES Permit No. IN0043273  
West Lafayette, Tippecanoe County

On December 17, 2014, the Indiana Department of Environmental Management (IDEM) received the Preventative Maintenance Schedule and Emergency Response Guide submitted by American Suburban Utilities, Inc. (ASU), as required by the Agreed Order adopted in the above-referenced case on September 22, 2014 (enclosed).

IDEM has completed the review of the **Preventative Maintenance Schedule** for Carriage Estates wastewater treatment plant (WWTP). It is hereby approved and incorporated into the Agreed Order and shall be deemed an enforceable part thereof. ASU should continue to implement the approved Preventative Maintenance Schedule, and ensure that all maintenance is documented in a permanent record that is kept onsite and will be made available for inspection by IDEM staff.

IDEM also reviewed the **Emergency Response Guide** (the ERG), and determined that it does not include the minimum information required by Order Paragraph 4 of the Agreed Order. Specifically, the following minimum information (in bold) must be included in order for IDEM to approve the ERG:

- A. **Identification of equipment at the WWTP and sanitary sewer collection system that's failure may result in the discharge of inadequately treated sewage and identification of materials and equipment for facilitating rapid response in the case of equipment failure.**



Compliance Status Letter: Case No. 2013-21924-W  
American Suburban Utilities, Inc.  
Carriage Estates WWTP  
NDPES No. IN0043273  
West Lafayette, Tippecanoe County  
Page 2

While the ERG (Section I: 1-A-1 through 1-A-6) lists equipment at the WWTP and in the sanitary sewer system, it does not address the impact of the equipment failure on the probability of discharging inadequately treated sewage as required in Paragraph 4A. In addition, although the ERG (Section 6, Vulnerability Assessment) includes an assessment for "Treatment", it does not discuss the specific equipment/processes involved in the treatment process whose failure may lead to a discharge of inadequately treated wastewater. Please identify all relevant equipment and/or processes at the WWTP whose failure would disrupt the ability of the WWTP to provide adequate treatment of wastewater and result in the discharge of inadequately treated wastewater. Moreover, the ERG must include any available materials, equipment, and purpose (or use) for facilitating a rapid response in the case of equipment and/or process failure.

**C. Procedures for expeditiously stopping, containing, and cleaning up spills, discharges of inadequately treated wastewater, and sanitary sewer overflows (SSOs) and other unauthorized releases pursuant to the regulations that are applicable to each type of unauthorized release. Employees who may cause, detect or respond to these releases must be trained in these procedures and have necessary response equipment available.**

While the ERG (Section 7 Response Actions for Specific Events) includes response actions for an SSO event, it does not include procedures for spills and/or discharges of wastewater from the WWTP and the sanitary sewer system that reach waters of the State. The response actions for an SSO event (Section 7 Part B) and Chemical Spill Event (Section 7 Part F) must include specific procedures to stop, contain, and clean up the SSO and/or chemical spill in the event the materials reach waters of the State. The ERG should also outline emergency response actions ASU will take in the event of equipment and/or alarm failure at the WWTP and/or sanitary sewer, in order to ensure that procedures are in place to adequately respond in the case that an emergency similar to the emergency event resulting in the discharge of inadequately treated wastewater from the WWTP into Indian Creek on August 26, 2013, occurs in the future.

In addition, some equipment listed in Section 7 is not included in Section 1, Part H: ASU Emergency Equipment. ASU should ensure that all equipment, including replacement parts and emergency equipment included in response actions is fully operational, available for use in the event of an emergency, and included in the list of Emergency Equipment (Section 1 Part H). If ASU intends to obtain any equipment listed in the response actions on an as-needed basis, the ERG should include procedures for how to procure the necessary equipment.

**D. Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies. These procedures should**



Compliance Status Letter, Case No. 2013-21924-W  
American Suburban Utilities, Inc.  
Carriage Estates WWTP  
NDPES No. IN0043273  
West Lafayette, Tippecanoe County  
Page 3

**include guidelines for providing all relevant information about the incident to emergency response and regulatory agencies. State or local requirements may necessitate reporting spills or discharges to local emergency response, public health, or drinking water supply agencies. Contact information must be in locations that are readily accessible and available.**

The ERG (Section 4: Emergency Notification) procedures should include the minimum information that ASU employees should provide to emergency response and/or regulatory agencies to provide an overall perspective of the potential emergency condition. The notification procedures should also include the emergency conditions that would require notification of State or local regulatory agencies, and which agencies should be contacted for each condition.

**E. Procedures for documenting how and where potential discharges of inadequately treated wastewater and SSOs could occur, and the potentially affected areas that would be impacted by such releases.**

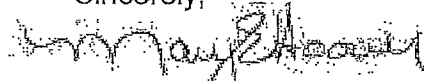
This information is not included in the ERG, and must be added.

**F. A procedure for documenting all significant pollutants and the extent of exposure that actually occurred at exposed areas and in the receiving waters.**

This information is not included in the ERG, and should be included with the response actions for any events, particularly those events which may result in unauthorized discharges reaching waters of the State.

Please submit a revised ERG that includes the above noted minimum information within 30 days of receipt of this correspondence. If you have any questions, please contact Amari Farren, Water Enforcement Case Manager, at (317) 232-8409. Thank you for your continued cooperation in this matter.

Sincerely,



Mary E. Hoover, Chief  
Water Enforcement Section  
Surface Water, Operations &  
Enforcement Branch  
Office of Water Quality

Enclosure

Compliance Status Letter: Case No. 2013-21924-W  
American Suburban Utilities, Inc.  
Carriage Estates WWTP  
NDPES No. IN0043273  
West Lafayette, Tippecanoe County  
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cc: Michael Scanlon, Barnes and Thornburg LLP  
<http://www.in.gov/idem>

## PERMITTEE NAME/ADDRESS

NAME CARRIAGE ESTATES WWTP  
ADDRESS AMERICAN SUBURBAN UTILITIES INC.  
3350 W 250 N  
WEST LAFAYETTE IN 47906NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)Form Approved  
OMB No. 2040-0064

Page 56 of 128

TEMPO A1 ID: 55359



For any questions call Julie Bye at 317-233-9610

\*\*\* Mark box if NO DISCHARGE ☐ \*\*\*

NOTE: Read Instructions before completing this form

|               |                   |                   |
|---------------|-------------------|-------------------|
| Revised:      | IN0043273         | 001 A             |
|               | PERMIT NUMBER     | PERMITTED FEATURE |
|               | MONITORING PERIOD |                   |
| MO DAY YEAR   | MO DAY YEAR       |                   |
| FROM 01/01/15 | TO 01/31/15       |                   |

| PARAMETER                                                                    |                    | QUANTITY OR LOADING |          |             | QUALITY OR CONCENTRATION |         |          |       | NO. EX | Frequency of Analysis | Sample Type |
|------------------------------------------------------------------------------|--------------------|---------------------|----------|-------------|--------------------------|---------|----------|-------|--------|-----------------------|-------------|
|                                                                              |                    | Average             | Maximum  | Units       | Minimum                  | Average | Maximum  | Units |        |                       |             |
| Oxygen, dissolved [DO]<br>00300 1 2 0<br>Effluent Gross                      | SAMPLE MEASUREMENT | *****               | *****    |             | 7.3                      | *****   | *****    | mg/L  | 0      | 5-7                   | Grab        |
|                                                                              | PERMIT REQUIREMENT |                     |          |             | 5                        |         |          |       |        | Five Per Week         | GRAB        |
|                                                                              |                    |                     |          |             | DLXAVMIN                 |         |          |       |        |                       |             |
| pH<br>00400 1 0 0<br>Effluent Gross                                          | SAMPLE MEASUREMENT | *****               | *****    |             | 7.4                      | *****   | 8.1      | SU    | 0      | 5-7                   | Grab        |
|                                                                              | PERMIT REQUIREMENT |                     |          |             | 6                        |         | 9        |       |        | Five Per Week         | GRAB        |
|                                                                              |                    |                     |          |             | DAILY MN                 |         | DAILY MX |       |        |                       |             |
| Solids, total suspended<br>00530 1 2 0<br>Effluent Gross                     | SAMPLE MEASUREMENT | 193.5               | 221.9    | lb/d        | *****                    | 11.7    | 12.4     | mg/L  | 0      | 5-7                   | Comp        |
|                                                                              | PERMIT REQUIREMENT | 375.5               | 563.3    |             |                          | 30      | 45       |       |        | Five Per Week         | COMP        |
|                                                                              |                    | MO AVG              | MX WK AV |             |                          | MO AVG  | MX WK AV |       |        |                       |             |
| Nitrogen, ammonia total<br>[as N]<br>00610 1 2 0<br>Effluent Gross           | SAMPLE MEASUREMENT | 5.6                 | 7.0      | lb/d        | *****                    | .33     | .42      | mg/L  | 0      | 5-7                   | Comp        |
|                                                                              | PERMIT REQUIREMENT | 23.8                | 36.3     |             |                          | 1.9     | 2.9      |       |        | Five Per Week         | COMP        |
|                                                                              |                    | MO AVG              | MX WK AV |             |                          | MO AVG  | MX WK AV |       |        |                       |             |
| Flow, in conduit or thru<br>treatment plant<br>50050 1 0 0<br>Effluent Gross | SAMPLE MEASUREMENT | 1.966               | *****    | MGD         | *****                    | *****   | *****    |       | 0      | 5-7                   | Cont        |
|                                                                              | PERMIT REQUIREMENT | Report              |          |             |                          |         |          |       |        | Five Per Week         | TOTALZ      |
|                                                                              |                    | MO AVG              |          |             |                          |         |          |       |        |                       |             |
| BOD, carbonaceous, 05<br>day, 20 C<br>80082 1 2 0<br>Effluent Gross          | SAMPLE MEASUREMENT | 113.8               | 150.2    | lb/d        | *****                    | 6.9     | 9.2      | mg/L  | 0      | 5-7                   | Comp        |
|                                                                              | PERMIT REQUIREMENT | 312.9               | 500.7    |             |                          | 25      | 40       |       |        | Five Per Week         | COMP        |
|                                                                              |                    | MO AVG              | MX WK AV |             |                          | MO AVG  | MX WK AV |       |        |                       |             |
| Flow, total<br>82220 1 0 0<br>Effluent Gross                                 | SAMPLE MEASUREMENT | *****               | 60.976   | Mgal/<br>mo | *****                    | *****   | *****    |       | 0      | 31-31                 | Cont        |
|                                                                              | PERMIT REQUIREMENT |                     | Report   |             |                          |         |          |       |        | Monthly               | RCOTOT      |
|                                                                              |                    |                     | MO TOTAL |             |                          |         |          |       |        |                       |             |

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR  
AUTHORIZED AGENT

TELEPHONE

DATE

FORWARD O. SIEGOWSKI  
TYPED OR PRINTEDSignature  
SIGNATURE317 796-5293  
AREA CODE AND NO.02  
MO26  
DAY15  
YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

FLOW METER(S) SHALL BE CALIBRATED AT LEAST ONCE ANNUALLY. SEMI PUBLIC TIPPECANOE COUNTY



**Monthly Report of Operation  
Sequencing Batch Reactor  
Wastewater Treatment Plant**

State Form 10829 (R/12-2009)  
Page 1 of 4

|                                                            |              |                              |                                  |
|------------------------------------------------------------|--------------|------------------------------|----------------------------------|
| Name of Facility<br>Carriage Estates WWTP                  |              | Permit Number<br>IN0043273   |                                  |
| Month<br>January                                           | Year<br>2015 | Plant Design Flow<br>1.5 mgd | Telephone Number<br>765/463-3856 |
| Facility's e-mail address (if available):<br>wwtp@city.org |              |                              |                                  |
| Certified Operator: Name<br>Dennis Crandall                |              | Class<br>IV                  | Certificate Number<br>15007      |
|                                                            |              | Expiration Date<br>6/30/2016 |                                  |

| Day Of Month | Day of Week | Man-Hours at Plant<br>(Plants less than 1 MGD only)                                              | Air Temperature (optional) | Total | Bypass At Plant Site<br>("X" If Occurred) | Collection System Overflow<br>("X" If Occurred) | CHEMICALS<br>USED      |                |            | RAW SEWAGE |                             |        |              |             |                     |                    |                   |                |  |  |
|--------------|-------------|--------------------------------------------------------------------------------------------------|----------------------------|-------|-------------------------------------------|-------------------------------------------------|------------------------|----------------|------------|------------|-----------------------------|--------|--------------|-------------|---------------------|--------------------|-------------------|----------------|--|--|
|              |             |                                                                                                  |                            | 1.4   |                                           |                                                 | Precipitation - Inches | Chlorine - Lbs | Lbs or Gal | Lbs or Gal | Influent Flow Rate<br>(MGD) | pH     | CBOD5 - mg/l | CBOD5 - lbs | Susp. Solids - mg/l | Susp. Solids - lbs | Phosphorus - mg/l | Ammonia - mg/l |  |  |
| 29           | Mon         | Fill In December's effluent data on page 3 as necessary for correct weekly average calculations. |                            |       |                                           |                                                 |                        |                | 1.824      |            |                             |        |              |             |                     |                    |                   |                |  |  |
| 30           | Tue         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.783      |            |                             |        |              |             |                     |                    |                   |                |  |  |
| 31           | Wed         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.893      |            |                             |        |              |             |                     |                    |                   |                |  |  |
| 1            | Thu         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.729      | 7.6        | 100                         | 1442   | 116          | 1672.7      |                     |                    | 14.7              |                |  |  |
| 2            | Fri         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.709      | 7.7        | 109                         | 1553.6 | 106          | 1510.8      |                     |                    | 15.8              |                |  |  |
| 3            | Sat         |                                                                                                  |                            | 0.5   |                                           |                                                 |                        |                | 1.643      |            |                             |        |              |             |                     |                    |                   |                |  |  |
| 4            | Sun         |                                                                                                  |                            | 0.6   |                                           |                                                 |                        |                | 2.444      |            |                             |        |              |             |                     |                    |                   |                |  |  |
| 5            | Mon         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 2.294      | 7.8        | 115                         | 2200.2 | 108          | 2066.3      |                     |                    | 14                |                |  |  |
| 6            | Tue         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 2.013      | 7.7        | 151                         | 2535.1 | 98           | 1645.3      |                     |                    | 16.4              |                |  |  |
| 7            | Wed         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.929      | 7.8        | 117                         | 1882.3 | 112          | 1801.8      |                     |                    | 15.2              |                |  |  |
| 8            | Thu         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.914      | 7.8        | 115                         | 1835.7 | 102          | 1628.2      |                     |                    | 20.8              |                |  |  |
| 9            | Fri         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 2.118      | 7.9        | 112                         | 1978.4 | 126          | 2225.7      |                     |                    | 16.4              |                |  |  |
| 10           | Sat         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.98       |            |                             |        |              |             |                     |                    |                   |                |  |  |
| 11           | Sun         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.95       |            |                             |        |              |             |                     |                    |                   |                |  |  |
| 12           | Mon         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 2.087      | 7.7        | 99                          | 1723.2 | 124          | 2158.3      |                     |                    | 15                |                |  |  |
| 13           | Tue         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 2.047      | 7.8        | 107                         | 1826.7 | 110          | 1877.9      |                     |                    | 25.8              |                |  |  |
| 14           | Wed         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.842      | 8.0        | 110                         | 1689.9 | 126          | 1935.6      |                     |                    | 27.9              |                |  |  |
| 15           | Thu         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.925      | 7.7        | 104                         | 1669.7 | 114          | 1830.2      |                     |                    | 12                |                |  |  |
| 16           | Fri         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.874      | 7.9        | 111                         | 1734.8 | 128          | 2000.5      |                     |                    | 33.2              |                |  |  |
| 17           | Sat         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.652      |            |                             |        |              |             |                     |                    |                   |                |  |  |
| 18           | Sun         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 2.093      |            |                             |        |              |             |                     |                    |                   |                |  |  |
| 19           | Mon         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 2.165      | 7.8        | 84                          | 1516.7 | 138          | 2491.7      |                     |                    | 21                |                |  |  |
| 20           | Tue         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 2.094      | 7.9        | 107                         | 1868.6 | 122          | 2130.6      |                     |                    | 21.3              |                |  |  |
| 21           | Wed         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 2.106      | 7.8        | 98                          | 1721.3 | 116          | 2037.4      |                     |                    | 29.2              |                |  |  |
| 22           | Thu         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.991      | 7.8        | 117                         | 1942.8 | 110          | 1826.5      |                     |                    | 35.9              |                |  |  |
| 23           | Fri         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.914      | 7.9        | 219                         | 3495.8 | 106          | 1692.1      |                     |                    | 32.4              |                |  |  |
| 24           | Sat         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.852      |            |                             |        |              |             |                     |                    |                   |                |  |  |
| 25           | Sun         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.942      |            |                             |        |              |             |                     |                    |                   |                |  |  |
| 26           | Mon         |                                                                                                  |                            | 0.3   |                                           |                                                 |                        |                | 2.207      | 7.8        | 110                         | 2024.7 | 101          | 1859        |                     |                    | 34.5              |                |  |  |
| 27           | Tue         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 2.086      | 7.8        | 145                         | 2522.6 | 110          | 1913.7      |                     |                    | 24                |                |  |  |
| 28           | Wed         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.889      | 7.8        | 95                          | 1496.7 | 120          | 1890.5      |                     |                    | 24.9              |                |  |  |
| 29           | Thu         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.874      | 7.8        | 131                         | 2047.4 | 124          | 1938        |                     |                    | 21.6              |                |  |  |
| 30           | Fri         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.856      | 7.8        | 98                          | 1516.9 | 116          | 1795.6      |                     |                    | 25.5              |                |  |  |
| 31           | Sat         |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.757      |            |                             |        |              |             |                     |                    |                   |                |  |  |
| Average      |             |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.96697    |            | 116                         | 1919.3 | 115          | 1905.8      |                     |                    | 22.61             |                |  |  |
| Maximum      |             |                                                                                                  |                            | 0.6   |                                           |                                                 |                        |                | 2.444      | 8.0        | 219                         | 3495.8 | 138          | 2491.7      |                     |                    | 35.9              |                |  |  |
| Minimum      |             |                                                                                                  |                            |       |                                           |                                                 |                        |                | 1.643      | 7.6        | 84                          | 1442   | 98           | 1510.8      |                     |                    | 12                |                |  |  |
| No. of Data  |             |                                                                                                  |                            | 3     | 0                                         | 0                                               | 0                      | 0              | 0          | 31         | 22                          | 22     | 22           | 22          | 22                  | 0                  | 22                |                |  |  |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

*Dennis Crandall* 2-4-15  
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)

*Robert M. Asch* 2-26-15  
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Monthly Report of Operation  
Sequencing Batch Reactor  
Wastewater Treatment Plant

Name of Facility: Carriage Estates WWTP  
Permit Number: IN0043273  
For Month Of: January  
Year: 2015

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*Don: [Signature]* 2-4-15  
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)  
*Edward J. Smith* 2-16-15  
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

| Day Of Month | Temperature in Reactors | REACTOR # 1                       |                     |                           |                         | REACTOR # 2                       |                     |                           |                         | REACTOR # 3                       |                     |                           |                         | FINAL EFFLUENT                   |                           |                         |     |                         |                   |
|--------------|-------------------------|-----------------------------------|---------------------|---------------------------|-------------------------|-----------------------------------|---------------------|---------------------------|-------------------------|-----------------------------------|---------------------|---------------------------|-------------------------|----------------------------------|---------------------------|-------------------------|-----|-------------------------|-------------------|
|              |                         | Settleable Solids % in 30 minutes | Susp. Solids - mg/l | Sludge Vol. Index - ml/gm | Dissolved Oxygen - mg/l | Settleable Solids % in 30 minutes | Susp. Solids - mg/l | Sludge Vol. Index - ml/gm | Dissolved Oxygen - mg/l | Settleable Solids % in 30 minutes | Susp. Solids - mg/l | Sludge Vol. Index - ml/gm | Dissolved Oxygen - mg/l | Residual Chlorine - Contact Tank | Residual Chlorine - Final | E. Coli - colony/100 ml | pH  | Dissolved Oxygen - mg/l | Phosphorus - mg/l |
| 1            |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.7 | 9.4                     |                   |
| 2            |                         | 43                                | 2650                | 162                       |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 8.0 | 8.8                     |                   |
| 3            |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                   |
| 4            |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                   |
| 5            |                         | 41                                | 2650                | 155                       |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 8.0 | 8.5                     |                   |
| 6            |                         |                                   |                     |                           |                         | 44                                | 2900                | 152                       |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.7 | 9.2                     |                   |
| 7            |                         |                                   |                     |                           |                         |                                   |                     |                           |                         | 50                                | 3050                | 164                       |                         |                                  |                           |                         | 7.8 | 8.7                     |                   |
| 8            |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.8 | 8.5                     |                   |
| 9            |                         | 40                                | 2650                | 151                       |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 8.1 | 9.4                     |                   |
| 10           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                   |
| 11           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                   |
| 12           |                         | 42                                | 2600                | 162                       |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.9 | 8.8                     |                   |
| 13           |                         |                                   |                     |                           |                         | 45                                | 2700                | 167                       |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.5 | 7.6                     |                   |
| 14           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         | 51                                | 2800                | 182                       |                         |                                  |                           |                         | 7.5 | 8.5                     |                   |
| 15           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.4 | 7.6                     |                   |
| 16           |                         | 42                                | 2500                | 168                       |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.9 | 8.8                     |                   |
| 17           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                   |
| 18           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                   |
| 19           |                         | 41                                | 3200                | 128                       |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.5 | 9.4                     |                   |
| 20           |                         |                                   |                     |                           |                         | 43                                | 3250                | 132                       |                         |                                   |                     |                           |                         |                                  |                           |                         | 8.0 | 8.6                     |                   |
| 21           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         | 50                                | 3350                | 149                       |                         |                                  |                           |                         | 7.6 | 8.3                     |                   |
| 22           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.5 | 7.3                     |                   |
| 23           |                         | 39                                | 3050                | 128                       |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.8 | 9.3                     |                   |
| 24           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                   |
| 25           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                   |
| 26           |                         | 37                                | 3250                | 114                       |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.6 | 8                       |                   |
| 27           |                         |                                   |                     |                           |                         | 42                                | 3200                | 131                       |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.8 | 7.7                     |                   |
| 28           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         | 45                                | 3400                | 132                       |                         |                                  |                           |                         | 7.7 | 7.4                     |                   |
| 29           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.8 | 7.6                     |                   |
| 30           |                         | 38                                | 3200                | 119                       |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         | 7.7 | 8                       |                   |
| 31           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                   |                     |                           |                         |                                  |                           |                         |     |                         |                   |
| Avg.         |                         | 40                                | 2861                | 143                       |                         | 44                                | 3013                | 145                       |                         | 49                                | 3150                | 157                       |                         |                                  |                           |                         |     | 8.427                   |                   |
| Max.         |                         | 43                                | 3250                | 168                       |                         | 45                                | 3250                | 167                       |                         | 51                                | 3400                | 182                       |                         |                                  |                           |                         | 8.1 | 9.4                     |                   |
| Min.         |                         | 37                                | 2500                | 114                       |                         | 42                                | 2700                | 131                       |                         | 45                                | 2800                | 132                       |                         |                                  |                           |                         | 7.4 | 7.3                     |                   |
| Data         | 0                       | 9                                 | 9                   | 8                         | 0                       | 4                                 | 4                   | 4                         | 0                       | 4                                 | 4                   | 4                         | 0                       | 0                                | 0                         | 0                       | 22  | 22                      | 0                 |

Comments for the Month (major repairs, breakdowns, process upsets and their causes, Inplant treatment process bypass, etc.):

Monthly Report of Operation  
Sequencing Batch Reactor  
Wastewater Treatment Plant

Name of Facility: Carriage Estates WWTP  
Permit Number: IN0043273  
For Month Of: January  
Year: 2015  
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State Form 10829 (R/12-2005)

*D. Lindall*  
(SIGNATURE OF CERTIFIED OPERATOR)  
2-4-15  
(DATE)  
*Sherry Ann*  
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)  
2-26-15  
(DATE)

| Day Of Month | FINAL EFFLUENT           |                              |              |                             |             |                                |                        |                                    |                    |                                       |                |                               |               |                                  |        |   |
|--------------|--------------------------|------------------------------|--------------|-----------------------------|-------------|--------------------------------|------------------------|------------------------------------|--------------------|---------------------------------------|----------------|-------------------------------|---------------|----------------------------------|--------|---|
|              | Flow                     |                              | BOD          |                             |             |                                | Total Suspended Solids |                                    |                    |                                       | Ammonia        |                               |               |                                  | Other  |   |
|              | Effluent Flow Rate (MGD) | Effluent Flow Weekly Average | CBOD5 - mg/l | CBOD5 - mg/l Weekly Average | CBOD5 - lbs | CBOD5 - lbs/day Weekly Average | Susp. Solids - mg/l    | Susp. Solids - mg/l Weekly Average | Susp. Solids - lbs | Susp. Solids - lbs/day Weekly Average | Ammonia - mg/l | Ammonia - mg/l Weekly Average | Ammonia - lbs | Ammonia - lbs/day Weekly Average |        |   |
| 29           | 1.824                    |                              | 6            |                             | 81.32766    |                                | 7                      |                                    | 108.54896          |                                       | 0.29           |                               | 4.4141712     |                                  |        |   |
| 30           | 1.783                    |                              | 4            |                             | 58.51654    |                                | 15                     |                                    | 222.18708          |                                       | 0.53           |                               | 7.8859418     |                                  |        |   |
| 31           | 1.895                    |                              | 7            |                             | 110.89543   |                                | 10                     |                                    | 158.13775          |                                       | 0.37           |                               | 5.6510988     |                                  |        |   |
| 1            | 1.729                    |                              | 6            |                             | 86.671      |                                | 11                     |                                    | 158.71             |                                       | 0.36           |                               | 5.1943        |                                  |        |   |
| 2            | 1.708                    |                              | 7            |                             | 99.831      |                                | 9                      |                                    | 128.35             |                                       | 0.35           |                               | 4.9916        |                                  |        |   |
| 3            | 1.643                    |                              |              |                             |             |                                |                        |                                    |                    |                                       |                |                               |               |                                  |        |   |
| 4            | 2.444                    |                              |              |                             |             |                                |                        |                                    |                    |                                       |                |                               |               |                                  |        |   |
| 5            | 2.294                    |                              | 7            |                             | 134         |                                | 8                      |                                    | 159.15             |                                       | 0.29           |                               | 5.5516        |                                  |        |   |
| 6            | 2.013                    |                              | 7            |                             | 117.59      |                                | 12                     |                                    | 201.58             |                                       | 0.21           |                               | 3.5277        |                                  |        |   |
| 7            | 1.929                    |                              | 9            |                             | 144.88      |                                | 9                      |                                    | 144.88             |                                       | 0.13           |                               | 2.0927        |                                  |        |   |
| 8            | 1.914                    |                              | 11           |                             | 175.7       |                                | 13                     |                                    | 207.64             |                                       | 0.27           |                               | 4.3125        |                                  |        |   |
| 9            | 2.118                    |                              | 9            | 8.6                         | 159.07      | 146                            | 10                     | 10.4                               | 176.75             | 176                                   | 0.36           | 2.5                           | 6.3629        |                                  |        |   |
| 10           | 1.98                     | 2.09886                      |              |                             |             |                                |                        |                                    |                    |                                       |                |                               |               |                                  | 4.3695 |   |
| 11           | 1.95                     |                              |              |                             |             |                                |                        |                                    |                    |                                       |                |                               |               |                                  |        |   |
| 12           | 2.087                    |                              | 7            |                             | 121.81      |                                | 11                     |                                    | 191.58             |                                       | 0.15           |                               | 2.6124        |                                  |        |   |
| 13           | 2.047                    |                              | 5            |                             | 85.411      |                                | 16                     |                                    | 273.32             |                                       | 0.31           |                               | 5.2955        |                                  |        |   |
| 14           | 1.842                    |                              | 5            |                             | 76.857      |                                | 10                     |                                    | 153.71             |                                       | 0.36           |                               | 5.5337        |                                  |        |   |
| 15           | 1.925                    |                              | 5            |                             | 80.321      |                                | 13                     |                                    | 208.83             |                                       | 0.24           |                               | 3.8554        |                                  |        |   |
| 16           | 1.874                    |                              | 5            | 5.4                         | 78.193      | 89.5                           | 12                     | 12.4                               | 187.66             | 203                                   | 0.46           | 3.0                           | 7.1937        |                                  |        |   |
| 17           | 1.652                    | 1.911                        |              |                             |             |                                |                        |                                    |                    |                                       |                |                               |               |                                  | 4.8981 |   |
| 18           | 2.093                    |                              |              |                             |             |                                |                        |                                    |                    |                                       |                |                               |               |                                  |        |   |
| 19           | 2.165                    |                              | 4            |                             | 72.268      |                                | 12                     |                                    | 216.8              |                                       | 0.36           |                               | 6.5041        |                                  |        |   |
| 20           | 2.094                    |                              | 3            |                             | 52.423      |                                | 12                     |                                    | 209.69             |                                       | 0.26           |                               | 4.5434        |                                  |        |   |
| 21           | 2.106                    |                              | 5            |                             | 87.873      |                                | 10                     |                                    | 175.75             |                                       | 0.65           |                               | 11.423        |                                  |        |   |
| 22           | 1.991                    |                              | 5            |                             | 83.074      |                                | 11                     |                                    | 182.76             |                                       | 0.24           |                               | 3.9876        |                                  |        |   |
| 23           | 1.814                    |                              | 6            | 4.6                         | 85.834      | 78.3                           | 11                     | 11.2                               | 175.7              | 192                                   | 0.33           | 3.7                           | 5.2709        |                                  |        |   |
| 24           | 1.852                    | 2.03071                      |              |                             |             |                                |                        |                                    |                    |                                       |                |                               |               |                                  | 6.3459 |   |
| 25           | 1.942                    |                              |              |                             |             |                                |                        |                                    |                    |                                       |                |                               |               |                                  |        |   |
| 26           | 2.207                    |                              | 5            |                             | 92.087      |                                | 14                     |                                    | 257.84             |                                       | 0.34           |                               | 6.2619        |                                  |        |   |
| 27           | 2.086                    |                              | 10           |                             | 174.08      |                                | 13                     |                                    | 226.3              |                                       | 0.53           |                               | 9.2261        |                                  |        |   |
| 28           | 1.889                    |                              | 11           |                             | 173.4       |                                | 13                     |                                    | 204.93             |                                       | 0.43           |                               | 6.7784        |                                  |        |   |
| 29           | 1.874                    |                              | 11           |                             | 172.02      |                                | 15                     |                                    | 234.58             |                                       | 0.39           |                               | 6.099         |                                  |        |   |
| 30           | 1.856                    |                              | 8            |                             | 139.39      |                                | 12                     |                                    | 185.86             |                                       | 0.42           |                               | 6.5051        |                                  |        |   |
| 31           | 1.757                    | 1.94443                      |              | 9.2                         |             | 150.2                          |                        | 13.4                               |                    | 221.9                                 |                | 0.422                         |               | 6.9741                           |        |   |
| Avg          | 1.96697                  |                              | 6.9091       |                             | 113.76      |                                | 11.682                 |                                    | 193.47             |                                       | 0.3382         |                               | 5.5965        |                                  |        |   |
| Max          | 2.444                    | 2.09886                      | 11           | 9.2                         | 175.7       | 150.2                          | 16                     | 13.4                               | 273.32             | 221.9                                 | 0.65           | 0.422                         | 11.423        | 6.9741                           |        |   |
| Min          | 1.643                    | 1.911                        | 3            | 9.2                         | 52.423      | 150.2                          | 8                      | 13.4                               | 128.35             | 221.9                                 | 0.13           | 0.422                         | 2.0927        | 4.3695                           |        |   |
| Data         | 31                       | 4                            | 22           | 1                           | 22          | 1                              | 22                     | 1                                  | 22                 | 1                                     | 22             | 1                             | 22            | 4                                | 0      | 0 |

| MONTHLY REMOVAL SUMMARY |      |      |         |            | Total Monthly Flow:<br>(million gallons) |
|-------------------------|------|------|---------|------------|------------------------------------------|
|                         | BOD5 | S.S. | Ammonia | Phosphorus | 60.976                                   |
| Percent Removal         | 94   | 90   | 99      | NA         |                                          |
|                         |      |      |         |            | Percent Capacity<br>(actual flow/design) |
|                         |      |      |         |            | 131%                                     |

Monthly Report of Operation  
Sequencing Batch Reactor  
Wastewater Treatment Plant

Name of Facility: Cabbage Estates WWTP  
Permit Number: IN0043273  
For Month Of: January  
Year: 2015  
Page 4 of 4  
State Form 10B29 (R/12-2005)

*Don Kendall* 2-4-15  
(SIGNATURE OF CERTIFIED OPERATOR) (Date)  
*Edward J. Smith* 2-26-15  
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (Date)

| Day Of Month | SLUDGE TO DIGESTER    |    | DIGESTER OPERATION |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               | REACTOR #4                        |                     |                           |                         |
|--------------|-----------------------|----|--------------------|---|---|-------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------------------|-----------------------------------|---------------------|---------------------------|-------------------------|
|              | Waste Act. Sludge HRS |    | Anaerobic Only     |   |   | Supernatant Withdrawn hrs. or Gal. x 1000 | Supernatant BOD5 mg/l or NH3-N mg/l | Total Solids in Incoming Sludge - % | Total Solids in Digested Sludge - % | Volatile Solids in Incoming Sludge - % | Volatile Solids in Digested Sludge - % | Digested Sludge Withdrawn hrs. or Gal. x 1000 | Settleable Solids % in 30 minutes | Susp. Solids - mg/l | Sludge Vol. Index - ml/gm | Dissolved Oxygen - mg/l |
| 1            | 6                     |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               | 50                                | 2900                | 172                       |                         |
| 2            | 5                     |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 3            |                       |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 4            |                       |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 5            | 8                     |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 6            |                       |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 7            |                       |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 8            |                       |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               | 42                                | 2800                | 150                       |                         |
| 9            |                       |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 10           | 4                     |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 11           | 6                     |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 12           | 2                     |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 13           | 5.5                   |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 14           | 1                     |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 15           | 10                    |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               | 39                                | 2650                | 147                       |                         |
| 16           | 10                    |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 17           |                       |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 18           |                       |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 19           |                       |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 20           |                       |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 21           | 8                     |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 22           | 6                     |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               | 40                                | 3100                | 128                       |                         |
| 23           | 3                     |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 24           |                       |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 25           |                       |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 26           |                       |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 27           | 7.5                   |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 28           | 4                     |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 29           | 8                     |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               | 40                                | 3250                | 123                       |                         |
| 30           |                       |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| 31           |                       |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               |                                   |                     |                           |                         |
| Avg.         | 5.875                 |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               | 42.2                              | 2940                | 144.34                    |                         |
| Max.         | 10                    |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               | 50                                | 3250                | 172.41                    |                         |
| Min.         | 1                     |    |                    |   |   |                                           |                                     |                                     |                                     |                                        |                                        |                                               | 39                                | 2650                | 123.08                    |                         |
| Data         | 0                     | 16 | 0                  | 0 | 0 | 0                                         | 0                                   | 0                                   | 0                                   | 0                                      | 0                                      | 0                                             | 5                                 | 5                   | 5                         | 0                       |

Send completed forms by the 28th of the month to:  
Indiana Department of Environmental Management  
Office of Water Quality, Mail Code 65-42  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

Carriage Estates II W.W.T.P.  
West Lafayette, Indiana  
American Suburban Utilities, Inc.  
NPDES Permit #IN0043273

The CSBR Tanks main air line had a gasket failure in a flange connection which resulted in a reduced amount of air to the tanks for a period of time. This resulted in an ammonia-nitrogen effluent limit of 10.4 mg/l on January 17, 2015 which caused a weekly average ammonia nitrogen limit of 38.554 lbs/day for the week ending January 20, 2015. The maximum weekly effluent ammonia nitrogen limit is 36.3 lbs/day.

The air main was immediately repaired and the following day the effluent ammonia nitrogen was 0.64 mg/l and the process was back to normal.





INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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100 N. Senate Avenue • Indianapolis, IN 46204  
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence  
Governor

Thomas W. Easterly  
Commissioner

April 24, 2015

Via Email to: asu-inc@hotmail.com

Mr. Scot Lods, Owner  
American Suburban Utilities  
3350 W 250 N  
West Lafayette, Indiana 47906

Dear Mr. Lods:

**Re: Inspection Summary/ Violation Letter**

American Suburban Utilities  
NPDES Permit No. IN0043273  
West Lafayette, Tippecanoe County

An inspection of the above-referenced facility or location was conducted by a representative of the Indiana Department of Environmental Management, Office of Water Quality, pursuant to IC 13-18-3-9. A summary of the inspection is provided below:

Date(s) of Inspection: April 14, 2015  
Type of Inspection: Complaint Investigation  
Inspection Results: Violations were observed.

1. Maintenance was rated as unsatisfactory due to the facility having a root ball in the collection system. This is a violation of Part II. B. 1 of the permit which states, in part, that all waste collection, control, treatment, and disposal facilities shall be operated as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants, with adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to ensure compliance with the conditions of this permit. The original complaint was made in 2012. The facility stated they have been chemically treating the root ball. Over two years was more than adequate time to address the issue and attempt chemical treatment. The root ball needs to be manually removed from the collection system within 30 days.
2. Records/Reports was rated as marginal due to not reporting overflows. Due to the fact that there are conflicting accounts of who is at fault, the facility did not report these overflows. Inspector requests that all overflows that are potentially the facility's responsibility be reported to IDEM.

(Over)

Within 30 days of receipt of this letter, a written detailed response documenting correction of each of the concerns listed above and/or a plan for assuring future compliance must be submitted to this office. Failure to respond adequately to this letter may result in formal enforcement action. Please direct your response to this letter to the attention of Bridget S. Murphy, at our letterhead address or via email to [wwViolationResponse@idem.IN.gov](mailto:wwViolationResponse@idem.IN.gov). Any questions should be directed to Kim Rohr at 317-719-1666 or by email to [krohr@idem.IN.gov](mailto:krohr@idem.IN.gov). Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink that reads "Bridget S. Murphy". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Bridget S. Murphy, Inspections Section Chief  
Compliance Branch  
Office of Water Quality

Enclosure



# NPDES Wastewater Facility Inspection Report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

|                                                                                                                                   |  |                                   |              |                                        |                             |                                      |  |
|-----------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------|--------------|----------------------------------------|-----------------------------|--------------------------------------|--|
| NPDES Permit Number:<br><b>IN0043273</b>                                                                                          |  | Facility Type:<br>Mixed Ownership |              | Facility Classification:<br>Major      |                             | TEMPO AI ID<br>55359                 |  |
| Date(s) of Inspection: April 14, 2015                                                                                             |  |                                   |              |                                        |                             |                                      |  |
| Type of Inspection: Complaint Investigation                                                                                       |  |                                   |              |                                        |                             |                                      |  |
| Name and Location of Facility Inspected:<br><b>American Suburban Utilities</b><br>4100 Bridgeway Drive<br>West Lafayette IN 47906 |  |                                   |              | Receiving Waters:<br>Indian Creek      |                             | Permit Expiration Date:<br>1/31/2016 |  |
| County: Tippecanoe                                                                                                                |  |                                   |              |                                        |                             | Design Flow:<br>1.5MGD               |  |
| On Site Representative(s):                                                                                                        |  |                                   |              |                                        |                             |                                      |  |
| First Name<br>Ed                                                                                                                  |  | Last Name<br>Serowka              |              | Title<br>Engineer                      |                             | Email<br>eserowka@earthlink.net      |  |
|                                                                                                                                   |  |                                   |              |                                        |                             | Phone<br>317-796-5273                |  |
| Was a verbal summary of findings presented to the on-site representative? Yes                                                     |  |                                   |              |                                        |                             |                                      |  |
| Certified Operator:<br>Dennis Crandall                                                                                            |  | Number:<br>15007                  | Class:<br>IV | Effective Date:<br>7-1-14              | Expiration Date:<br>6-30-16 | Email:<br>dc0866@yahoo.com           |  |
| Responsible Official:<br>Mr. Scot Lods, Owner<br>3350 W 250 N<br>West Lafayette, Indiana 47906                                    |  |                                   |              | Permittee: American Suburban Utilities |                             |                                      |  |
|                                                                                                                                   |  |                                   |              | Email: asu-inc@hotmail.com             |                             |                                      |  |
|                                                                                                                                   |  |                                   |              | Phone: 765-463-3856                    |                             | Contacted?                           |  |
|                                                                                                                                   |  |                                   |              | Fax:                                   |                             | No                                   |  |

## INSPECTION FINDINGS

- ☐ Conditions evaluated were found to be satisfactory at the time of the inspection. (5)  
☐ Violations were discovered but corrected during the inspection. (4)  
☐ Potential problems were discovered or observed. (3)  
☒ Violations were discovered and require a submittal from you and/or a follow-up inspection by IDEM. (2)  
☐ Violations were discovered and may subject you to an appropriate enforcement response. (1)

## AREAS EVALUATED DURING INSPECTION

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

|   |                          |   |               |   |                  |   |                            |
|---|--------------------------|---|---------------|---|------------------|---|----------------------------|
| N | Receiving Waters         | N | Facility/Site | N | Self-Monitoring  | N | Compliance Schedules       |
| N | Effluent Appearance      | N | Operation     | N | Flow Measurement | N | Pretreatment               |
| N | Permit                   | U | Maintenance   | N | Laboratory       | N | Effluent Limits Compliance |
| N | CSO/SSO (Sewer Overflow) | N | Sludge        | M | Records/Reports  | N | Other:                     |

## DETAILED AREA EVALUATIONS

Complainant stated that during heavy precipitation or snowmelt they are having sewage overflowing their sewer cap. American Suburban stated they believe it is the complainant's lateral. Located right down stream in the same yard as the cleanout there is a root ball in the collection system. The picture attached shows an overflow event. The amount of water and pressure in the picture would indicate it is from the main and not the lateral. Regardless if this incident is due to a lateral or a main issue, there is a clog (root ball) in the main. This clog (root ball) needs to be removed to provide efficient collection system operation. The complainant is installing back flow preventers in all his properties and does not want the next person upstream of the clog to have these issues in the future. The complainant's original complaint to American Suburban was on 12/20/12 with on going issues ever since.

### Maintenance:

#### Comments:

Maintenance was rated as **unsatisfactory** due to the facility having a root ball in the collection system. This is a violation of Part II. B. 1 of the permit which states, in part, that all waste collection, control, treatment, and disposal facilities shall be operated as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants, with adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to ensure compliance with the conditions of this permit. The original complaint was made in 2012. The facility stated they have been chemically treating the root ball. Over two years was more than adequate time to address the issue and attempt chemical treatment. The root ball needs to be manually removed from the collection system within 30 days.

**Records/Reports:**

The following records/reports were reviewed:

Comments:

Records/Reports was rated as **marginal** due to not reporting overflows. Due to the fact that there are conflicting accounts of who is at fault the facility did not report these overflows. Inspector requests that all overflows that are potentially the facility's responsibility be reported to IDEM.

**Effluent Limits Compliance:**

No 1. Were DMRs reviewed as part of the inspection?

Comments:

**IDEM REPRESENTATIVE**

Inspector Name:

Email:

Phone Number:

Kim Rohr

krohr@idem.IN.gov

317-719-1666

**IDEM MANAGER REVIEW**

IDEM Manager:

Date:

Bridget S. Murphy

4/23/2015

## Inspection Photographs



|                                                   |                  |
|---------------------------------------------------|------------------|
| Facility:<br><b>American Suburban Utilities</b>   |                  |
| Photographer:<br>Josh Burgett                     |                  |
| Date: 1/18/2015                                   | Time: 7:10:00 PM |
| Others Present:                                   |                  |
| Location/Description:<br>backyard of 3366 Woodmar |                  |



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Michael R. Pence  
*Governor*

Thomas W. Easterly  
*Commissioner*

May 12, 2015

Via Email to: [asu-inc@hotmail.com](mailto:asu-inc@hotmail.com)

Mr. Scot Lods, President  
American Suburban Utilities  
3350 W 250 N  
West Lafayette, Indiana 47906

Dear Mr. Lods:

Re: Inspection Summary Letter  
Carriage Estates Wastewater Plant  
NPDES Permit No. IN0043273  
West Lafayette, Tippecanoe County

An inspection of the above-referenced facility or location was conducted by a representative of the Indiana Department of Environmental Management, Office of Water Quality, pursuant to IC 13-18-3-9. A summary of the inspection is provided below:

Date(s) of Inspection: May 08, 2015  
Type of Inspection: Complaint Investigation  
Inspection Results: Conditions evaluated were found to be satisfactory at the time of the inspection.

A copy of the NPDES Wastewater Facility Inspection Report is enclosed for your records. Please direct any response to this letter and any questions to Kim Rohr at 317-719-1666 or by email to [vrohr@idem.IN.gov](mailto:vrohr@idem.IN.gov).

Sincerely,

Bridget S. Murphy, Inspections Section Chief  
Compliance Branch  
Office of Water Quality

Enclosure



# NPDES Wastewater Facility Inspection Report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                                   |               |                                   |                                        |                                 |                                   |                               |                                      |                            |                  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------|---------------|-----------------------------------|----------------------------------------|---------------------------------|-----------------------------------|-------------------------------|--------------------------------------|----------------------------|------------------|--|
| NPDES Permit Number:<br><b>IN0043273</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          | Facility Type:<br>Mixed Ownership |               | Facility Classification:<br>Major |                                        | Facility Classification:<br>III |                                   | TEMPO AI ID<br>55359          |                                      |                            |                  |  |
| Date(s) of Inspection: May 08, 2015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                                   |               |                                   |                                        |                                 |                                   |                               |                                      |                            |                  |  |
| Type of Inspection: Complaint Investigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |                                   |               |                                   |                                        |                                 |                                   |                               |                                      |                            |                  |  |
| Name and Location of Facility Inspected:<br><b>Carriage Estates Wastewater Plant</b><br>4100 Bridgeway Drive<br>West Lafayette IN 47906                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                                   |               |                                   | County:<br>Tippecanoe                  |                                 | Receiving Waters:<br>Indian Creek |                               | Permit Expiration Date:<br>1/31/2016 |                            |                  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                                   |               |                                   |                                        |                                 | Design Flow:<br>1.5MGD            |                               |                                      |                            |                  |  |
| On Site Representative(s):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                                   |               |                                   |                                        |                                 |                                   |                               |                                      |                            |                  |  |
| First Name<br>Scot                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          | Last Name<br>Lods                 |               | Title<br>President                |                                        | Email<br>asu-inc@hotmail.com    |                                   | Phone<br>765-463-3856         |                                      |                            |                  |  |
| Was a verbal summary of findings presented to the on-site representative? <b>Yes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                                   |               |                                   |                                        |                                 |                                   |                               |                                      |                            |                  |  |
| Certified Operator:<br>Dennis Crandall                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          | Number:<br>15007                  |               | Class:<br>IV                      |                                        | Effective Date:<br>7-1-14       |                                   | Expiration Date:<br>6-30-16   |                                      | Email:<br>dc0866@yahoo.com |                  |  |
| Responsible Official:<br>Mr. Scot Lods, President<br>3350 W 250 N<br>West Lafayette, Indiana 47906                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                                   |               |                                   | Permittee: American Suburban Utilities |                                 | Email: asu-inc@hotmail.com        |                               | Phone: 765-463-3856                  |                            | Contacted?<br>No |  |
| <b>INSPECTION FINDINGS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                                   |               |                                   |                                        |                                 |                                   |                               |                                      |                            |                  |  |
| <input checked="" type="radio"/> Conditions evaluated were found to be satisfactory at the time of the inspection. (5)<br><input type="radio"/> Violations were discovered but corrected during the inspection. (4)<br><input type="radio"/> Potential problems were discovered or observed. (3)<br><input type="radio"/> Violations were discovered and require a submittal from you and/or a follow-up inspection by IDEM. (2)<br><input type="radio"/> Violations were discovered and may subject you to an appropriate enforcement response. (1) |                          |                                   |               |                                   |                                        |                                 |                                   |                               |                                      |                            |                  |  |
| <b>AREAS EVALUATED DURING INSPECTION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          |                                   |               |                                   |                                        |                                 |                                   |                               |                                      |                            |                  |  |
| (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                                   |               |                                   |                                        |                                 |                                   |                               |                                      |                            |                  |  |
| N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Receiving Waters         | N                                 | Facility/Site | N                                 | Self-Monitoring                        | N                               | Compliance Schedules              |                               |                                      |                            |                  |  |
| N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Effluent Appearance      | N                                 | Operation     | N                                 | Flow Measurement                       | N                               | Pretreatment                      |                               |                                      |                            |                  |  |
| N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Permit                   | N                                 | Maintenance   | N                                 | Laboratory                             | N                               | Effluent Limits Compliance        |                               |                                      |                            |                  |  |
| N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | CSO/SSO (Sewer Overflow) | N                                 | Sludge        | N                                 | Records/Reports                        | N                               | Other:                            |                               |                                      |                            |                  |  |
| <b>DETAILED AREA EVALUATIONS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                                   |               |                                   |                                        |                                 |                                   |                               |                                      |                            |                  |  |
| Citizen complained of loud noise from the blowers at the facility. Inspector visited the site. Excessive noise was not heard. Inspector spoke with Scot Lods, he is aware of noise concerns at the facility. Included in a planned construction upgrade of the facility is sound enclosures in the blower buildings. They are also considering upgrading to more efficient blowers. IDEM does not have any regulation/jurisdiction regarding noise.                                                                                                  |                          |                                   |               |                                   |                                        |                                 |                                   |                               |                                      |                            |                  |  |
| <b>Effluent Limits Compliance:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                                   |               |                                   |                                        |                                 |                                   |                               |                                      |                            |                  |  |
| No 1. Were DMRs reviewed as part of the inspection?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                          |                                   |               |                                   |                                        |                                 |                                   |                               |                                      |                            |                  |  |
| Comments:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                   |               |                                   |                                        |                                 |                                   |                               |                                      |                            |                  |  |
| <b>IDEM REPRESENTATIVE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                                   |               |                                   |                                        |                                 |                                   |                               |                                      |                            |                  |  |
| Inspector Name:<br>Kim Rohr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |                                   |               | Email:<br>krohr@idem.IN.gov       |                                        |                                 |                                   | Phone Number:<br>317-719-1666 |                                      |                            |                  |  |
| <b>IDEM MANAGER REVIEW</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                                   |               |                                   |                                        |                                 |                                   |                               |                                      |                            |                  |  |
| IDEM Manager:<br>Andy Schmidt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |                                   |               |                                   |                                        |                                 |                                   | Date:<br>5/11/2015            |                                      |                            |                  |  |

**BYPASS / OVERFLOW INCIDENT REPORT**State Form 48373 (R5 / 4-13)  
Indiana Department of Environmental Management  
Office of Water Quality☐ Follow-up to Bypass report  
previously sent on: \_\_\_\_\_

**INSTRUCTIONS:** Complete all parts of this form and fax it to the Office of Water Quality (OWQ) at (317) 232-8637 or 232-8406. Or email signed copies to [wwreports@idem.in.gov](mailto:wwreports@idem.in.gov). Submittal of this report will satisfy the Office of Water Quality (OWQ) telephone and written bypass / overflow reporting requirements of your NPDES permit. To speak with someone in OWQ, call (317) 232-8670.

To report a spill or if the release is resulting in a fish kill or other severe environmental damage, immediately report the release to the Emergency Response Section spill response line at: (317) 233-7745 or toll free within Indiana at (888) 233-7745.

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                          |                                                                                  |                                                                                                                                                                                                                                                                                                                                                                            |                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Facility Name: (Organization)                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Mailing Address: (reporting organization)                                                                                                                                                                                                | County:                                                                          | NPDES Permit #:                                                                                                                                                                                                                                                                                                                                                            | Permit Outfall                                                        |
| American Suburban Utilities, Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3350 W. 25 N., W. Lafayette, IN 47906                                                                                                                                                                                                    | Tippecanoe                                                                       | IN0043273                                                                                                                                                                                                                                                                                                                                                                  | 001                                                                   |
| Individual Making Report: (printed)                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Telephone Number:                                                                                                                                                                                                                        | Contact Email:                                                                   | Date/Time IDEM Notified:                                                                                                                                                                                                                                                                                                                                                   | <input type="checkbox"/> AM<br><input checked="" type="checkbox"/> PM |
| Edward J. Serowka, P.E.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 765-463-3856                                                                                                                                                                                                                             | asu-inc@gmail.com                                                                | 07/14/15 4:30                                                                                                                                                                                                                                                                                                                                                              |                                                                       |
| RELEASE INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                          |                                                                                  |                                                                                                                                                                                                                                                                                                                                                                            |                                                                       |
| Date (mm/dd/yy) & Time Release Began:                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Date (mm/dd/yy) & Time Release Stopped:                                                                                                                                                                                                  | Location of Release: (streets address or Manhole, Lift Station, Force Main etc.) | Latitude: (Deg Min Sec)                                                                                                                                                                                                                                                                                                                                                    | Longitude: (Deg Min Sec)                                              |
| 07/12/15 8:00<br><input checked="" type="checkbox"/> AM<br><input type="checkbox"/> PM                                                                                                                                                                                                                                                                                                                                                                                                           | 07/12/15 10:30<br><input checked="" type="checkbox"/> AM<br><input type="checkbox"/> PM                                                                                                                                                  | Manhole in Hadley Moore Subdivision                                              | 40 30' 43.7"                                                                                                                                                                                                                                                                                                                                                               | 86 57' 42.7"                                                          |
| Amount of Flow Released:<br>Check one: <input checked="" type="checkbox"/> Estimated <input type="checkbox"/> Actual                                                                                                                                                                                                                                                                                                                                                                             | (always provide a volume)<br>8,000 gallons                                                                                                                                                                                               | WWTP Flow During Release:<br>2.45 MGD                                            | WWTP Peak Design Flow:<br>3.75 MGD                                                                                                                                                                                                                                                                                                                                         |                                                                       |
| Overflow Type: (select one)<br><input checked="" type="checkbox"/> Sanitary Sewer Overflow<br><input type="checkbox"/> Treatment Bypass (at wastewater plant)                                                                                                                                                                                                                                                                                                                                    | Describe any damage to aquatic life or receiving stream:<br>No damage                                                                                                                                                                    |                                                                                  |                                                                                                                                                                                                                                                                                                                                                                            |                                                                       |
| Reason for Bypass/Overflow: (select one or more)<br><input type="checkbox"/> Construction Related <input type="checkbox"/> Power Failure <input type="checkbox"/> Equipment Failure <input type="checkbox"/> Unknown <input type="checkbox"/> Exceeded Max Capacity <input type="checkbox"/> Precipitation <input type="checkbox"/> Other: _____ Inches                                                                                                                                          |                                                                                                                                                                                                                                          |                                                                                  |                                                                                                                                                                                                                                                                                                                                                                            |                                                                       |
| System Component(s): (select one or more)<br><input checked="" type="checkbox"/> Manhole<br><input type="checkbox"/> House Lateral<br><input type="checkbox"/> Pipe Failure<br><input type="checkbox"/> Pump Station Failure<br><input type="checkbox"/> Treatment Bypassed<br><input type="checkbox"/> Other<br>Describe Other: (in the box below)                                                                                                                                              | Additional Description of the Bypass/Overflow Event:<br><br>Power was lost to the Kimberly Lift Station which serves the Hadley Moore Subdivision. Power was returned and lift station operated properly reducing sewage in sewer lines. |                                                                                  | Description of the Area Impacted: (Check All That Apply)<br><input checked="" type="checkbox"/> Affected Private Property<br><input type="checkbox"/> Basement Backup<br><input type="checkbox"/> Occurred at Treatment Plant<br><input type="checkbox"/> Reached Public Land<br><input type="checkbox"/> Reached Receiving Water<br><br>Name of Receiving Water Impacted: |                                                                       |
| Organizations Notified by Facility: (select one or more)<br><input type="checkbox"/> IDEM Emergency Response <input type="checkbox"/> Health Dept <input type="checkbox"/> DNR Fish & Wildlife <input type="checkbox"/> Local Emergency Management <input checked="" type="checkbox"/> Other: None                                                                                                                                                                                               |                                                                                                                                                                                                                                          |                                                                                  |                                                                                                                                                                                                                                                                                                                                                                            |                                                                       |
| Actions Taken to Prevent, Minimize, or Mitigate Damage Including Clean-up and Treatment of Affected Area:<br>(Select one or more of the following, then add a written description)<br><input type="checkbox"/> Removed Blockage <input type="checkbox"/> Repaired Pipe <input checked="" type="checkbox"/> Repaired Pump Station <input type="checkbox"/> Other<br><br>The area was inspected and no clean up was required due to the high volume of water due to infiltration which overflowed. |                                                                                                                                                                                                                                          |                                                                                  |                                                                                                                                                                                                                                                                                                                                                                            |                                                                       |
| Resolution: Actions Taken or Planned to Prevent Recurrence:<br><br>The Kimberly Lift Station will be removed as soon as the new Los Tres Grandes gravity sewer line is completed.                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                          |                                                                                  |                                                                                                                                                                                                                                                                                                                                                                            |                                                                       |

(ATTACH ADDITIONAL SHEETS IF NECESSARY.)

**CERTIFICATION AND SIGNATURE**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (The area below is for a handwritten signature or an electronic substitute then fax or scan to PDF for emailing.)

SIGNATURE: Edward J. Serowka  
Digitally signed by Edward J. Serowka  
DN: cn=Edward J. Serowka, email=edward.j.serowka@idem.in.gov, o=IDEM, ou=Indiana Department of Environmental Management, c=USDATE (month, day, year): 07/14/15



OUCC DR 5-26, Page 24 of 48

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[Close](#)

## By-Pass Overflow Incident Report

From: **Edward Serowka** (eserowka270@gmail.com)

Sent: Tue 7/14/15 4:49 PM

To: [wwwreports@idem.in.gov](mailto:wwwreports@idem.in.gov)

Cc: [ASU\(ASU-INC@hotmail.com\)](mailto:ASU(ASU-INC@hotmail.com))

1 attachment

48373 INCIDENT 07-12-15f.pdf (937.8 KB)

See attached Bypass Overflow Incident Report for 12-July-2015.

American Suburban Utilities, Inc.

--

Edward J. Serowka, P.E.

332 Persimmon Trail

Lafayette, Indiana 47909-6823

TEL: (317) 796-5273

**BYPASS / OVERFLOW INCIDENT REPORT**State Form 48373 (R5 / 4-13)  
Indiana Department of Environmental Management  
Office of Water Quality☐ Follow-up to Bypass report  
previously sent on: \_\_\_\_\_

**INSTRUCTIONS:** Complete all parts of this form and fax it to the Office of Water Quality (OWQ) at (317) 232-8637 or 232-8406. Or email signed copies to wwreports@idem.in.gov. Submittal of this report will satisfy the Office of Water Quality (OWQ) telephone and written bypass / overflow reporting requirements of your NPDES permit. To speak with someone in OWQ, call (317) 232-8670.

To report a spill or if the release is resulting in a fish kill or other severe environmental damage, immediately report the release to the Emergency Response Section spill response line at: (317) 233-7745 or toll free within Indiana at (888) 233-7745.

| GENERAL INFORMATION                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                              |                   |                                                                                                                                                                                                                                                                                                                |                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Facility Name: (Organization)                                                                                                                                                                                                                                                                          |  | Mailing Address: (reporting organization)                                                                                                                                                                                                                                                    |                   | County:                                                                                                                                                                                                                                                                                                        | NPDES Permit #:                                                       |
| Americcan Suburban Utilities, Inc.                                                                                                                                                                                                                                                                     |  | 3350 W. 25 N., W. Lafayette, IN 47906                                                                                                                                                                                                                                                        |                   | Tippecanoe                                                                                                                                                                                                                                                                                                     | IN0043273                                                             |
| Individual Making Report: (printed)                                                                                                                                                                                                                                                                    |  | Telephone Number:                                                                                                                                                                                                                                                                            | Contact Email:    | Date/Time IDEM Notified:                                                                                                                                                                                                                                                                                       | <input type="checkbox"/> AM<br><input checked="" type="checkbox"/> PM |
| Edward J. Serowka, P.E.                                                                                                                                                                                                                                                                                |  | 765-463-3856                                                                                                                                                                                                                                                                                 | asu-inc@gmail.com | 07/15/15 3:00                                                                                                                                                                                                                                                                                                  |                                                                       |
| RELEASE INFORMATION                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                              |                   |                                                                                                                                                                                                                                                                                                                |                                                                       |
| Date (mm/dd/yy) & Time Release Began:                                                                                                                                                                                                                                                                  |  | Date (mm/dd/yy) & Time Release Stopped:                                                                                                                                                                                                                                                      |                   | Location of Release: (streets address or Manhole, Lift Station, Force Main etc.)                                                                                                                                                                                                                               | Latitude: (Deg Min Sec) Longitude: (Deg Min Sec)                      |
| 07/15/15 9:00<br><input checked="" type="checkbox"/> AM<br><input type="checkbox"/> PM                                                                                                                                                                                                                 |  | 07/15/15 11:00<br><input checked="" type="checkbox"/> AM<br><input type="checkbox"/> PM                                                                                                                                                                                                      |                   | Manhole in Big Oaks Subdivision                                                                                                                                                                                                                                                                                | 40 30' 43.7" 86 57' 42.7"                                             |
| Amount of Flow Released:                                                                                                                                                                                                                                                                               |  | (always provide a volume)                                                                                                                                                                                                                                                                    |                   | WWTP Flow During Release:                                                                                                                                                                                                                                                                                      | WWTP Peak Design Flow:                                                |
| Check one: <input checked="" type="checkbox"/> Estimated <input type="checkbox"/> Actual                                                                                                                                                                                                               |  | 1,000 gallons                                                                                                                                                                                                                                                                                |                   | 2.50 MGD                                                                                                                                                                                                                                                                                                       | 3.75 MGD                                                              |
| Overflow Type: (select one)                                                                                                                                                                                                                                                                            |  | Describe any damage to aquatic life or receiving stream:                                                                                                                                                                                                                                     |                   |                                                                                                                                                                                                                                                                                                                |                                                                       |
| <input checked="" type="checkbox"/> Sanitary Sewer Overflow<br><input type="checkbox"/> Treatment Bypass (at wastewater plant)                                                                                                                                                                         |  | No damage                                                                                                                                                                                                                                                                                    |                   |                                                                                                                                                                                                                                                                                                                |                                                                       |
| Reason for Bypass/Overflow: (select one or more)                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                              |                   |                                                                                                                                                                                                                                                                                                                |                                                                       |
| <input type="checkbox"/> Construction Related <input type="checkbox"/> Power Failure <input type="checkbox"/> Equipment Failure <input type="checkbox"/> Unknown <input type="checkbox"/> Exceeded Max Capacity <input type="checkbox"/> Precipitation Inches                                          |  |                                                                                                                                                                                                                                                                                              |                   |                                                                                                                                                                                                                                                                                                                |                                                                       |
| System Component(s): (select one or more)                                                                                                                                                                                                                                                              |  | Additional Description of the Bypass/Overflow Event:                                                                                                                                                                                                                                         |                   | Description of the Area Impacted: (Check All That Apply)                                                                                                                                                                                                                                                       |                                                                       |
| <input checked="" type="checkbox"/> Manhole<br><input type="checkbox"/> House Lateral<br><input type="checkbox"/> Pipe Failure<br><input type="checkbox"/> Pump Station Failure<br><input type="checkbox"/> Treatment Bypassed<br><input type="checkbox"/> Other<br>Describe Other: (in the box below) |  | Power was lost to the Big Oaks Lift Station which serves the Big Oaks Subdivision. Power was returned and lift station operated properly reducing sewage in sewer lines. The power outage also shut down the Kimberly Lift Station but it was restarted before any other manhole overflowed. |                   | <input checked="" type="checkbox"/> Affected Private Property<br><input type="checkbox"/> Basement Backup<br><input type="checkbox"/> Occurred at Treatment Plant<br><input type="checkbox"/> Reached Public Land<br><input type="checkbox"/> Reached Receiving Water<br><br>Name of Receiving Water Impacted: |                                                                       |
| Organizations Notified by Facility: (select one or more)                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                                                                                                              |                   |                                                                                                                                                                                                                                                                                                                |                                                                       |
| <input type="checkbox"/> IDEM Emergency Response <input type="checkbox"/> Health Dept <input type="checkbox"/> DNR Fish & Wildlife <input type="checkbox"/> Local Emergency Management <input checked="" type="checkbox"/> Other: None                                                                 |  |                                                                                                                                                                                                                                                                                              |                   |                                                                                                                                                                                                                                                                                                                |                                                                       |
| Actions Taken to Prevent, Minimize, or Mitigate Damage including Clean-up and Treatment of Affected Area:<br>(Select one or more of the following, then add a written description)                                                                                                                     |  |                                                                                                                                                                                                                                                                                              |                   |                                                                                                                                                                                                                                                                                                                |                                                                       |
| <input type="checkbox"/> Removed Blockage <input type="checkbox"/> Repaired Pipe <input checked="" type="checkbox"/> Repaired Pump Station <input type="checkbox"/> Other                                                                                                                              |  |                                                                                                                                                                                                                                                                                              |                   |                                                                                                                                                                                                                                                                                                                |                                                                       |
| The area was inspected and no clean up was required due to the high volume of water due to infiltration which overflowed.                                                                                                                                                                              |  |                                                                                                                                                                                                                                                                                              |                   |                                                                                                                                                                                                                                                                                                                |                                                                       |
| Resolution: Actions Taken or Planned to Prevent Recurrence:                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                              |                   |                                                                                                                                                                                                                                                                                                                |                                                                       |
| The Big Oaks Lift Station will be removed as soon as the new Los Tres Grandes gravity sewer line is completed.                                                                                                                                                                                         |  |                                                                                                                                                                                                                                                                                              |                   |                                                                                                                                                                                                                                                                                                                |                                                                       |

(ATTACH ADDITIONAL SHEETS IF NECESSARY.)

**CERTIFICATION AND SIGNATURE**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (The area below is for a handwritten signature or an electronic substitute then fax or scan to PDF for emailing.)

SIGNATURE: Edward J. Serowka  
Digitally signed by Edward J. Serowka  
DN: cn=Edward J. Serowka, o=Edward J. Serowka, PK, ou,  
email=eserowka@owq.idem.in.gov, c=US  
Date: 2015.07.15 15:23:45 -0500DATE (month, day, year): 07/15/15

OUCC DR 5-26, Page 26 of 48

Print

## **Bypass/Overflow Incidence Report**

From: American Suburban Utilities, Inc. (asu-inc@hotmail.com)

Sent: Wed 7/15/15 3:01 PM

To: wwreports@idem.in.gov (wwreports@idem.in.gov)

1 attachment

bypass overflow report 15-july-15.pdf (827.0 KB)

Please see attached report for 15-July-15

*American Suburban Utilities, Inc.*

3350 W 250 N

West Lafayette, IN 47906

Phone 765-463-3856

Fax 765-463-3855

**BYPASS / OVERFLOW INCIDENT REPORT**

State Form 48373 (R5 / 4-13)  
Indiana Department of Environmental Management  
Office of Water Quality

☐ Follow-up to Bypass report  
previously sent on: \_\_\_\_\_

**INSTRUCTIONS:** Complete all parts of this form and fax it to the Office of Water Quality (OWQ) at (317) 232-8637 or 232-8406. Or email signed copies to [wwreports@idem.in.gov](mailto:wwreports@idem.in.gov). Submittal of this report will satisfy the Office of Water Quality (OWQ) telephone and written bypass / overflow reporting requirements of your NPDES permit. To speak with someone in OWQ, call (317) 232-8670.

To report a spill or if the release is resulting in a fish kill or other severe environmental damage, immediately report the release to the Emergency Response Section spill response line at: (317) 233-7745 or toll free within Indiana at (888) 233-7745.

| GENERAL INFORMATION                                                                                                                                                                                                                                           |                                                                                                                                                                                                 |                                                                                  |                                                               |                                                                    |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------|--|
| Facility Name: (Organization)                                                                                                                                                                                                                                 | Mailing Address: (reporting organization)                                                                                                                                                       | County:                                                                          | NPDES Permit #:                                               | Permit Outfall                                                     |  |
| American Suburban Utilities, Inc.                                                                                                                                                                                                                             | 3350 W. 25 N., W. Lafayette, IN 47906                                                                                                                                                           | Tippecanoe                                                                       | IN0043273                                                     | 001                                                                |  |
| Individual Making Report: (printed)                                                                                                                                                                                                                           | Telephone Number:                                                                                                                                                                               | Contact Email:                                                                   | Date/Time IDEM Notified:                                      | <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM |  |
| Edward J. Serowka, P.E.                                                                                                                                                                                                                                       | 765-463-3856                                                                                                                                                                                    | asu-inc@gmail.com                                                                | 07/16/15 3:00                                                 |                                                                    |  |
| RELEASE INFORMATION                                                                                                                                                                                                                                           |                                                                                                                                                                                                 |                                                                                  |                                                               |                                                                    |  |
| Date (mm/dd/yy) & Time Release Began:                                                                                                                                                                                                                         | Date (mm/dd/yy) & Time Release Stopped:                                                                                                                                                         | Location of Release: (streets address or Manhole, Lift Station, Force Main etc.) | Latitude: (Deg Min Sec)                                       | Longitude: (Deg Min Sec)                                           |  |
| 07/15/15 3:15 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM                                                                                                                                                                              | 07/15/15 4:30 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM                                                                                                                | Manhole in Hadley Moore Subdivision                                              | 40 30' 43.7"                                                  | 86 57' 42.7"                                                       |  |
| Amount of Flow Released: (always provide a volume)                                                                                                                                                                                                            |                                                                                                                                                                                                 | WWTP Flow During Release:                                                        | WWTP Peak Design Flow:                                        |                                                                    |  |
| Check one: <input checked="" type="checkbox"/> Estimated <input type="checkbox"/> Actual 200 gallons                                                                                                                                                          |                                                                                                                                                                                                 | 2.50 MGD                                                                         | 3.75 MGD                                                      |                                                                    |  |
| Overflow Type: (select one)                                                                                                                                                                                                                                   |                                                                                                                                                                                                 | Describe any damage to aquatic life or receiving stream:                         |                                                               |                                                                    |  |
| <input checked="" type="checkbox"/> Sanitary Sewer Overflow                                                                                                                                                                                                   |                                                                                                                                                                                                 | No damage                                                                        |                                                               |                                                                    |  |
| <input type="checkbox"/> Treatment Bypass (at wastewater plant)                                                                                                                                                                                               |                                                                                                                                                                                                 |                                                                                  |                                                               |                                                                    |  |
| Reason for Bypass/Overflow: (select one or more)                                                                                                                                                                                                              |                                                                                                                                                                                                 |                                                                                  |                                                               |                                                                    |  |
| <input type="checkbox"/> Construction Related <input type="checkbox"/> Power Failure <input type="checkbox"/> Equipment Failure <input type="checkbox"/> Unknown <input type="checkbox"/> Exceeded Max Capacity <input type="checkbox"/> Precipitation Inches |                                                                                                                                                                                                 |                                                                                  |                                                               |                                                                    |  |
| System Component(s): (select one or more)                                                                                                                                                                                                                     | Additional Description of the Bypass/Overflow Event:                                                                                                                                            |                                                                                  | Description of the Area Impacted: (Check All That Apply)      |                                                                    |  |
| <input checked="" type="checkbox"/> Manhole                                                                                                                                                                                                                   | Power was again lost to the Big Oaks and Kimberly Lift Stations which serve the Hadley Moore Subdivision. Power was returned and lift station operated properly reducing sewage in sewer lines. |                                                                                  | <input checked="" type="checkbox"/> Affected Private Property |                                                                    |  |
| <input type="checkbox"/> House Lateral                                                                                                                                                                                                                        |                                                                                                                                                                                                 |                                                                                  | <input type="checkbox"/> Basement Backup                      |                                                                    |  |
| <input type="checkbox"/> Pipe Failure                                                                                                                                                                                                                         |                                                                                                                                                                                                 |                                                                                  | <input type="checkbox"/> Occurred at Treatment Plant          |                                                                    |  |
| <input type="checkbox"/> Pump Station Failure                                                                                                                                                                                                                 |                                                                                                                                                                                                 |                                                                                  | <input type="checkbox"/> Reached Public Land                  |                                                                    |  |
| <input type="checkbox"/> Treatment Bypassed                                                                                                                                                                                                                   |                                                                                                                                                                                                 |                                                                                  | <input type="checkbox"/> Reached Receiving Water              |                                                                    |  |
| <input type="checkbox"/> Other                                                                                                                                                                                                                                |                                                                                                                                                                                                 |                                                                                  | Name of Receiving Water Impacted:                             |                                                                    |  |
| Describe Other: (in the box below)                                                                                                                                                                                                                            |                                                                                                                                                                                                 |                                                                                  |                                                               |                                                                    |  |
| Organizations Notified by Facility: (select one or more)                                                                                                                                                                                                      |                                                                                                                                                                                                 |                                                                                  |                                                               |                                                                    |  |
| <input type="checkbox"/> IDEM Emergency Response <input type="checkbox"/> Health Dept <input type="checkbox"/> DNR Fish & Wildlife <input type="checkbox"/> Local Emergency Management <input checked="" type="checkbox"/> Other: None                        |                                                                                                                                                                                                 |                                                                                  |                                                               |                                                                    |  |
| Actions Taken to Prevent, Minimize, or Mitigate Damage including Clean-up and Treatment of Affected Area: (Select one or more of the following, then add a written description)                                                                               |                                                                                                                                                                                                 |                                                                                  |                                                               |                                                                    |  |
| <input type="checkbox"/> Removed Blockage <input type="checkbox"/> Repaired Pipe <input checked="" type="checkbox"/> Repaired Pump Station <input type="checkbox"/> Other                                                                                     |                                                                                                                                                                                                 |                                                                                  |                                                               |                                                                    |  |
| The area was inspected and no clean up was required due to the high volume of water due to infiltration which overflowed.                                                                                                                                     |                                                                                                                                                                                                 |                                                                                  |                                                               |                                                                    |  |
| Resolution: Actions Taken or Planned to Prevent Recurrence:                                                                                                                                                                                                   |                                                                                                                                                                                                 |                                                                                  |                                                               |                                                                    |  |
| The Big Oaks Lift Station and Kimberly Lift Station will be removed as soon as the new Los Tres Grandes gravity sewer line is completed.                                                                                                                      |                                                                                                                                                                                                 |                                                                                  |                                                               |                                                                    |  |

(ATTACH ADDITIONAL SHEETS IF NECESSARY.)

**CERTIFICATION AND SIGNATURE**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (The area below is for a handwritten signature or an electronic substitute then fax or scan to PDF for emailing.)

SIGNATURE: Edward J. Serowka  
Digitally signed by Edward J. Serowka  
DN: cn=Edward J. Serowka, o=Indiana Department of Environmental Management, ou=Office of Water Quality, email=eserowka@idem.in.gov, c=US

DATE (month, day, year): 07/16/15

Print

## Incident Reports from 07-15-15

From: Edward Serowka (eserowka270@gmail.com)

Sent: Thu 7/16/15 4:24 PM

To: IDEM Reports (wwreports@idem.in.gov)

Cc: ASU (ASU-INC@hotmail.com)

2 attachments

48373 INCIDENT 07-15-15F.pdf (938.0 KB) , 48373 Kimberly INCIDENT 07-15-15f.pdf  
(937.8 KB)

American Suburban Utilities, Inc.

--  
Edward J. Serowka, P.E.  
332 Persimmon Trail  
Lafayette, Indiana 47909-6823  
TEL: (317) 796-5273



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

Mitchell E. Daniels Jr.  
Governor

Thomas W. Easterly  
Commissioner

August 19, 2011

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

VIA CERTIFIED MAIL 91 7190 0005 2710 0016 0478

Mr. Scott Lods, President  
American Suburban Utilities  
3350 W 250 N  
West Lafayette, Indiana 47906

Re: **Inspection Summary/Violation Letter**  
American Suburban Utilities (County Home) Wastewater  
Treatment Facility  
NPDES Permit No. IN0038334  
West Lafayette, Tippecanoe County

Dear Mr. Lods:

On July 25, 2011, a representative of the Indiana Department of Environmental Management, Office of Water Quality, conducted an inspection of the American Suburban Utilities (County Home) Wastewater Treatment Facility, located in West Lafayette, Indiana. This inspection was conducted pursuant to IC 13-14-2-2. For your information, and in accordance with IC 13-14-5, a summary of the inspection is provided below:

Type of Inspection: Compliance Evaluation Inspection

Results of Inspection: ☐ Violations were observed but corrected during the inspection.  
☒ Violations were observed.  
☐ Violations were observed and will be referred to the Enforcement Section.

The following specific items were noted:

Sludge disposal was rated as marginal. Facility needs to improve sludge removal records.

Maintenance was rated as unsatisfactory due to inadequate maintenance of the collection system. The facility needs to continually investigate sources of inflow and infiltration (I/I), document known sources and repair if feasible. This is a violation of Part II, B. 1 of the permit which states, in part, that all waste collection, control, treatment, and disposal facilities shall be operated and maintained as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants. Wet weather this spring was the apparent cause of effluent limit violations, indicating inadequate maintenance of the collection system.

The Self Monitoring Program was rated as unsatisfactory. At the time of the inspection it was determined the final sample log was inadequate. This is a violation of Part I, B. 6 of the NPDES permit which states, in part, that the permittee shall record specific information as described, for each measurement or sample taken pursuant to the requirements of this permit. These requirements include:

- the date, exact place and time of sampling or measurements;
- the person who performed the sampling or measurements;
- the date(s) analyses were performed;

- d. the person(s) who performed the analyses;
- e. the analytical techniques or methods used; and
- f. the results of such measurements and analyses

The final sample logs for pH, DO, and chlorine were not available for my review for the current month. These logs were also not filed with the May 2011 report with other bench sheets.

The Laboratory evaluation generated an unsatisfactory rating. Part I. B. 5 of the permit states, in part, the analytical and sampling methods used shall conform to the current version of 40 CFR, Part 136, unless otherwise specified.

- a. At the time of the inspection it was determined the laboratory scales did not have a current (annual) calibration.
- b. At the time of the inspection it was determined there was no Quality Control/Quality Assurance manual found by the inspector.
- c. At the time of the inspection it was determined there was no Quality Control/Quality Assurance program. No blanks, duplicates, or check standards are being run with ammonia samples. The ammonia standards observed were expired. The E. coli filters were expired in 2008. The CBOD incubator was locked, not available for inspection. Unable to determine whether samples were set up and incubating as expected. There were no current bench sheets available for review for any parameter. There were samples in the E. coli incubator, but no paperwork to go with them. The ammonia meter was not on the lab bench. There was an undated note indicating that it needed to be checked out or repaired. Sample dates indicate that CBOD samples were in incubator, but no paperwork was available. Nitrification inhibitor used for CBOD was expired. CBOD nutrients for dilution water are to be stored at 10 - 30 degrees Celsius. These were in refrigerator at 4 degrees.

The Records/Reports evaluation generated an unsatisfactory rating. Part I. B. 8 of the permit states, in part, that the permittee shall retain, for a minimum of three (3) years, all records and information resulting from the monitoring activities required by this permit, including all records of analyses performed. In cases where the original records are kept at another location, a copy of all such records shall be kept at the permitted facility. At the time of the inspection, current bench sheets were unavailable for review.

The Records/Reports evaluation generated an unsatisfactory rating. Part II. C. 5. of the permit states, in part, that where a permittee has submitted incorrect information in any report to the Commissioner, the permittee shall promptly submit such facts or corrected information to the Commissioner. At the time of the inspection, it was determined you have not been properly completing the Discharge Monitoring Reports. The number of exceedances column must be completed accurately. All violations including both loading and concentration must be counted accurately and entered into the appropriate box on the DMR. April, May and June 2011 were inaccurate.

The Records/Reports evaluation generated an unsatisfactory rating. The failure to provide a written non-compliance notification, within five (5) days of becoming aware of a violation, or at the time that the DMR and MRO were submitted, as required by 327 IAC 5-2-8(10)(C) and (D) and Part II. C. 4 of the NPDES Permit, containing:

- (i) A description of the discharge and the cause of noncompliance;
- (ii) The period of noncompliance, including exact dates and times, or if not corrected, the anticipated time the non-compliance is expected to continue; and
- (iii) The steps taken (or planned) to reduce, eliminate, and prevent the recurrence of the non-complying discharge.

An explanation of violations must be included when submitting the monthly reports.

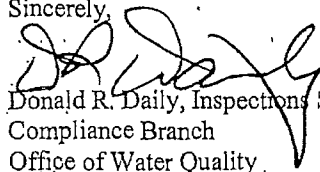
The Effluent Limits Violations evaluation generated an unsatisfactory rating. A review of the Discharge Monitoring Reports (DMR) and the Monthly Report of Operations (MRO) during the inspection revealed your facility reported excessive final effluent violations. This is a violation of Part I. A. 1 of the permit which sets forth the effluent limitations applicable to the discharge from Outfall 001.

Facility/Site was rated as marginal. No audible alarm on lift station in Hawthorne neighborhood. The lift station at the WWTP has a light and audible alarm inside the building. No light or audible warning at lift station.

Operation was rated as marginal. During wet weather this spring, effluent limit violations indicated the plant is not capable of handling the excessive wet weather flows. The construction permit for an upgrade was issued in 2004, the construction is not complete. The certified operator sometimes makes determination of when to waste sludge. Other times maintenance personnel decide to waste based on sludge blanket depth. The operation of the treatment plant should be under the operation of the certified operator.

Within thirty (30) days of receipt of this letter, a written detailed response documenting correction of each of the violations listed above and/or a plan for assuring future compliance must be submitted to this office. Failure to respond adequately to this letter may result in a referral to Office of Water Quality's Enforcement Section. Please direct your response to this letter to the attention of Becky Ruark. Any questions regarding this matter should be directed to Becky Ruark at 317-691-1909 or by email to [bruark@idem.IN.gov](mailto:bruark@idem.IN.gov). Thank you for your attention to this matter.

Sincerely,



Donald R. Daily, Inspections Section Chief  
Compliance Branch  
Office of Water Quality



Revised 8-2-11 BR



# Wastewater Facility Notice of Inspection

State Form 54290 (5-10)  
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

| FACILITY AND INSPECTION INFORMATION                                                                                                                                                                                                                |                          |                                          |                 |                                                                                                                                                                                                                                         |                                           |                                            |                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|--------------------------------------------|----------------------------|
| NPDES Permit Number<br><b>IN0038334</b>                                                                                                                                                                                                            |                          | Facility Type Code<br><b>Semi-Public</b> |                 | Classification Per Permit<br><b>Minor</b>                                                                                                                                                                                               |                                           |                                            |                            |
| This is to notify you that on July 25, 2011, an inspection of the specified facility was conducted by the undersigned representative of the Indiana Department of Environmental Management, Office of Water Quality.                               |                          |                                          |                 |                                                                                                                                                                                                                                         |                                           |                                            |                            |
| Type Of Inspection: <b>Compliance Evaluation Inspection</b>                                                                                                                                                                                        |                          |                                          |                 |                                                                                                                                                                                                                                         |                                           |                                            |                            |
| Name and Location of Facility Inspected<br><b>American Suburban Utilities (County Home) WWTF</b><br><b>550 Salisbury Rd</b><br><b>West Lafayette, Indiana 47906</b>                                                                                |                          |                                          |                 | Receiving Waters/POTW<br><b>Cole Creek</b>                                                                                                                                                                                              |                                           | Permit Expiration Date<br><b>6/30/2015</b> |                            |
| County<br><b>Tiptecanoe</b>                                                                                                                                                                                                                        |                          |                                          |                 | Facility Design Flow<br><b>0.1 MGD</b>                                                                                                                                                                                                  |                                           |                                            |                            |
| On Site Representative(s)                                                                                                                                                                                                                          |                          |                                          |                 |                                                                                                                                                                                                                                         |                                           |                                            |                            |
| Name                                                                                                                                                                                                                                               | Title                    | Facility phone                           | Cell phone      | Email                                                                                                                                                                                                                                   |                                           |                                            |                            |
| Dean Yoder                                                                                                                                                                                                                                         | Maintenance              | 765-463-3857                             |                 |                                                                                                                                                                                                                                         |                                           |                                            |                            |
| Certified Operator<br><b>Dennis Crandall</b>                                                                                                                                                                                                       |                          | Number<br><b>15007</b>                   |                 | Class<br><b>IV</b>                                                                                                                                                                                                                      | Renewal Effective Date<br><b>7/1/2010</b> | Expiration Date<br><b>6/30/2012</b>        | Hours/Week                 |
| Responsible Official<br><b>Mr. Scott Lods</b><br><b>American Suburban Utilities</b><br><b>3350 W 250 N</b><br><b>West Lafayette, Indiana 47906</b>                                                                                                 |                          |                                          |                 | Title<br><b>President</b>                                                                                                                                                                                                               |                                           |                                            |                            |
|                                                                                                                                                                                                                                                    |                          |                                          |                 | Email                                                                                                                                                                                                                                   |                                           |                                            |                            |
|                                                                                                                                                                                                                                                    |                          |                                          |                 | Telephone<br><b>765-463-3857</b>                                                                                                                                                                                                        |                                           | Contacted?<br><b>No</b>                    |                            |
|                                                                                                                                                                                                                                                    |                          |                                          |                 | Fax                                                                                                                                                                                                                                     |                                           |                                            |                            |
| AREAS EVALUATED DURING INSPECTION                                                                                                                                                                                                                  |                          |                                          |                 |                                                                                                                                                                                                                                         |                                           |                                            |                            |
| (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated, NA = Not Applicable)                                                                                                                                                       |                          |                                          |                 |                                                                                                                                                                                                                                         |                                           |                                            |                            |
| S                                                                                                                                                                                                                                                  | Receiving Waters         | M                                        | Facility/Site   | U                                                                                                                                                                                                                                       | Self-Monitoring                           | S                                          | Compliance Schedules       |
| S                                                                                                                                                                                                                                                  | Effluent Appearance      | M                                        | Operation       | S                                                                                                                                                                                                                                       | Flow Measurement                          | NA                                         | Pretreatment               |
| S                                                                                                                                                                                                                                                  | Permit                   | U                                        | Maintenance     | U                                                                                                                                                                                                                                       | Laboratory                                | U                                          | Effluent Limits Violations |
| S                                                                                                                                                                                                                                                  | CSO/SSO (Sewer Overflow) | M                                        | Sludge Disposal | U                                                                                                                                                                                                                                       | Records/Reports                           | N                                          | Other:                     |
| PRELIMINARY INSPECTION/SCREENING FINDINGS*                                                                                                                                                                                                         |                          |                                          |                 |                                                                                                                                                                                                                                         |                                           |                                            |                            |
| *These findings are considered preliminary and identify specific compliance issues discovered during the above noted inspection that the designated agent of IDEM believes may be a violation of statute(s), rule(s), or permit(s) issued by IDEM. |                          |                                          |                 |                                                                                                                                                                                                                                         |                                           |                                            |                            |
| SINGLE MEDIA INSPECTION:                                                                                                                                                                                                                           |                          |                                          |                 |                                                                                                                                                                                                                                         |                                           |                                            |                            |
| No violations were discovered with respect to the particular items observed during the inspection. (5)                                                                                                                                             |                          |                                          |                 |                                                                                                                                                                                                                                         |                                           |                                            |                            |
| Violations were discovered but corrected during the inspection. (4)                                                                                                                                                                                |                          |                                          |                 |                                                                                                                                                                                                                                         |                                           |                                            |                            |
| • Violations were discovered and require a submittal from you and/or a follow-up inspection by IDEM. (2)                                                                                                                                           |                          |                                          |                 |                                                                                                                                                                                                                                         |                                           |                                            |                            |
| Violations were discovered and may subject you to an appropriate enforcement response. (1)                                                                                                                                                         |                          |                                          |                 |                                                                                                                                                                                                                                         |                                           |                                            |                            |
| Additional information/review is required to evaluate overall compliance. (6)                                                                                                                                                                      |                          |                                          |                 |                                                                                                                                                                                                                                         |                                           |                                            |                            |
| Potential problems were discovered or observed. (3)                                                                                                                                                                                                |                          |                                          |                 |                                                                                                                                                                                                                                         |                                           |                                            |                            |
| Comments Regarding Ratings:                                                                                                                                                                                                                        |                          |                                          |                 |                                                                                                                                                                                                                                         |                                           |                                            |                            |
| The Following Facility Records Were Reviewed:<br>Discharge Monitoring Reports<br>Monthly Report of Operations<br><br>DMRs and MROs reviewed: from 7-10 to 6-11.                                                                                    |                          |                                          |                 | The Following Laboratory Records Were Reviewed:<br>TSS Bench Sheet<br>CBOD Bench Sheet<br>Ammonia Bench Sheet<br>E. coli bench sheet<br>Chlorine bench sheet<br>pH bench sheet<br>DO bench sheet<br>Process Control/ 30 minute settling |                                           |                                            |                            |

The following effluent violations were noted:

| Month | Year | Parameter | Type      | # Violations |
|-------|------|-----------|-----------|--------------|
| April | 2011 | TSS       | Mx Wk avg | 1            |
| May   | 2011 | CBOD      | Mx Wk avg | 1            |
| May   | 2011 | CBOD      | Mo. avg   | 1            |
| May   | 2011 | NH3-N     | Mx Wk avg | 1            |
| May   | 2011 | NH3-N     | Mo. avg   | 1            |
| June  | 2011 | CBOD      | Mx Wk avg | 2            |
| June  | 2011 | CBOD      | Mo. avg   | 1            |
| June  | 2011 | NH3-N     | Mx Wk avg | 1            |
| June  | 2011 | NH3-N     | Mo. avg   | 1            |

Facility needs to improve sludge removal records.

Maintenance was rated as unsatisfactory due to inadequate maintenance of the collection system. The facility needs to continually investigate sources of inflow and infiltration (I/I), document known sources and repair if feasible. This is a violation of Part II. B. 1 of the permit which states, in part, that all waste collection, control, treatment, and disposal facilities shall be operated and maintained as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants. Wet weather this spring was the apparent cause of effluent limit violations, indicating inadequate maintenance of the collection system.

The Self Monitoring Program was rated as unsatisfactory. At the time of the inspection it was determined the final sample log was inadequate. This is a violation of Part I. B. 6 of the NPDES permit which states, in part, that the permittee shall record specific information as described, for each measurement or sample taken pursuant to the requirements of this permit. These requirements include:

- the date, exact place and time of sampling or measurements;
- the person who performed the sampling or measurements;
- the date(s) analyses were performed;
- the person(s) who performed the analyses;
- the analytical techniques or methods used; and
- the results of such measurements and analyses

The final sample logs for pH, DO, and chlorine were not available for my review for the current month. These logs were also not filed with the May 2011 report with other bench sheets.

The Laboratory evaluation generated an unsatisfactory rating. Part I. B. 5 of the permit states, in part, the analytical and sampling methods used shall conform to the current version of 40 CFR, Part 136, unless otherwise specified. At the time of the inspection it was determined the laboratory scales did not have a current (annual) calibration.

The Laboratory evaluation generated an unsatisfactory rating. Part I. B. 5 of the permit states, in part, the analytical and sampling methods used shall conform to the current version of 40 CFR, Part 136, unless otherwise specified. At the time of the inspection it was determined there was no Quality Control/Quality Assurance manual found by the inspector.

The Laboratory evaluation generated an unsatisfactory rating. Part I. B. 5 of the permit states, in part, the analytical and sampling methods used shall conform to the current version of 40 CFR, Part 136, unless otherwise specified. At the time of the inspection it was determined there was no Quality Control/Quality Assurance program. No blanks, duplicates, or check standards are being run with ammonia samples. The ammonia standards observed were expired. The E. coli filters were expired in 2008. The CBOD incubator was locked, not available for inspection. Unable to determine whether samples were set up and incubating as expected. There were no current bench sheets available for review for any parameter. There were sample in the E. coli incubator, but no paperwork to go with them. The ammonia meter was not on the lab bench. There was an undated note indicating that it needed to be checked out or repaired. Sample dates indicate that CBOD samples were in incubator, but no paperwork was available. Nitrification inhibitor used for CBOD was expired. CBOD nutrients for dilution water are to be stored at 10 - 30 degrees Celsius. These were in refrigerator at 4 degrees.

The Records/Reports evaluation generated an unsatisfactory rating. Part I. B. 8 of the permit states, in part, that the permittee shall retain, for a minimum of three (3) years, all records and information resulting from the monitoring activities required by this permit, including all records of analyses performed. In cases where the original records are kept at another location, a copy of all such records shall be kept at the permitted facility. At the time of the inspection, current bench sheets were unavailable for review.

The Records/Reports evaluation generated an unsatisfactory rating. Part II. C. 5. of the permit states, in part, that where a permittee has submitted incorrect information in any report to the Commissioner, the permittee shall promptly submit such facts or corrected information to the Commissioner. At the time of the inspection, it was determined you have not been properly completing the Discharge Monitoring Reports. The number of exceedances column must be completed accurately. All violations loading and concentration must be counted accurately and entered into the appropriate box on the DMR. April, May and June 2011 were inaccurate.

The Records/Reports evaluation generated an unsatisfactory rating. The failure to provide a written non-compliance notification, within five (5) days of becoming aware of a violation, or at the time that the DMR and MRO were submitted, as required by 327 IAC 5-2-8(10)(C) and (D) and Part II. C. 4 of the NPDES Permit, containing:

- (i) A description of the discharge and the cause of noncompliance;
  - (ii) The period of noncompliance, including exact dates and times, or if not corrected, the anticipated time the non-compliance is expected to continue; and
  - (iii) The steps taken (or planned) to reduce, eliminate, and prevent the recurrence of the non-complying discharge.
- An explanation of violations must be included when submitting the monthly reports.

The Effluent Limits Violations evaluation generated an unsatisfactory rating. A review of the Discharge Monitoring Reports (DMR) and the Monthly Report of Operations (MRO) during the inspection revealed your facility reported excessive final effluent violations. This is a violation of Part I. A. 1 of the permit which sets forth the effluent limitations applicable to the discharge from Outfall 001.

Facility/Site was rated as marginal. No audible alarm on lift station in Hawthorne neighborhood. The lift station at the WWTP has a light and audible alarm inside the building. No light or audible warning at lift station.

During wet weather this spring, effluent limit violations indicated the plant is not capable of handling the excessive wet weather flows. The construction permit for an upgrade was issued in 2004, the construction is not complete.

Certified operator sometimes makes determination of when to waste. Other times maintenance personnel decide to waste based on sludge blanket depth.

Receiving Waters appearance was visibly free of solids, color and sheen.

Effluent was clean and clear at the time of the inspection.

The facility has a valid permit and the facility description is accurate.

No SSO events reported in last six months.

Facility has a standby generator.

The facility is checked daily.

Maintenance of blowers are documented with date, person and repair performed.

The final flow meter last calibrated on August 11, 2010.

No reporting milestones have occurred since construction is not yet complete.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                 |                                  |                                                                                                                                                                |                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| <b>MULTI-MEDIA SCREENING</b> (please note that a multi-media screening is not a comprehensive evaluation of the compliance status of the facility):<br>Multi-media screening not conducted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                 |                                  |                                                                                                                                                                |                     |
| <b>POLLUTION PREVENTION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                 |                                  |                                                                                                                                                                |                     |
| Pollution prevention is the preferred means of environmental protection in Indiana. The goal of pollution prevention is to promote changes in business and commercial operation, especially manufacturing processes, so that Indiana businesses increase productivity, generate less environmental waste, reduce their regulatory responsibilities and become more profitable. Your participation in Indiana's pollution prevention program is entirely voluntary. If you have any pollution prevention questions, you may contact our Office of Pollution Prevention and Technical Assistance (OPPTA) at 317 232-8172 or (800) 988-7901, or visit OPPTA's Web site at <a href="http://www.idem.IN.gov/oppta/p2/">www.idem.IN.gov/oppta/p2/</a> . Would your company like to be contacted by IDEM's Office of Pollution Prevention and Technical Assistance? No |                                 |                                  |                                                                                                                                                                |                     |
| <b>COMPLIANCE ASSISTANCE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                 |                                  |                                                                                                                                                                |                     |
| In addition to the compliance assistance offered by IDEM's individual programs, IDEM's Compliance and Technical Assistance Program (CTAP) offers free, confidential assistance to regulated entities, including small businesses and municipalities, throughout Indiana. In the future, if you would like to request free, confidential compliance assistance, call 317 232-8172 or (800) 988-7901, or visit CTAP's Web site at <a href="http://www.idem.IN.gov/oppta/ctap/">www.idem.IN.gov/oppta/ctap/</a> .                                                                                                                                                                                                                                                                                                                                                  |                                 |                                  |                                                                                                                                                                |                     |
| <b>SUMMARY AND CORRECTION INFORMATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                 |                                  |                                                                                                                                                                |                     |
| A summary of violations and concerns noted during the inspection was verbally communicated to the undersigned representative during the inspection. The facility should correct any deficiencies noted as soon as possible. Corrections made and verified during the inspection may still be cited as violations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                 |                                  |                                                                                                                                                                |                     |
| Written report provided at the conclusion of the inspection. If upon subsequent review, any changes to this report are deemed necessary, a revised report will be sent to the responsible official within 45 days.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                 |                                  |                                                                                                                                                                |                     |
| <b>IDEM REPRESENTATIVE:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                 |                                  |                                                                                                                                                                |                     |
| Inspector Name<br>Becky Ruark                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Signature<br><i>Becky Ruark</i> | Telephone Number<br>317-691-1909 | Date<br>July 25, 2011                                                                                                                                          |                     |
| Inspector Email<br>bruark@idem.IN.gov                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                 |                                  | Time In<br>10:30 AM                                                                                                                                            | Time Out<br>2:45 PM |
| <b>FACILITY REPRESENTATIVE:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                 |                                  |                                                                                                                                                                |                     |
| Printed name<br>DEAN YODER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Signature<br><i>Dean Yoder</i>  | Title<br>Mant.                   | Telephone Number<br>463-3056                                                                                                                                   | Date<br>7-25-11     |
| <b>FOR IDEM INTERNAL USE:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                 |                                  |                                                                                                                                                                |                     |
| IDEM Manager Review<br><i>[Signature]</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                 | Date<br>8-16-11                  | For:<br><input type="checkbox"/> Follow up<br><input type="checkbox"/> NPDES permits<br><input type="checkbox"/> Enforcement<br><input type="checkbox"/> Other |                     |

## NPDES Facility Compliance Evaluation Checklist

|           |                                                |           |
|-----------|------------------------------------------------|-----------|
| IN0038334 | American Suburban Utilities (County Home) WWTF | 7/25/2011 |
|-----------|------------------------------------------------|-----------|

All evaluations indicated on this form are based upon the Inspector's observations at the time of the inspection.

### Areas Evaluated

#### A. Receiving Waters Appearance

|     |                                                                                        |
|-----|----------------------------------------------------------------------------------------|
| Yes | 1. The receiving stream is visibly free of excessive deposits of settled solids.       |
| Yes | 2. The receiving stream is visibly free of excess floating debris, oil, scum, or foam. |

#### B. Effluent Appearance

|     |                                                                                                                      |
|-----|----------------------------------------------------------------------------------------------------------------------|
| Yes | 1. Treated effluent is essentially free of excessive deposits of settled solids, floating debris, oil, scum or foam. |
|-----|----------------------------------------------------------------------------------------------------------------------|

#### C. Permit

|     |                                                                                                       |
|-----|-------------------------------------------------------------------------------------------------------|
| N/E | 1. Was a permit renewal application submitted to IDEM at least 180 days prior to the expiration date? |
| Yes | 2. The facility description, including the receiving waters, is complete and accurate                 |
| N/A | 3. The permit has been properly transferred                                                           |

#### D. CSO/SSO (Sewer Overflow)

|     |                                                                          |
|-----|--------------------------------------------------------------------------|
| N/A | 1. CSOs are adequately monitored and maintained.                         |
| Yes | 2. The facility has had zero SSO/overflow events in the past six months. |

#### E. Facility/Site

|     |                                                                                                                                           |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------|
| Yes | 1. The facility has standby power or equivalent provision.                                                                                |
| No  | 2. An adequate alarm or notification system for power or equipment failure is available for the treatment facility and for lift stations. |
| Yes | 3. Safe and adequate access is provided for inspection of all treatment units, lift stations, and outfalls.                               |
| Yes | 3. The facility housekeeping is adequate.                                                                                                 |

#### F. Operation

|     |                                                                                                                                        |
|-----|----------------------------------------------------------------------------------------------------------------------------------------|
| No  | 1. All facilities and systems necessary for achieving compliance with the terms and conditions of the permit are operated efficiently. |
| Yes | 2. An adequate, qualified operating staff is provided to carry out the operation of the facility.                                      |
| N/E | 3. Sufficient solids are wasted from the treatment system, at proper intervals, to maintain process efficiency.                        |
| No  | 4. Wasting of solids is based on pre-determined values and valid process control testing.                                              |

G. Maintenance

|     |                                                                                                                                |
|-----|--------------------------------------------------------------------------------------------------------------------------------|
| Yes | 1. A maintenance record system has been established and includes maintenance/repair history and preventative maintenance plan. |
| N/E | 2. Lift station inspections, cleaning and maintenance procedures are adequate.                                                 |
| No  | 3. Collection system maintenance is adequate.                                                                                  |

H. Sludge Disposal

|     |                                                                                                               |
|-----|---------------------------------------------------------------------------------------------------------------|
| N/E | 1. Sludges, screenings, and slurries are disposed of properly to maintain overall efficiency of the facility. |
|     | <i>Needs to keep records of sludge removed.</i>                                                               |

I. Self-Monitoring Program

|     |                                                                                                            |
|-----|------------------------------------------------------------------------------------------------------------|
| Yes | 1. The sampling protocol and procedure, including locations, type and frequency, is accurate and adequate. |
| No  | 2. Sampling and analysis data and documentation is accurate.                                               |
| N/A | 3. NPDES Permit Whole Effluent Toxicity (WET) testing requirements are being met.                          |

J. Flow Measurement

|     |                                                                  |
|-----|------------------------------------------------------------------|
| Yes | 1. Flow is properly monitored as required by the permit.         |
| Yes | 2. Flow charts and calibration records are available for review. |
| Yes | 3. Effluent flow is used in calculating effluent loadings.       |

K. Laboratory

|                                                    |                                                                                                                                                                                      |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. The following laboratory records were reviewed: |                                                                                                                                                                                      |
|                                                    | TSS Bench Sheet<br>CBOD Bench Sheet<br>Ammonia Bench Sheet<br>E. coli bench sheet<br>Chlorine bench sheet<br>pH bench sheet<br>DO bench sheet<br>Process Control/ 30 minute settling |
| No                                                 | 2. All laboratory practices and protocol reviewed, including bench sheets were adequate.                                                                                             |

L. Records/Reports

|                                                  |                                                              |
|--------------------------------------------------|--------------------------------------------------------------|
| 1. The following facility records were reviewed: |                                                              |
|                                                  | Discharge Monitoring Reports<br>Monthly Report of Operations |
| No                                               | 2. All records reviewed were accurate and available.         |

M. Compliance Schedules

|     |                                                                                  |
|-----|----------------------------------------------------------------------------------|
| Yes | 1. The Schedule of Compliance monitoring and reporting milestones have been met. |
|-----|----------------------------------------------------------------------------------|

|     |                                                      |
|-----|------------------------------------------------------|
| N/A | 2. Agreed Order compliance milestones have been met. |
|     |                                                      |

N. Pretreatment

|     |                                                                                                                      |
|-----|----------------------------------------------------------------------------------------------------------------------|
| N/A | 1. The pretreatment records, including inventory, monitoring, inspection and enforcement, are complete and accurate. |
| N/A | 2. For both Delegated and Non-Delegated, the program is regulated as required.                                       |
| N/A | 3. The SUO/ERG has been developed or updated as required for NON-Delegated programs.                                 |
|     |                                                                                                                      |

O. Effluent Limits Violations

|            |                                                  |
|------------|--------------------------------------------------|
| Yes        | 1. Reviewed DMRs and MROs during the inspection. |
| From: 7-10 | To: 6-11                                         |
|            |                                                  |
| Yes        | 2. Were effluent violations reported?            |
|            |                                                  |
|            |                                                  |
|            |                                                  |

## IDEM WASTEWATER PRE-INSPECTION CHECKLIST

| Name and Location of Facility to be Inspected                                                                      | NPDES Permit # | GPS Coordinates Recorded | Date to be Inspected | Inspector   |
|--------------------------------------------------------------------------------------------------------------------|----------------|--------------------------|----------------------|-------------|
| Name: American Suburban Utilities<br>(County Home) WWTF<br><br>Town/City: West Lafayette<br><br>County: Tippecanoe | IN0038334      | No                       | 7/25/2011            | Becky Ruark |

|                                             |     |
|---------------------------------------------|-----|
| 1. PRE-INSPECTION FILE REVIEW WAS CONDUCTED | Yes |
|---------------------------------------------|-----|

|                                                           |               |                                                      |     |
|-----------------------------------------------------------|---------------|------------------------------------------------------|-----|
| 2. REVIEW RELEVANT PROGRAM PERMIT AND PERMIT APPLICATIONS |               |                                                      | Yes |
|                                                           |               |                                                      |     |
| Info Source                                               | Date Reviewed | Inspector Notations Pertinent to Upcoming Inspection |     |
| Inspector file                                            | 7-25-11       | Reviewed current permit.                             |     |

|                                                                                                                                   |               |                                                      |     |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------|------------------------------------------------------|-----|
| 3. REVIEW PRIOR INSPECTION HISTORY & REPORTS RELEVANT TO THE PROGRAM INSPECTION PARTICULARLY ANY OUTSTANDING OR UNRESOLVED ISSUES |               |                                                      | Yes |
|                                                                                                                                   |               |                                                      |     |
| Info Source                                                                                                                       | Date Reviewed | Inspector Notations Pertinent to Upcoming Inspection |     |
| Inspector file                                                                                                                    | 7-25-11       | Reviewed previous inspection reports.                |     |

|                                                                                                                                                            |               |                                                      |    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------------------------------------------------|----|
| 4. REVIEW PRIOR COMPLIANCE AND ENFORCEMENT HISTORY RELEVANT TO PROGRAM INSPECTION PARTICULARLY WARNINGS AND MINOR VIOLATIONS, FORMAL ACTIONS (OE & OR EPA) |               |                                                      | No |
| No recent activity.                                                                                                                                        |               |                                                      |    |
| Info Source                                                                                                                                                | Date Reviewed | Inspector Notations Pertinent to Upcoming Inspection |    |
| Inspector file                                                                                                                                             |               |                                                      |    |

|                                                  |               |                                                      |    |
|--------------------------------------------------|---------------|------------------------------------------------------|----|
| 5. REVIEW FACILITY RESPONSES TO ALL OF THE ABOVE |               |                                                      | No |
| No recent correspondence                         |               |                                                      |    |
| Info Source                                      | Date Reviewed | Inspector Notations Pertinent to Upcoming Inspection |    |
| Inspector file                                   |               |                                                      |    |

|                                                                               |               |                                                       |    |
|-------------------------------------------------------------------------------|---------------|-------------------------------------------------------|----|
| 6. REVIEW FACILITY RECORDS, REPORTS, SELF-MONITORING DATA CURRENTLY AVAILABLE |               |                                                       | No |
| Will review data on site.                                                     |               |                                                       |    |
| Info Source                                                                   | Date Reviewed | Inspector Notations Pertinent to Upcoming Inspection: |    |



|                |  |  |
|----------------|--|--|
| Inspector file |  |  |
|----------------|--|--|

|                                                                             |               |                                                      |
|-----------------------------------------------------------------------------|---------------|------------------------------------------------------|
| 7. REVIEW MAPS SHOWING FACILITY LAYOUT AND WASTE MANAGEMENT/DISCHARGE SITES |               | Yes                                                  |
|                                                                             |               |                                                      |
| Info Source                                                                 | Date Reviewed | Inspector Notations Pertinent to Upcoming Inspection |
| Inspector file                                                              | 7-25-11       | Inspector familiar with layout.                      |

|                                          |               |                                                      |
|------------------------------------------|---------------|------------------------------------------------------|
| 8. REVIEW RECORDS OF CITIZENS COMPLAINTS |               | No                                                   |
| None known.                              |               |                                                      |
| Info Source                              | Date Reviewed | Inspector Notations Pertinent to Upcoming Inspection |
| Inspector file                           |               |                                                      |

|                                   |               |                                                      |
|-----------------------------------|---------------|------------------------------------------------------|
| 9. REVIEW ANY PROCESS INFORMATION |               | Yes                                                  |
|                                   |               |                                                      |
| Info Source                       | Date Reviewed | Inspector Notations Pertinent to Upcoming Inspection |
| Inspector file                    | 7-25-11       | Inspector familiar with facility process.            |

|                                                  |               |                                                      |
|--------------------------------------------------|---------------|------------------------------------------------------|
| 10. REVIEW AND DETERMINE APPLICABLE REQUIREMENTS |               | Yes                                                  |
|                                                  |               |                                                      |
| Info Source                                      | Date Reviewed | Inspector Notations Pertinent to Upcoming Inspection |
| Inspector file                                   | 7-25-11       | NPDES                                                |

**McNeil, Tammie**

---

**From:** DoNotReply@pb.com  
**Sent:** Monday, August 22, 2011 11:45 PM  
**To:** McNeil, Tammie  
**Subject:** Package Delivery Notification: Carrier = POST, TrackingNr = 9171900005271000160478

This delivery notification is to alert you that a package was delivered to:

Mr. Scott Lods, President  
Attn: American Suburban Utilities, Inc  
3350 W 250 N

West Lafayette , IN 479065147 US

: The package was delivery on 8/22/2011 9:53:00 AM

**Package Detail:**

TrackingNr: 9171900005271000160478  
Service: 2PM  
Weight: 0.062  
Pieces: 1  
BillNr: Z900000120611

Your package can be tracked from URL:

<http://trkcnfrm1.smi.usps.com/PTSIInternetWeb/InterLabelInquiry.do?origTrackNum=9171900005271000160478>



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

Mitchell E. Daniels Jr.  
Governor

Thomas W. Easterly  
Commissioner

October 14, 2011

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

VIA CERTIFIED MAIL 91 7190 0005 2710 0017 5014

Mr. Scott Lods, President  
American Suburban Utilities  
3350 W 250 N  
West Lafayette, Indiana 47906

Re: **Inspection Summary/Violation Letter**  
American Suburban Utilities (County Home) Wastewater  
Treatment Facility  
NPDES Permit No. IN0038334.  
West Lafayette, Tippecanoe County

Dear Mr. Lods:

On July 25, 2011, a representative of the Indiana Department of Environmental Management, Office of Water Quality, conducted an inspection of the American Suburban Utilities (County Home) Wastewater Treatment Facility, located in West Lafayette, Indiana. This inspection was conducted pursuant to IC 13-14-2-2. For your information, and in accordance with IC 13-14-5, a summary of the inspection is provided below:

Type of Inspection: Compliance Evaluation Inspection

Results of Inspection: ☐ Violations were observed but corrected during the inspection.  
☒ Violations were observed.  
☐ Violations were observed and will be referred to the Enforcement Section.

On August 19, 2011 your facility was sent a Violation Letter concerning issues observed during the above noted inspection. The Violation Letter required a response and, to date, no response has been received by IDEM. A copy of the letter is enclosed for your records.

Within fifteen (15) days of receipt of this letter, a written detailed response documenting correction of each of the violations listed above and/or a plan for assuring future compliance must be submitted to this office. Failure to respond adequately to this letter may result in a referral to Office of Water Quality's Enforcement Section. Please direct your response to this letter to the attention of Becky Ruark. Any questions regarding this matter should be directed to Becky Ruark at 317-691-1909 or by email to [bruark@idem.IN.gov](mailto:bruark@idem.IN.gov). Thank you for your attention to this matter.

Sincerely,

Donald R. Daily, Inspections Section Chief  
Compliance Branch  
Office of Water Quality

Enclosure



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

Mitchell E. Daniels Jr.  
Governor

Thomas W. Easterly  
Commissioner

August 19, 2011

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8803  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

VIA CERTIFIED MAIL 91 7190 0005 2710 0016 0478

Mr. Scott Lods, President  
American Suburban Utilities  
3350 W 250 N  
West Lafayette, Indiana 47906

Re: **Inspection Summary/Violation Letter**  
American Suburban Utilities (County Home) Wastewater  
Treatment Facility  
NPDES Permit No. IN0038334  
West Lafayette, Tippecanoe County

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Type of Inspection: Compliance Evaluation Inspection

Results of \_\_\_\_\_ Violations were observed but corrected during the inspection.  
Inspection:   X   Violations were observed.  
\_\_\_\_\_ Violations were observed and will be referred to the Enforcement Section.

The following specific items were noted:

Sludge disposal was rated as marginal. Facility needs to improve sludge removal records.

Maintenance was rated as unsatisfactory due to inadequate maintenance of the collection system. The facility needs to continually investigate sources of inflow and infiltration (I/I), document known sources and repair if feasible. This is a violation of Part II. B. 1 of the permit which states, in part, that all waste collection, control, treatment, and disposal facilities shall be operated and maintained as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants. Wet weather this spring was the apparent cause of effluent limit violations, indicating inadequate maintenance of the collection system.

The Self Monitoring Program was rated as unsatisfactory. At the time of the inspection it was determined the final sample log was inadequate. This is a violation of Part I. B. 6 of the NPDES permit which states, in part, that the permittee shall record specific information as described, for each measurement or sample taken pursuant to the requirements of this permit. These requirements include:

- the date, exact place and time of sampling or measurements;
- the person who performed the sampling or measurements;
- the date(s) analyses were performed;

- d. the person(s) who performed the analyses;
- e. the analytical techniques or methods used; and
- f. the results of such measurements and analyses

The final sample logs for pH, DO, and chlorine were not available for my review for the current month. These logs were also not filed with the May 2011 report with other bench sheets.

The Laboratory evaluation generated an unsatisfactory rating. Part I. B. 5 of the permit states, in part, the analytical and sampling methods used shall conform to the current version of 40 CFR, Part 136, unless otherwise specified.

- a. At the time of the inspection it was determined the laboratory scales did not have a current (annual) calibration.
- b. At the time of the inspection it was determined there was no Quality Control/Quality Assurance manual found by the inspector.
- c. At the time of the inspection it was determined there was no Quality Control/Quality Assurance program. No blanks, duplicates, or check standards are being run with ammonia samples. The ammonia standards observed were expired. The E. coli filters were expired in 2008. The CBOD incubator was locked, not available for inspection. Unable to determine whether samples were set up and incubating as expected. There were no current bench sheets available for review for any parameter. There were samples in the E. coli incubator, but no paperwork to go with them. The ammonia meter was not on the lab bench. There was an undated note indicating that it needed to be checked out or repaired. Sample dates indicate that CBOD samples were in incubator, but no paperwork was available. Nitrification inhibitor used for CBOD was expired. CBOD nutrients for dilution water are to be stored at 10 - 30 degrees Celsius. These were in refrigerator at 4 degrees.

The Records/Reports evaluation generated an unsatisfactory rating. Part I. B. 8 of the permit states, in part, that the permittee shall retain, for a minimum of three (3) years, all records and information resulting from the monitoring activities required by this permit, including all records of analyses performed. In cases where the original records are kept at another location, a copy of all such records shall be kept at the permitted facility. At the time of the inspection, current bench sheets were unavailable for review.

The Records/Reports evaluation generated an unsatisfactory rating. Part II. C. 5. of the permit states, in part, that where a permittee has submitted incorrect information in any report to the Commissioner, the permittee shall promptly submit such facts or corrected information to the Commissioner. At the time of the inspection, it was determined you have not been properly completing the Discharge Monitoring Reports. The number of exceedances column must be completed accurately. All violations including both loading and concentration must be counted accurately and entered into the appropriate box on the DMR. April, May and June 2011 were inaccurate.

The Records/Reports evaluation generated an unsatisfactory rating. The failure to provide a written non-compliance notification, within five (5) days of becoming aware of a violation, or at the time that the DMR and MRO were submitted, as required by 327 IAC 5-2-8(10)(C) and (D) and Part II. C. 4 of the NPDES Permit, containing:

- (i) A description of the discharge and the cause of noncompliance;
- (ii) The period of noncompliance, including exact dates and times, or if not corrected, the anticipated time the non-compliance is expected to continue; and
- (iii) The steps taken (or planned) to reduce, eliminate, and prevent the recurrence of the non-complying discharge.

An explanation of violations must be included when submitting the monthly reports.

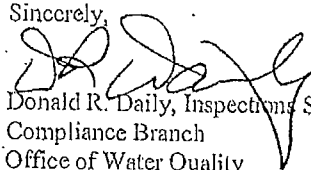
The Effluent Limits Violations evaluation generated an unsatisfactory rating. A review of the Discharge Monitoring Reports (DMR) and the Monthly Report of Operations (MRO) during the inspection revealed your facility reported excessive final effluent violations. This is a violation of Part I. A. 1 of the permit which sets forth the effluent limitations applicable to the discharge from Outfall 001.

Facility/Site was rated as marginal. No audible alarm on lift station in Hawthorne neighborhood. The lift station at the WWTP has a light and audible alarm inside the building. No light or audible warning at lift station.

Operation was rated as marginal. During wet weather this spring, effluent limit violations indicated the plant is not capable of handling the excessive wet weather flows. The construction permit for an upgrade was issued in 2004, the construction is not complete. The certified operator sometimes makes determination of when to waste sludge. Other times maintenance personnel decide to waste based on sludge blanket depth. The operation of the treatment plant should be under the operation of the certified operator.

Within thirty (30) days of receipt of this letter, a written detailed response documenting correction of each of the violations listed above and/or a plan for assuring future compliance must be submitted to this office. Failure to respond adequately to this letter may result in a referral to Office of Water Quality's Enforcement Section. Please direct your response to this letter to the attention of Becky Ruark. Any questions regarding this matter should be directed to Becky Ruark at 317-691-1909 or by email to [bruark@idem.IN.gov](mailto:bruark@idem.IN.gov). Thank you for your attention to this matter.

Sincerely,

  
Donald R. Daily, Inspections Section Chief  
Compliance Branch  
Office of Water Quality



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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October 14, 2011

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VIA CERTIFIED MAIL 91 7190 0005 2710 0017 5014

Mr. Scott Lods, President  
American Suburban Utilities  
3350 W 250 N  
West Lafayette, Indiana 47906

Re: **Inspection Summary/Violation Letter**  
American Suburban Utilities (County Home) Wastewater  
Treatment Facility  
NPDES Permit No. IN0038334.  
West Lafayette, Tippecanoe County

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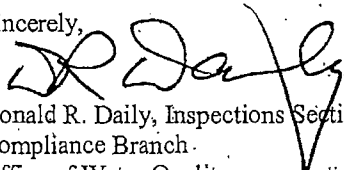
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Compliance Branch  
Office of Water Quality

Enclosure



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August 19, 2011

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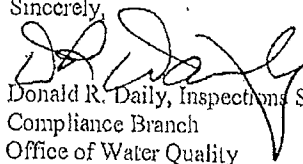
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Sincerely,



Donald R. Daily, Inspection Section Chief  
Compliance Branch  
Office of Water Quality

**McNeil, Tammie**

---

From: DoNotReply@pb.com  
Sent: Monday, October 17, 2011 11:45 PM  
To: McNeil, Tammie  
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This delivery notification is to alert you that a package was delivered to:

Mr. Scott Lods, President  
Attn: American Suburban Utilities, Inc  
3350 W 250 N

West Lafayette, IN 479065147 US

The package was delivery on 10/17/2011 10:24:00 AM

Package Detail:

TrackingNr: 9171900005271000175014  
Service: 2PM  
Weight: 0.056  
Pieces: 1  
BillNr: Z900000134255

Your package can be tracked from URL:

<http://trkcnfrm1.smi.usps.com/PTSIInternetWeb/InterLabelInquiry.do?origTrackNum=9171900005271000175014>



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Mitchell E. Daniels Jr.  
Governor

August 16, 2012

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Thomas W. Easterly  
Commissioner

[www.idem.IN.gov](http://www.idem.IN.gov)

Mr. Scott Lods, Owner  
American Suburban Utilities  
3350 W 250 N  
West Lafayette, Indiana 47906

Dear Mr. Lods:

Re: Inspection Summary Letter  
County Home WWTP  
NPDES Permit No. IN0038334  
West Lafayette, Tippecanoe County

On July 31, 2012, a representative of the Indiana Department of Environmental Management, Office of Water Quality, conducted an inspection of County Home WWTP, located in West Lafayette, Indiana. This inspection was conducted pursuant to IC 13-18-3-9. A summary of the inspection is provided below:

Type of Inspection: Reconnaissance Inspection

Results of  
Inspection: ☐ No violations were observed.  
☐ Additional information/review is required to evaluate overall compliance.  
☒ Potential problems were discovered or observed.

A copy of the NPDES Wastewater Facility Inspection Report is enclosed for your records. Please direct any response to this letter and any questions to Aaron Deeter at 317-691-1915 or by email to [adeeter@idem.IN.gov](mailto:adeeter@idem.IN.gov).

Sincerely,

Donald R. Daily, Inspections Section Chief  
Compliance Branch  
Office of Water Quality

Enclosure



# NPDES Wastewater Facility Inspection Report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                          |                                                                                                                          |                                                                                               |   |                  |   |                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---|------------------|---|----------------------------|
| NPDES Permit Number:<br><b>IN0038334</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Facility Type:<br><b>Mixed Ownership</b> | Facility Classification:<br><b>Minor</b>                                                                                 | TEMPO AI ID<br><b>55308</b>                                                                   |   |                  |   |                            |
| This is to notify you that on July 31, 2012, an inspection of the specified facility was conducted by the undersigned representative of the Indiana Department of Environmental Management, Office of Water Quality.                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                          |                                                                                                                          |                                                                                               |   |                  |   |                            |
| Type of Inspection: <b>Reconnaissance Inspection</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                          |                                                                                                                          |                                                                                               |   |                  |   |                            |
| Name and Location of Facility Inspected:<br><b>County Home WWTP</b><br><b>550 SALISBURY RD</b><br><b>West Lafayette IN 47906</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                          | Receiving Waters/POTW:<br><b>Cole Creek</b>                                                                              | Permit Expiration Date:<br><b>6/30/2015</b><br><br>Design Flow:<br><b>0.1MGD</b>              |   |                  |   |                            |
| On Site Representative(s):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                          |                                                                                                                          |                                                                                               |   |                  |   |                            |
| First Name<br><b>Eric</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Last Name<br><b>Klopfenstein</b>         | Title<br><b>Maintenance</b>                                                                                              | Phone<br><b>765-463-3856</b>                                                                  |   |                  |   |                            |
| Certified Operator:<br><b>Dennis Crandall</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Number:<br><b>15007</b>                  | Class:<br><b>IV</b>                                                                                                      | Renewal Effective Date:<br><b>7-1-12</b><br>Expiration Date:<br><b>6-30-14</b><br>Hours/Week: |   |                  |   |                            |
| Responsible Official:<br><b>Mr. Scott Lods, Owner</b><br><b>3350 W 250 N</b><br><b>West Lafayette, Indiana 47906</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                          | Permittee: <b>American Suburban Utilities</b><br>Email:<br>Phone: <b>765-463-3857</b><br>Fax:<br>Contacted?<br><b>No</b> |                                                                                               |   |                  |   |                            |
| <b>INSPECTION FINDINGS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                          |                                                                                                                          |                                                                                               |   |                  |   |                            |
| <b>SINGLE MEDIA INSPECTION OVERALL RATING:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                          |                                                                                                                          |                                                                                               |   |                  |   |                            |
| <input type="radio"/> No violations were discovered with respect to the particular items observed during the inspection. (5)<br><input type="radio"/> Violations were discovered but corrected during the inspection. (4)<br><input type="radio"/> Violations were discovered and require a submittal from you and/or a follow-up inspection by IDEM. (2)<br><input type="radio"/> Violations were discovered and may subject you to an appropriate enforcement response. (1)<br><input type="radio"/> Additional information/review is required to evaluate overall compliance. (6)<br><input checked="" type="radio"/> Potential problems were discovered or observed. (3) |                                          |                                                                                                                          |                                                                                               |   |                  |   |                            |
| <b>AREAS EVALUATED DURING INSPECTION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                          |                                                                                                                          |                                                                                               |   |                  |   |                            |
| (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                          |                                                                                                                          |                                                                                               |   |                  |   |                            |
| S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Receiving Waters                         | S                                                                                                                        | Facility/Site                                                                                 | N | Self-Monitoring  | N | Compliance Schedules       |
| S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Effluent Appearance                      | S                                                                                                                        | Operation                                                                                     | S | Flow Measurement | N | Pretreatment               |
| S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Permit                                   | M                                                                                                                        | Maintenance                                                                                   | S | Laboratory       | S | Effluent Limits Violations |
| S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | CSO/SSO (Sewer Overflow)                 | S                                                                                                                        | Sludge                                                                                        | S | Records/Reports  | N | Other:                     |
| <b>DETAILED AREA EVALUATIONS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                          |                                                                                                                          |                                                                                               |   |                  |   |                            |
| <b>Receiving Waters:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                          |                                                                                                                          |                                                                                               |   |                  |   |                            |
| Comments:<br>The receiving stream was observed thru some weeds at the edge of outfall and appeared to be free of notable foam, algae, sheen or solids.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |                                                                                                                          |                                                                                               |   |                  |   |                            |
| <b>Effluent Appearance:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                          |                                                                                                                          |                                                                                               |   |                  |   |                            |
| Comments:<br>The effluent was observed at the weir of the contact tank and at the outfall pipe and appeared to very clear and free of color at the time of the inspection.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                          |                                                                                                                          |                                                                                               |   |                  |   |                            |
| <b>Permit:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                          |                                                                                                                          |                                                                                               |   |                  |   |                            |
| Comments:<br>The facility has a valid permit that is made up of parameters and facility descriptions for the old plant and new plant. The new plant has not come on line yet. The comminutor has been taken out of service at the old plant and this does not reflect the facility description of the permit, but once the new plant is operational this will be resolved.                                                                                                                                                                                                                                                                                                   |                                          |                                                                                                                          |                                                                                               |   |                  |   |                            |
| <b>CSO/SSO:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                          |                                                                                                                          |                                                                                               |   |                  |   |                            |
| Comments:<br>No SSO events have been reported in last six months by the facility.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                          |                                                                                                                          |                                                                                               |   |                  |   |                            |

**Facility/Site:****Comments:**

The facility has a standby generator that runs all of sewage plant plus main lift station. Main lift station has a visual and audible alarm in side building that is checked daily. The only other lift station is in the Hawthorne neighborhood that has a visual light and neighbors who call when light is on. The facility grounds are maintained good enough due to the construction and the access to the outfall was adequate.

**Operation:****Comments:**

At the time of inspection all units of treatment appeared to be operating efficiently. The two aeration tanks had good color and mixing during the inspections. The wasting of the aeration tanks is determined by the certified operator and e-mailed to onsite personal each week. Then onsite personal waste by schedule and record on a daily wasting log. The facility in April started to seed one of the four sequential batch reactors for the new plant and determined the new blowers would not run properly, so they are in the process of replacing the blowers and also installing the Macerator comminutor for the start of the new plant. The facility must notify IDEM of an expected construction completion day within 30 days prior of completion of the facilities construction of the new Class III, 1.0 MGD facility which is stated in Part 1 E of the existing permit.

**Maintenance:****Comments:**

Maintenance was rated as marginal due to the facility continuing to have excessive inflow and infiltration (I/I) in the collection system during wet weather. There was no Effluent violations reported during the review of the last six months of MRO's, but three out of those six months were above the 100% capacity of the plants design, especially in Jan. 2012. (149%).

**Sludge:****Comments:**

A records review during the inspection showed adequate wasting, handling, and disposal of sludge. The facility hauls sludge from site and stores it at Carriage Estates WWTP to be land applied by Merrett Bros. The facility last hauled out a total of 42,000 gallons of sludge between the 4th and 5th of April 2012.

**Flow Measurement:****Comments:**

The effluent flow meter was last calibrated on 7/5/12 by B.L. Anderson.

**Laboratory:**

1. The following laboratory records were reviewed:

|                      |                              |                      |
|----------------------|------------------------------|----------------------|
| Lab Procedures       | Lab QA/QC Manual             | Sample Log           |
| On-site Sampling Log | CBOD Bench Sheets            | TSS Bench Sheets     |
| Ammonia Bench Sheets | pH/chlorine residue Bench SI | E. coli Bench Sheets |

**Contract Lab Information**

Lab Name: DC Testing  
Lab Address: On site  
Contact Person: Dennis Crandall  
Telephone: 765-426-8415

**Comments:**

Reviewed all recent bench sheets on site during the inspection and they appeared to be accurate and complete. Calibration records ok, temperature monitoring ok and QA/QC ok on lab testing. Laboratory scale was last calibrated on 8-11-11 by Mechanical Scales Services. The QA/QC manual and lab procedure manual was on site and adequate. The lab just purchased a new Hach DR 3900 spectrometer for testing Ammonia and will have it in service this year.

**Records/Reports:****Comments:**

The requested records were available and appear complete and accurate.

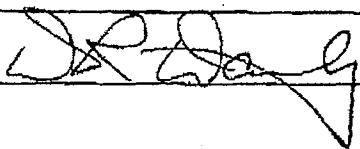
**Effluent Limits Violations:**

Yes 1. Were DMRs reviewed as part of the inspection?

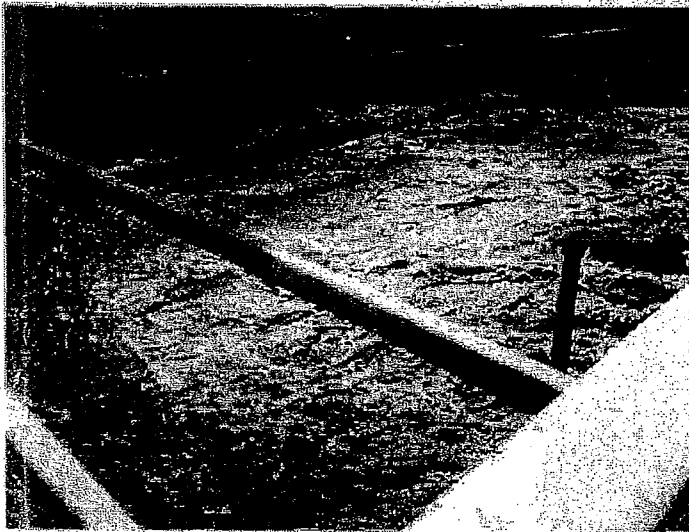
DMRs for the period of January/2012 to June/2012 were reviewed as part of the inspection.

No 2. Were violations noted during the review of DMRs?

N 3. Overflow/Bypass and Noncompliance reporting.

| IDEM REPRESENTATIVE                                                                                |                                         |                                         |
|----------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|
| Inspector Name:<br>Aaron Deeter                                                                    | Inspector Email:<br>adeeter@idem.IN.gov | Inspector Phone Number:<br>317-691-1915 |
| Inspection Date:<br>7/31/2012                                                                      | Time In:<br>9:30 AM                     | Time Out:<br>12:30 PM                   |
| IDEM MANAGER REVIEW                                                                                |                                         |                                         |
| IDEM Manager:<br> |                                         | Date:<br>8-13-12                        |

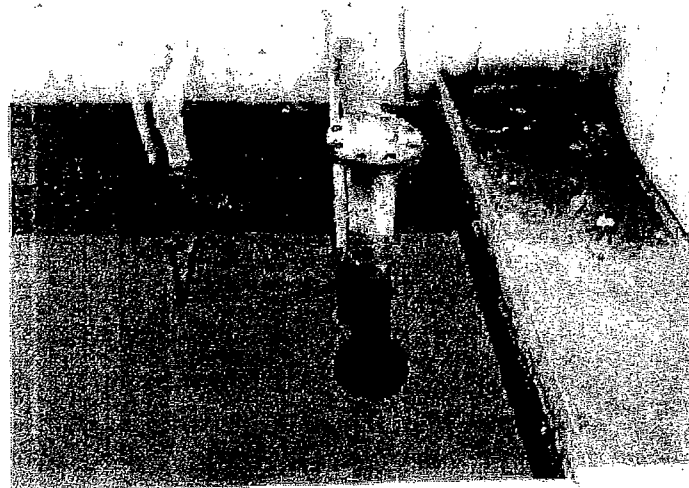
# Inspection Photographs



|                       |       |
|-----------------------|-------|
| Facility:             |       |
| County Home WWTP      |       |
| Photographer:         |       |
| Aaron Deeter          |       |
| Date:                 | Time: |
| 7/31/12               |       |
| Others Present:       |       |
|                       |       |
| Location/Description: |       |
| aeration tanks        |       |

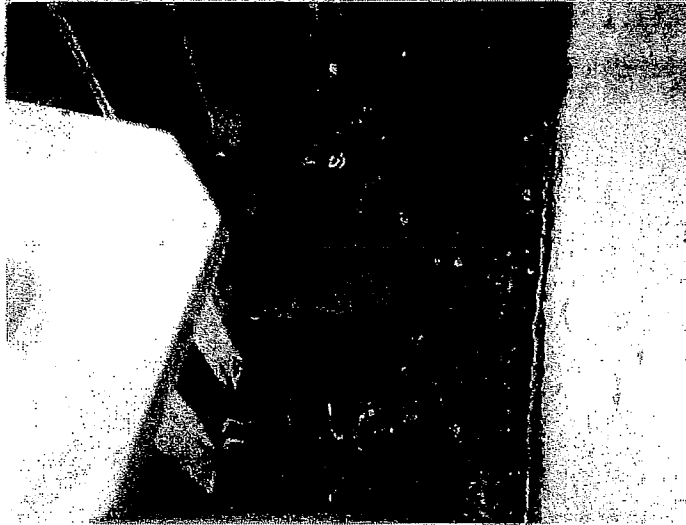


|                       |       |
|-----------------------|-------|
| Facility:             |       |
| County Home WWTP      |       |
| Photographer:         |       |
| Aaron Deeter          |       |
| Date:                 | Time: |
| 7/31/12               |       |
| Others Present:       |       |
|                       |       |
| Location/Description: |       |
| clarifier weir        |       |



|                       |       |
|-----------------------|-------|
| Facility:             |       |
| County Home WWTP      |       |
| Photographer:         |       |
| Aaron Deeter          |       |
| Date:                 | Time: |
| 7/31/12               |       |
| Others Present:       |       |
|                       |       |
| Location/Description: |       |
| clarifier scimmer     |       |

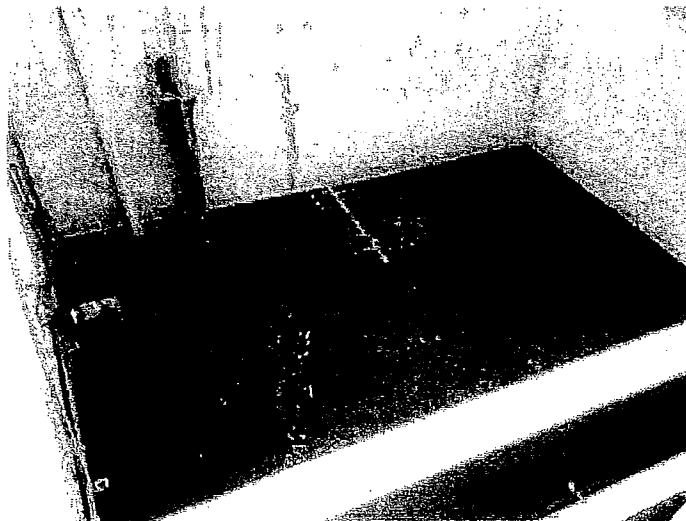




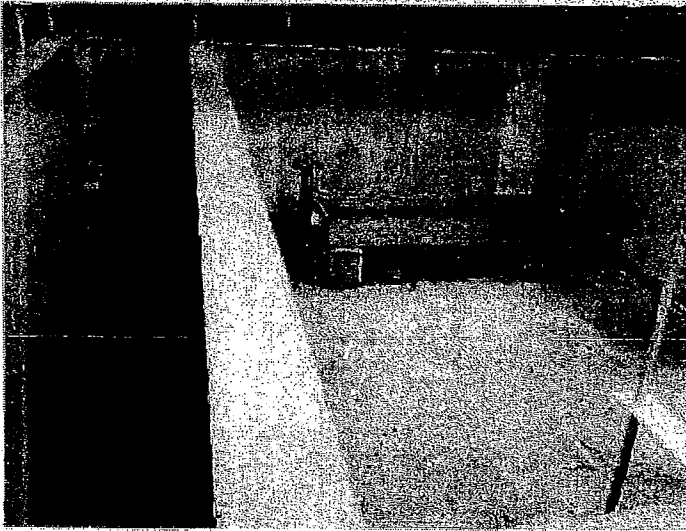
|                       |       |
|-----------------------|-------|
| Facility:             |       |
| County Home WWTP      |       |
| Photographer:         |       |
| Aaron Deeter          |       |
| Date:                 | Time: |
| 7/31/12               |       |
| Others Present:       |       |
|                       |       |
| Location/Description: |       |
| chlorine contact      |       |



|                          |       |
|--------------------------|-------|
| Facility:                |       |
| County Home WWTP         |       |
| Photographer:            |       |
| Aaron Deeter             |       |
| Date:                    | Time: |
| 7/31/12                  |       |
| Others Present:          |       |
|                          |       |
| Location/Description:    |       |
| outfall receiving stream |       |



|                       |       |
|-----------------------|-------|
| Facility:             |       |
| County Home WWTP      |       |
| Photographer:         |       |
| Aaron Deeter          |       |
| Date:                 | Time: |
| 7/31/12               |       |
| Others Present:       |       |
|                       |       |
| Location/Description: |       |
| 1 of 4 new SBR tanks  |       |



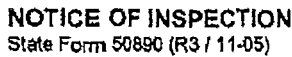
|                                                                    |       |
|--------------------------------------------------------------------|-------|
| Facility:<br><b>County Home WWTP</b>                               |       |
| Photographer:<br><b>Aaron Deeter</b>                               |       |
| Date:<br><b>7/31/12</b>                                            | Time: |
| Others Present:                                                    |       |
| Location/Description:<br><b>new UV and post aeration structure</b> |       |



|                                                     |       |
|-----------------------------------------------------|-------|
| Facility:<br><b>County Home WWTP</b>                |       |
| Photographer:<br><b>Aaron Deeter</b>                |       |
| Date:<br><b>7/31/12</b>                             | Time: |
| Others Present:                                     |       |
| Location/Description:<br><b>new ammonia machine</b> |       |



|                                                         |       |
|---------------------------------------------------------|-------|
| Facility:<br><b>County Home WWTP</b>                    |       |
| Photographer:<br><b>Aaron Deeter</b>                    |       |
| Date:<br><b>7/31/12</b>                                 | Time: |
| Others Present:                                         |       |
| Location/Description:<br><b>suspended solids set up</b> |       |



Telephone: (800) 451-6027 or (317) 232-8603

**Type of Inspection (may include more than one):**

☐ Complaint  
☐ Multi-Media Screening Evaluation  
☐ Other \_\_\_\_\_

These findings are considered preliminary and identify specific compliance issues discovered during the above-noted inspection that the designated agent of IDEM believes may be a violation of a statute(s), rule(s) or permit(s) issued by IDEM.

☐ No violations were discovered with respect to the particular items observed during the inspection.

☐ Violations were discovered but corrected during the inspection.

☐ Violations were discovered and require a submittal from you and/or follow-up inspection by IDEM.

☐ Violations were discovered and may subject you to an appropriate enforcement response.

☐ Additional information/review is required to evaluate overall compliance.

☒ Other / Comments (attachment may be included) *POTENTIAL PROBLEMS WERE OBSERVED OR DISCLOSED*

☒ Multi-media screening not conducted.

☐ No violations were discovered with respect to the limited multi-media screening conducted by IDEM.

☐ Potential violations were discovered but corrected during the inspection.

☐ Potential violations were discovered and may be further investigated.

Pollution prevention is the preferred means of environmental protection in Indiana. The goal of pollution prevention is to promote changes in business and commercial operation, especially manufacturing processes, so that Indiana businesses increase productivity, generate less environmental wastes, reduce their regulatory responsibilities and become more profitable. Your participation in Indiana's pollution prevention program is entirely voluntary. If you have any pollution prevention questions, you may contact our Office of Pollution Prevention and Technical Assistance (OPPTA) at (317) 232-8172 or (800) 988-7901, or visit OPPTA's Web site at [www.idem.IN.gov/oppta/p2/](http://www.idem.IN.gov/oppta/p2/). Would your company like to be contacted by IDEM's Office of Pollution Prevention and Technical Assistance? ☐ Yes ☒ No

In addition to the compliance assistance offered by IDEM's individual programs, IDEM's Compliance and Technical Assistance Program (CTAP) offers free, confidential compliance assistance to regulated entities, including small businesses and municipalities, throughout Indiana. In the future, if you would like to request free, confidential compliance assistance, call (317) 232-8172 or (800) 988-7901, or visit CTAP's Web site at [www.idem.IN.gov/ctap](http://www.idem.IN.gov/ctap).

A written inspection summary will be provided within 45 days. In accordance with IC 13-14-5-4, matters not evident to IDEM at the time of the inspection might not be included in either the verbal or written inspection summary.

| Printed Name | Signature                                                                           | Phone Number | Date    | Time                             |
|--------------|-------------------------------------------------------------------------------------|--------------|---------|----------------------------------|
| ARON DEETER  |  | 317-691-1915 | 7/31/12 | In: 9:30 A.m.<br>Out: 12:30 P.m. |

| Printed Name         | Signature                                                                           | Title       | Phone Number | Date       |
|----------------------|-------------------------------------------------------------------------------------|-------------|--------------|------------|
| ERIC L. KLOPFENSTEIN |  | MAINTENANCE | 765 463-3896 | 31-July-12 |

**DISTRIBUTION:** White - IDEM Public File; Canary - Office of Pollution Prevention and Technical Assistance (If OPPTA assistance is requested) or IDEM Representative (i.e., Inspector) (If OPPTA assistance is not requested); Pink - Owner/Agent Representative

### IDEM OWQ Wastewater Pre-Inspection Checklist

| Name and Location of Facility to be Inspected:                               |                                                                                                                                                           | NPDES Permit Number:                                                                                                          | Date to be Inspected:                                                                                                           | Inspector:   |
|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|--------------|
| Name:<br>County Home WWTP<br>Town/City: West Lafayette<br>County: Tippecanoe |                                                                                                                                                           | IN0038334                                                                                                                     | 7/31/2012                                                                                                                       | Aaron Deeter |
| 1.                                                                           | REVIEW RELEVANT PROGRAM PERMIT AND PERMIT APPLICATIONS                                                                                                    |                                                                                                                               | CHECK ONE:<br><input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A <input type="radio"/> N/E |              |
| IF NO, N/A, N/E:                                                             | Provide explanation or description why:                                                                                                                   |                                                                                                                               |                                                                                                                                 |              |
| IF YES:                                                                      | Info Source/Date Reviewed:<br>Inspector File<br>7/31/2012                                                                                                 | Inspector Notations Pertinent to Upcoming Inspection:<br>Inspector familiar with permit.<br>Permit Expiration Date: 6/30/2015 |                                                                                                                                 |              |
| 2.                                                                           | REVIEW PRIOR INSPECTION HISTORY & REPORTS RELEVANT TO THE PROGRAM INSPECTION, PARTICULARLY ANY OUTSTANDING OR UNRESOLVED ISSUES.                          |                                                                                                                               | CHECK ONE:<br><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A <input type="radio"/> N/E |              |
| IF NO, N/A, N/E:                                                             | Explanation:                                                                                                                                              |                                                                                                                               |                                                                                                                                 |              |
| IF YES:                                                                      | Info Source/Date Reviewed:<br>Inspector File<br>7/31/2012                                                                                                 | Inspector Notations Pertinent to Upcoming Inspection:                                                                         |                                                                                                                                 |              |
| 3.                                                                           | REVIEW PRIOR COMPLIANCE AND ENFORCEMENT HISTORY RELEVANT TO PROGRAM INSPECTION, PARTICULARLY: WARNINGS AND MINOR VIOLATIONS, FORMAL ACTIONS (OE &/OR EPA) |                                                                                                                               | CHECK ONE:<br><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A <input type="radio"/> N/E |              |
| IF NO, N/A, N/E:                                                             | Explanation:                                                                                                                                              |                                                                                                                               |                                                                                                                                 |              |
| IF YES:                                                                      | Info Source/Date Reviewed:                                                                                                                                | Inspector Notations Pertinent to Upcoming Inspection:                                                                         |                                                                                                                                 |              |
| 4.                                                                           | REVIEW FACILITY RESPONSES TO ALL OF THE ABOVE.                                                                                                            |                                                                                                                               | CHECK ONE:<br><input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A <input type="radio"/> N/E |              |
| IF NO, N/A, N/E:                                                             | Explanation:                                                                                                                                              |                                                                                                                               |                                                                                                                                 |              |
| IF YES:                                                                      | Info Source/Date Reviewed:<br>Inspector File<br>7/31/2012                                                                                                 | Inspector Notations Pertinent to Upcoming Inspection:<br>No issues                                                            |                                                                                                                                 |              |
| 5.                                                                           | REVIEW FACILITY RECORDS, REPORTS, SELF-MONITORING DATA CURRENTLY AVAILABLE.                                                                               |                                                                                                                               | CHECK ONE:<br><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A <input type="radio"/> N/E |              |
| IF NO, N/A, N/E:                                                             | Explanation:<br>Will review on site.                                                                                                                      |                                                                                                                               |                                                                                                                                 |              |
| IF YES:                                                                      | Info Source/Date Reviewed:<br>Select or type...                                                                                                           | Inspector Notations Pertinent to Upcoming Inspection:                                                                         |                                                                                                                                 |              |
| 6.                                                                           | REVIEW MAPS SHOWING FACILITY LAYOUT AND WASTE                                                                                                             |                                                                                                                               | CHECK ONE:                                                                                                                      |              |

|                        |                                                           |                                                                                                                                 |
|------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
|                        | MANAGEMENT/<br>DISCHARGE SITES.                           | <input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A <input type="radio"/> N/E               |
| IF NO,<br>N/A,<br>N/E: | Explanation:<br>None in file                              |                                                                                                                                 |
| IF YES:                | Info Source/Date Reviewed:<br>Select or type...           | Inspector Notations Pertinent to Upcoming Inspection:                                                                           |
| 7.                     | REVIEW RECORDS OF CITIZEN'S COMPLAINTS.                   | CHECK ONE:<br><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A <input type="radio"/> N/E |
| IF NO,<br>N/A,<br>N/E: | Explanation:<br>None Recent                               |                                                                                                                                 |
| IF YES:                | Info Source/Date Reviewed:<br>Select or type...           | Inspector Notations Pertinent to Upcoming Inspection:                                                                           |
| 8.                     | REVIEW ANY PROCESS INFORMATION.                           | CHECK ONE:<br><input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A <input type="radio"/> N/E |
| IF NO,<br>N/A,<br>N/E: | Explanation:                                              |                                                                                                                                 |
| IF YES:                | Info Source/Date Reviewed:<br>Inspector File<br>7/31/2012 | Inspector Notations Pertinent to Upcoming Inspection:<br>permit facility discription                                            |
| 9.                     | REVIEW AND DETERMINE APPLICABLE REQUIREMENTS.             | CHECK ONE:<br><input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A <input type="radio"/> N/E |
| IF NO,<br>N/A,<br>N/E: | Explanation:                                              |                                                                                                                                 |
| IF YES:                | Info Source/Date Reviewed:<br>Inspector File<br>7/31/2012 | Inspector Notations Pertinent to Upcoming Inspection:<br>NPDES                                                                  |

ADDITIONAL COMMENTS:



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

*We Protect Hoosiers and Our Environment.*

*Michael R. Pence.*  
Governor

April 25, 2013

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027

[www.idem.IN.gov](http://www.idem.IN.gov)

Mr. Scott Lods, Owner  
American Suburban Utilities  
3350 W. 250 N.  
West Lafayette, Indiana 47906

Dear Mr. Lods:

Re: Inspection Summary Letter  
County Home WWTP  
NPDES Permit No. IN0038334  
West Lafayette, Tippecanoe County

An inspection of the above-referenced facility or location was conducted by a representative of the Indiana Department of Environmental Management, Office of Water Quality, pursuant to IC 13-18-3-9. A summary of the inspection is provided below:

Date(s) of Inspection: April 08, 2013  
Type of Inspection: Compliance Evaluation Inspection  
Inspection Results: Potential problems were discovered or observed.

A copy of the NPDES Wastewater Facility Inspection Report is enclosed for your records. Please direct any response to this letter and any questions to Aaron Deeter at 317-691-1915 or by email to [adeeter@idem.IN.gov](mailto:adeeter@idem.IN.gov).

Sincerely,

Donald R. Daily, Inspections Section Chief  
Compliance Branch  
Office of Water Quality

Enclosure



# NPDES Wastewater Facility Inspection Report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

|                                                                                                                                  |                                          |                                                                                                                          |                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| NPDES Permit Number:<br><b>IN0038334</b>                                                                                         | Facility Type:<br><b>Mixed Ownership</b> | Facility Classification:<br><b>Minor</b>                                                                                 | TEMPO AI ID<br><b>55308</b>                                                                          |
| Date(s) of Inspection: <b>April 08, 2013</b>                                                                                     |                                          |                                                                                                                          |                                                                                                      |
| Type of Inspection: <b>Compliance Evaluation Inspection</b>                                                                      |                                          |                                                                                                                          |                                                                                                      |
| Name and Location of Facility Inspected:<br><b>County Home WWTP</b><br><b>550 SALISBURY RD</b><br><b>West Lafayette IN 47906</b> |                                          | Receiving Waters:<br><b>Cole Creek</b>                                                                                   | Permit Expiration Date:<br><b>6/30/2015</b><br>Design Flow:<br><b>0.1MGD</b>                         |
| On Site Representative(s):<br>First Name Last Name Title Email Phone<br><b>Eric Klopfenstein Maintenance 765-463-3856</b>        |                                          |                                                                                                                          |                                                                                                      |
| Certified Operator:<br><b>Dennis Crandall</b>                                                                                    | Number:<br><b>15007</b>                  | Class:<br><b>IV</b>                                                                                                      | Effective Date:<br><b>7-1-12</b><br>Expiration Date:<br><b>6-30-14</b><br>Hours/Week:<br><b>5-10</b> |
| Responsible Official:<br><b>Mr. Scott Lods, Owner</b><br><b>3350 W. 250 N.</b>                                                   |                                          | Permittee: <b>American Suburban Utilities</b><br>Email:<br>Phone: <b>765-463-3857</b><br>Fax:<br>Contacted?<br><b>No</b> |                                                                                                      |
| West Lafayette, Indiana 47906                                                                                                    |                                          |                                                                                                                          |                                                                                                      |

## INSPECTION FINDINGS

- ☐ No violations were discovered with respect to the particular items observed during the inspection. (5)
- ☐ Violations were discovered but corrected during the inspection. (4)
- ☒ Potential problems were discovered or observed. (3)
- ☐ Violations were discovered and require a submittal from you and/or a follow-up inspection by IDEM. (2)
- ☐ Violations were discovered and may subject you to an appropriate enforcement response. (1)

## AREAS EVALUATED DURING INSPECTION

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

|   |                          |   |               |   |                  |   |                            |
|---|--------------------------|---|---------------|---|------------------|---|----------------------------|
| S | Receiving Waters         | S | Facility/Site | M | Self-Monitoring  | N | Compliance Schedules       |
| S | Effluent Appearance      | S | Operations    | S | Flow Measurement | N | Pretreatment               |
| S | Permit                   | S | Maintenance   | S | Laboratory       | S | Effluent Limits Compliance |
| S | CSO/SSO (Sewer Overflow) | S | Sludge        | S | Records/Reports  | N | Other:                     |

## DETAILED AREA EVALUATIONS

### Receiving Waters:

S 1. The receiving stream is visibly free of excessive deposits of settled solids, floating debris, oil, scum, or foam.

### Comments:

The receiving stream was observed at the outfall and was free of notable foam, algae, sheen or solids.

### Effluent Appearance:

S 1. Treated effluent is essentially free of excessive deposits of settled solids, floating debris, oil, scum, or foam.

### Comments:

The effluent was observed at the final flow meter weir and at the outfall pipe and was clear and free of color at the time of the inspection.

### Permit:

- N 1. A permit renewal application was submitted to IDEM at least 180 days prior to the expiration date.
- S 2. The facility description, including the receiving waters, is complete and accurate.
- N 3. The permit has been properly transferred.

### Comments:

The facility has a valid permit and the facility description, including units of treatment and receiving stream, is accurate.

**CSO/SSO:**

- N 1. CSO structures are adequately monitored and maintained.
- S 2. The facility has had no unauthorized sewer overflow events in the past six months.
- N 3. SSO and dry weather CSO discharges have been properly reported.
- N 4. Any adverse impacts from SSO and CSO discharges have been properly mitigated.

**Comments:**

Facility's collection system is comprised of 100% separated sanitary sewers by design with no overflow or bypass points and have not reported any SSO events in last twelve months.

**Facility/Site:**

- S 1. The facility has standby power or equivalent provision.
- S 2. An adequate alarm or notification system for power or equipment failure is available for the treatment facility.
- S 3. Safe and adequate access is provided for inspection of all treatment units and outfalls.
- 4. List any safety concerns noted during the inspection in the box below:

**Comments:**

The facility grounds are well maintained and access to units of treatment and outfall was adequate. The facility has an on site generator that runs entire plant during power outages and automatically runs every Friday to insure its readiness. The facility has a visual and audible alarm for the one lift station and units of treatment at the plants main office.

**Operations:**

- S 1. All facilities and systems necessary for achieving compliance with the terms and conditions of the permit are operated efficiently, including:
  - a. An anticipated bypass report was submitted to IDEM for steps of treatment taken out of service.
- S 2. An adequate, qualified operating staff is provided to carry out the operation of the facility, including:
  - a. Certified Operator's on-site attendance and/or qualified operations personnel attendance is adequate.
  - b. Adequate documentation of operational activities, including system monitoring and cleaning.
  - c. Adequate funding to ensure proper operation.
- S 3. Solids handling procedures include:
  - a. Sufficient solids are wasted from the treatment system, in a timely manner, to maintain process efficiency.
  - b. Wasting of solids is based on appropriate operational targets and valid process control testing.
  - c. Adequate documentation of solids removal, handling, or control is available for review.
- S 4. The facility is operated efficiently during wet weather events.

**Comments:**

At the time of inspection all units of treatment appeared to be operating efficiently. The EQ tank had good color and mixing the day of inspection. The two aeration tanks had good color and mixing and appeared to be operating properly. The two secondary clarifiers and weirs were clean and clear except for a few grease balls on the surface. The chlorine and dechlor system was in service and working. The wasting schedule is determined by the certified operator and e-mailed to onsite personnel each week. Then onsite personnel waste by schedule and record on a daily wasting log.

**Maintenance:**

- S 1. A maintenance record system has been established and includes maintenance/repair history and preventative maintenance plan.
- S 2. Facility maintenance activities appear adequate.
- S 3. Lift station procedures include:
  - a. Adequate alarm or notification system for equipment failure.
  - b. Adequate inspections, cleaning, and maintenance activities.
  - c. Adequate documentation of all procedures
- S 4. Collection system maintenance activities appear adequate.

**Comments:**

Maintenance records for units of treatment and lift stations reviewed during inspection. Maintenance activities appear adequate and are up to date in the maintenance manual.



**Sludge:**

- S 1. Sludges, screenings, and slurries are handled and disposed of properly.

**Comments:**

A records review during the inspection showed adequate wasting, handling, and disposal of sludge. The facility hauls sludge from site and stores it at Carriage Estates WWTP to be land applied by Merrell Bros. The facility last hauled out a total of 20,000 gals. of sludge on 9-24-13 and 40,000 gals. sludge between the 16th and 18th of October 2012 to Carriage Estates. The facility will haul more sludge this spring to Carriage Estates.

**Self-Monitoring:**

- S 1. Samples are taken at pre-designated locations and are representative.  
S 2. Flow-proportioned samples are obtained where needed.  
S 3. The facility conducts sampling of all waste streams, including type and frequency, as required in the permit.  
S 4. Sample collection procedures, including automatic sampling, include:  
a. Samples are refrigerated during compositing.  
b. Proper preservation techniques are used.  
c. Containers and holding times conform to 40 CFR 136.3.  
M 5. Sample documentation is adequate and includes:  
a. Date, time, and location of sampling.  
b. Name of individual performing sampling.  
c. Instantaneous flow for flow-weighted aliquots.  
N 6. NPDES Permit Whole Effluent Toxicity (WET) testing requirements are being met.

**Comments:**

The Self Monitoring Program was rated as marginal due to the facility not recording the temperature of the composite sampler. At the time of inspection the facility had no thermometer in the composite sampler fridge and had not recorded the temperature of the fridge on the sample sheet since January. The composite sampler fridge appeared to be working at the time of inspection.

**Flow Measurement:**

- S 1. Flow is properly monitored as required by the permit.  
S 2. Flow charts and calibration records are available for review.  
S 3. Effluent flow is used in calculating effluent loadings.

**Comments:**

The facility's flow monitoring program, including all documentation, is adequate and representative. The effluent flow meter was last calibrated on 7-5-2012 by B.L. Anderson.

**Laboratory:**

- S 2. The laboratory practices and protocol reviewed were adequate, including:  
a. Written laboratory QA/QC manual.  
b. Chain-of-Custody procedures followed.  
c. Samples are properly stored.  
d. Approved analytical methods are used.  
e. Calibration and maintenance of instruments is adequate.  
f. QA/QC procedures are adequate.  
g. Dates of analyses.  
h. Name of person performing analyses.

**Comments:**

Analyses for all parameters of the permit are performed at the facility's laboratory. Reviewed all applicable bench sheets on site and all appeared to be accurate and complete. The facility analyzes Carriage Estates parameters in the same batch as County Home parameters and was only doing duplicates for TSS and CBOD for Carriage Estates, this frequency is adequate QA/QC for the lab. However, the facility was recommended to alternate duplicates between the two facilities to show each facility is meeting QA/QC adequately. Calibration records for laboratory equipment are up to date, temperature monitoring is recorded on bench sheets and QA/QC is adequate. The bench scales were last calibrated on 1-18-13 by Mechanical Calibration Services.

**Records/Reports:**

The following records/reports were reviewed:

DMRs for the period of July 2012 to February 2013 were reviewed as part of the inspection.

- S 1. All facility records for the period including the previous three years were available for review.  
S 2. DMRs, MROs/MMRs, and CSODMRs are completed properly and accurately including:  
a. "No Ex" column is accurate.  
b. Signatory requirements are met.  
c. Reports are prepared by or under the direction of a certified operator.

**Comments:**

The requested records were available and appear complete and accurate.

**Compliance Schedules:**

- N 1. The NPDES Permit Schedule of Compliance monitoring and reporting milestones have been met.  
N 2. Agreed Order compliance milestones have been met.

**Comments:**

The facility has no compliance schedules or enforcement actions at this time. When the new Class III 1.0 MGD plant is put into service the facility will have a schedule of compliance for Mercury and will need to submit progress reports for the monitoring of Mercury.

**Pretreatment:**

- N 1. The facility operates without significant interference from industrial or other sources of toxic substances.  
N 2. For both Delegated and Non-Delegated pretreatment programs:  
a. Industrial or commercial dischargers are regulated as required.  
b. The permittee enforces the Sewer Use Ordinance and follows the Enforcement Guide.  
c. The permittee submitted its annual pretreatment report to IDEM by April 1.  
N 3. Non-Delegated pretreatment programs have:  
a. Developed or reevaluated the Sewer Use Ordinance and submitted it to IDEM.  
b. Developed or reevaluated the Enforcement Response Guide and submitted it to IDEM.  
N 4. Pretreatment records were adequate and include:  
a. Inventory of Industrial Waste Contributors.  
b. Monitoring data.  
c. Inspection Reports.  
d. Compliance status records.  
e. Enforcement actions.

**Comments:**

Facility has no industrial sources

**Effluent Limits Compliance:**

Yes 1. Were DMRs reviewed as part of the inspection?

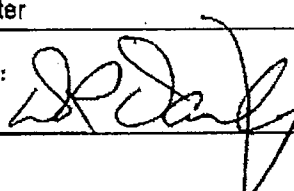
DMRs for the period of July 2012 to February 2013 were reviewed as part of the inspection.

No 2. Were violations noted during the review of DMRs?

N 3. Bypass and Noncompliance reporting.

**Comments:**

A records review during the inspection indicated no effluent violations have been reported during the period reviewed.

|                                                                                                      |                               |                               |
|------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------|
| <b>IDEM REPRESENTATIVE</b>                                                                           |                               |                               |
| Inspector Name:<br>Aaron Deeter                                                                      | Email:<br>adeeter@idem.IN.gov | Phone Number:<br>317-691-1915 |
| <b>IDEM MANAGER REVIEW</b>                                                                           |                               |                               |
| IDEM Manager:<br> | Date:<br>4-22-13              |                               |



# NOTICE OF INSPECTION FOR WASTEWATER FACILITIES

State Form 55071 (8-12)  
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
Office of Water Quality, Wastewater Facilities Inspection Section

This is to notify you that on 4/8/13 an inspection of COUNTY HOME WWTP  
(TIPECAANOE COUNTY) (NPDES # IN 0038334) was conducted by the undersigned representative of the Indiana Department of Environmental Management (IDEM), Office of Water Quality.

## Type of Inspection:

- ☒ Compliance Evaluation Inspection  
☐ Reconnaissance Inspection  
☐ Industrial User Inspection

- ☐ Complaint Investigation  
☐ Multi-Media Screening Evaluation  
☐ Other \_\_\_\_\_

## Preliminary Inspection/Screening Findings:

These findings are considered preliminary and may identify compliance issues discovered during the inspection that the designated agent of IDEM believes to be a violation of a statute(s), rule(s) or permit(s) issued by IDEM.

## Single Media Inspection:

- ☐ No violations were discovered with respect to the particular items observed during the inspection.  
☐ Violations were discovered but corrected during the inspection.  
☐ Violations were discovered and required a submittal from you and/or follow-up inspection by IDEM.  
☐ Violations were discovered and may subject you to an appropriate enforcement response.  
☐ Additional information/review is required to evaluate overall compliance.  
☒ Potential problems were discovered or observed.

## Multi-Media Screening (Please note that a multi-media screening is not a comprehensive evaluation of the compliance status of the facility):

- ☒ Multi-media screening not conducted.  
☐ No violations were discovered with respect to the limited multi-media screening conducted by IDEM.  
☐ Potential violations were discovered but corrected during the inspection.  
☐ Potential violations were discovered and may be further investigated.

## Pollution Prevention:

Pollution prevention is the preferred means of environmental protection in Indiana. The goal of pollution prevention is to promote changes in business and commercial operation, especially manufacturing processes, so that Indiana businesses increase productivity, generate less environmental wastes, reduce their regulatory responsibilities and become more profitable. Your participation in Indiana's pollution prevention program is entirely voluntary. If you have any pollution prevention questions, you may contact our Office of Pollution Prevention & Technical Assistance (OPPTA) at (317) 232-8172 or (800) 988-7901, or visit OPPTA's website at [www.idem.IN.gov/5489.htm](http://www.idem.IN.gov/5489.htm).

## Compliance Assistance:

In addition to the assistance offered by IDEM's individual programs, IDEM's Compliance and Technical Assistance Program (CTAP) offers free, confidential compliance assistance to entities throughout Indiana. If you would like to request assistance, call (317) 232-8172 or (800) 988-7901, or visit CTAP's website at [www.idem.IN.gov/ctap/](http://www.idem.IN.gov/ctap/).

A summary of violations and concerns noted during the inspection was verbally communicated to the undersigned representative during the inspection. The facility should correct any violations noted as soon as possible. Violations identified and corrected during the inspection may still be cited as violations.

A written inspection summary will be provided within forty-five (45) days. Matters not evident to IDEM at the time of the inspection might not be included in either the verbal or written inspection summary.

## IDEM Representative:

| Printed Name | Signature | Phone Number | Date   | Time                              |
|--------------|-----------|--------------|--------|-----------------------------------|
| AARON DEETER |           | 317-691-1915 | 4/8/13 | In: 10:20 A.M.<br>Out: 12:30 P.M. |

## Owner/Agent Representative:

| Printed Name      | Signature | Title       | Phone Number | Date       |
|-------------------|-----------|-------------|--------------|------------|
| ERIC KLOPFENSTEIN |           | MAINTENANCE | 765-463-3856 | 8-APRIL-13 |



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Michael R. Pence  
Governor

Thomas W. Easterly  
Commissioner

February 21, 2014

Mr. Scot Lods, President  
American Suburban Utilities  
3350 W. 250 N.  
West Lafayette, Indiana 47906

Dear Mr. Lods:

Re: Inspection Summary Letter  
County Home Wastewater Treatment Plant  
NPDES Permit No. IN0038334  
West Lafayette, Tippecanoe County

An inspection of the above-referenced facility or location was conducted by a representative of the Indiana Department of Environmental Management, Office of Water Quality, pursuant to IC 13-18-3-9. A summary of the inspection is provided below:

Date(s) of Inspection: February 11, 2014  
Type of Inspection: Reconnaissance Inspection  
Inspection Results: Potential problems were discovered or observed.

A copy of the NPDES Wastewater Facility Inspection Report is enclosed for your records. Please direct any response to this letter and any questions to Kim Rohr at 317-719-1666 or by email to [krohr@idem.IN.gov](mailto:krohr@idem.IN.gov).

Sincerely,

for

Donald R. Daily, Inspections Section Chief  
Compliance Branch  
Office of Water Quality

Enclosure



# NPDES Wastewater Facility Inspection Report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                   |                                                                                                                      |                                                                    |   |                  |   |                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---|------------------|---|----------------------------|
| NPDES Permit Number:<br><b>IN0038334</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Facility Type:<br>Mixed Ownership | Facility Classification:<br>Minor                                                                                    | TEMPO AI ID<br>55308                                               |   |                  |   |                            |
| Date(s) of Inspection: February 11, 2014                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                   |                                                                                                                      |                                                                    |   |                  |   |                            |
| Type of Inspection: Reconnaissance Inspection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                   |                                                                                                                      |                                                                    |   |                  |   |                            |
| Name and Location of Facility Inspected:<br><b>County Home Wastewater Treatment Plant</b><br>550 Salisbury Road<br>West Lafayette IN 47906                                                                                                                                                                                                                                                                                                                                                                                                                            |                                   | Receiving Waters:<br>Cole Creek                                                                                      | Permit Expiration Date:<br>6/30/2015<br>Design Flow:<br>0.1MGD     |   |                  |   |                            |
| On Site Representative(s):<br>First Name Last Name Title Email Phone<br>Ed Serowka Engineer<br>Eric Klopfenstein Maintenance 765-463-3856                                                                                                                                                                                                                                                                                                                                                                                                                             |                                   |                                                                                                                      |                                                                    |   |                  |   |                            |
| Was a verbal summary of findings presented to the on-site representative? <b>Yes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                   |                                                                                                                      |                                                                    |   |                  |   |                            |
| Certified Operator:<br>Dennis Crandall                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Number:<br>15007                  | Class:<br>IV                                                                                                         | Effective Date:<br>7-1-12<br>Expiration Date:<br>6-30-14<br>Email: |   |                  |   |                            |
| Responsible Official:<br>Mr. Scot Lods, President<br>3350 W. 250 N.<br>West Lafayette, Indiana 47906                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                   | Permittee: American Suburban Utilities<br>Email: asu-inc@hotmail.com<br>Phone: 765-463-3857<br>Fax: Contacted?<br>No |                                                                    |   |                  |   |                            |
| <b>INSPECTION FINDINGS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                   |                                                                                                                      |                                                                    |   |                  |   |                            |
| <input type="radio"/> No violations were discovered with respect to the particular items observed during the inspection. (5)<br><input type="radio"/> Violations were discovered but corrected during the inspection. (4)<br><input checked="" type="radio"/> Potential problems were discovered or observed. (3)<br><input type="radio"/> Violations were discovered and require a submittal from you and/or a follow-up inspection by IDEM. (2)<br><input type="radio"/> Violations were discovered and may subject you to an appropriate enforcement response. (1) |                                   |                                                                                                                      |                                                                    |   |                  |   |                            |
| <b>AREAS EVALUATED DURING INSPECTION</b><br>(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                   |                                                                                                                      |                                                                    |   |                  |   |                            |
| N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Receiving Waters                  | S                                                                                                                    | Facility/Site                                                      | S | Self-Monitoring  | N | Compliance Schedules       |
| S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Effluent Appearance               | S                                                                                                                    | Operations                                                         | S | Flow Measurement | N | Pre-treatment              |
| S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Permit                            | M                                                                                                                    | Maintenance                                                        | M | Laboratory       | S | Effluent Limits Compliance |
| N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | CSO/SSO (Sewer Overflow)          | S                                                                                                                    | Sludge                                                             | M | Records/Reports  | N | Other:                     |
| <b>DETAILED AREA EVALUATIONS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                   |                                                                                                                      |                                                                    |   |                  |   |                            |
| <b>Receiving Waters:</b><br>Comments:<br>Due to snow receiving stream was not evaluated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                   |                                                                                                                      |                                                                    |   |                  |   |                            |
| <b>Effluent Appearance:</b><br>Comments:<br>The effluent was clear and free of color at the time of the inspection.                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                   |                                                                                                                      |                                                                    |   |                  |   |                            |
| <b>Permit:</b><br>Comments:<br>The address listed for the facility is 550 N Salisbury Street, it is actually 5611 N 50. This needs to be corrected on the next permit application.                                                                                                                                                                                                                                                                                                                                                                                    |                                   |                                                                                                                      |                                                                    |   |                  |   |                            |
| <b>Facility/Site:</b><br>Comments:<br>The facility has a standby generator that is tested on a regular basis. The facility has a visible/audible alarm.                                                                                                                                                                                                                                                                                                                                                                                                               |                                   |                                                                                                                      |                                                                    |   |                  |   |                            |
| <b>Operations:</b><br>Comments:<br>The certified operator stated he would no longer be the certified operator at the end of the month. The facility will need to submit to IDEM who the new certified operator will be.                                                                                                                                                                                                                                                                                                                                               |                                   |                                                                                                                      |                                                                    |   |                  |   |                            |

**Maintenance:**

## Comments:

Maintenance was rated as marginal. The facility needs to improve upon the preventative maintenance documentation/plan that they have.

**Sludge:**

## Comments:

A records review during the inspection showed adequate wasting, handling, and disposal of sludge. Merrell Brothers hauled sludge from the facility on December 3, 4, and 5, 2013 to Carriage Estates Wastewater Treatment Plant to be later land applied.

**Self-Monitoring:**

## Comments:

The Self Monitoring Program was rated as satisfactory. All sampling practices, including raw and intermediate unit process testing, are conducted accurately and at the frequency required by the permit. The auto-sampler was out of service. The operator stated he was taking two grab samples and compositing based on flow.

**Flow Measurement:**

## Comments:

The effluent flow meter was last calibrated 04/30/13 by BL Anderson.

**Laboratory:**

## Comments:

Laboratory was rated as marginal due to lack of QA/QC. The operator runs samples for another plant as well at this laboratory and run duplicates on those. The operator should alternate duplicates between both plants. The operator should also perform a known standard check on the Ammonia meter.

**Records/Reports:**

The following records/reports were reviewed:

DMRs for the period of March 2013 to December 2013 were reviewed as part of the inspection.

## Comments:

Record/Reports was rated as marginal due to the DMR/MRO for September 2013 not being available on-site. Also, March through June 2013 were all reported on DMRs dated 2012.

**Effluent Limits Compliance:**

Yes 1. Were DMRs reviewed as part of the inspection?

DMRs for the period of March 2013 to December 2013 were reviewed as part of the inspection.

No 2. Were violations noted during the review of DMRs?

N 3. Bypass and Noncompliance reporting.

## Comments:

There were no reported effluent violations for the period reviewed.

**IDEM REPRESENTATIVE**

Inspector Name:

Email:

Phone Number:

Kim Rohr

krohr@idem.IN.gov

317-719-1666

**IDEM MANAGER REVIEW**

IDEM Manager:

Date:

~~Don Daily~~ *Andy Schmidt*

*2-19-14*



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Michael R. Pence  
Governor

Thomas W. Easterly  
Commissioner

October 07, 2014

Via Email to: [asu-inc@hotmail.com](mailto:asu-inc@hotmail.com)

Mr. Scot Lods, President  
American Suburban Utilities  
3350 W. 250 N.  
West Lafayette, Indiana 47906

Dear Mr. Lods:

### Re: Inspection Summary/ Violation Letter

County Home Wastewater Treatment Plant  
NPDES Permit No. IN0038334  
West Lafayette, Tippecanoe County

An inspection of the above-referenced facility or location was conducted by a representative of the Indiana Department of Environmental Management, Office of Water Quality, pursuant to IC 13-18-3-9. A summary of the inspection is provided below:

Date(s) of Inspection: September 29, 2014  
Type of Inspection: Compliance Evaluation Inspection  
Inspection Results: Violations were observed.

IDEM recommends the permittee begin the process of registering for NetDMR. Information on NetDMR can be obtained at <http://www.in.gov/idem/6765.htm>.

The following concerns were noted:

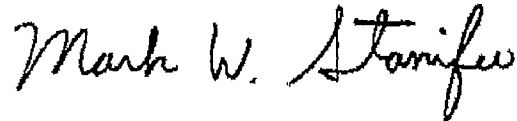
The Effluent Limits Compliance area was rated unsatisfactory due to the following self-reported violations of the limits detailed in Part I. A. of the NPDES Permit:

| Month | Year | Outfall | Parameter        | Type             | Conc./Loading | Number |
|-------|------|---------|------------------|------------------|---------------|--------|
| Feb   | 2014 | 001     | TSS              | Max. Wkly. Avg.  | Loading       | 2      |
| Feb   | 2014 | 001     | TSS              | Monthly Avg.     | Loading       | 1      |
| Feb   | 2014 | 001     | Ammonia Nitrogen | Max. Wkly. Avg.  | Loading       | 1      |
| Apr   | 2014 | 001     | E. coli          | Monthly Geo. Mn. | Conc.         | 1      |
| Jul   | 2014 | 001     | Chlorine         | Daily Minimum    | Conc.         | 1      |

(Over)

Within 30 days of receipt of this letter, a written detailed response documenting correction of each of the concerns listed above and/or a plan for assuring future compliance must be submitted to this office. Failure to respond adequately to this letter may result in formal enforcement action. Please direct your response to this letter to the attention of Mark Stanifer, at our letterhead address or via email to [wwViolationResponse@idem.IN.gov](mailto:wwViolationResponse@idem.IN.gov). Any questions should be directed to Kim Rohr at 317-719-1666 or by email to [krrohr@idem.IN.gov](mailto:krrohr@idem.IN.gov). Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink that reads "Mark W. Stanifer". The signature is written in a cursive style with a large, stylized "S" at the end.

Mark W. Stanifer, Chief  
Compliance Branch  
Office of Water Quality

Enclosure





# NPDES Wastewater Facility Inspection Report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------------------------------------|----------------------------|
| NPDES Permit Number:<br><b>IN0038334</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          | Facility Type:<br><b>Mixed Ownership</b> |                     | Facility Classification:<br><b>Minor</b>                                                                                         |                                    | TEMPO AI ID<br><b>55308</b>                 |                            |
| Date(s) of Inspection: <b>September 29, 2014</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| Type of Inspection: <b>Compliance Evaluation Inspection</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| Name and Location of Facility Inspected:<br><b>County Home Wastewater Treatment Plant</b><br><b>550 Salisbury Road</b><br><b>West Lafayette IN 47906</b>                                                                                                                                                                                                                                                                                                                                                                                             |                          |                                          |                     | Receiving Waters:<br><b>Cole Creek</b>                                                                                           |                                    | Permit Expiration Date:<br><b>6/30/2015</b> |                            |
| County: <b>Tippecanoe</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                          |                     |                                                                                                                                  |                                    | Design Flow:<br><b>0.1MGD</b>               |                            |
| On Site Representative(s):<br>First Name: <b>Dennis</b> Last Name: <b>Crandall</b> Title: <b>Operator</b> Email: <b>dc0866@yahoo.com</b> Phone: <b>765-426-8415</b>                                                                                                                                                                                                                                                                                                                                                                                  |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| Was a verbal summary of findings presented to the on-site representative? <b>Yes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| Certified Operator:<br><b>Dennis Crandall</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          | Number:<br><b>15007</b>                  | Class:<br><b>IV</b> | Effective Date:<br><b>7-1-14</b>                                                                                                 | Expiration Date:<br><b>6-30-16</b> | Email:<br><b>dc0866@yahoo.com</b>           |                            |
| Responsible Official:<br><b>Mr. Scot Lods, President</b><br><b>3350 W. 250 N.</b><br><b>West Lafayette, Indiana 47906</b>                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                          |                     | Permittee: <b>American Suburban Utilities</b><br>Email: <b>asu-inc@hotmail.com</b><br>Phone: <b>765-463-3857</b><br>Fax: <b></b> |                                    |                                             |                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                                          |                     | Contacted?<br><b>No</b>                                                                                                          |                                    |                                             |                            |
| <b>INSPECTION FINDINGS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| <input type="radio"/> Conditions evaluated were found to be satisfactory at the time of the inspection. (5)<br><input type="radio"/> Violations were discovered but corrected during the inspection. (4)<br><input type="radio"/> Potential problems were discovered or observed. (3)<br><input checked="" type="radio"/> Violations were discovered and require a submittal from you and/or a follow-up inspection by IDEM. (2)<br><input type="radio"/> Violations were discovered and may subject you to an appropriate enforcement response. (1) |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| <b>AREAS EVALUATED DURING INSPECTION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Receiving Waters         | S                                        | Facility/Site       | S                                                                                                                                | Self-Monitoring                    | N                                           | Compliance Schedules       |
| S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Effluent Appearance      | S                                        | Operation           | S                                                                                                                                | Flow Measurement                   | S                                           | Pretreatment               |
| S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Permit                   | M                                        | Maintenance         | M                                                                                                                                | Laboratory                         | U                                           | Effluent Limits Compliance |
| S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | CSO/SSO (Sewer Overflow) | S                                        | Sludge              | M                                                                                                                                | Records/Reports                    | N                                           | Other:                     |
| <b>DETAILED AREA EVALUATIONS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| IDEM recommends the permittee begin the process of registering for NetDMR. Information on NetDMR can be obtained at <a href="http://www.in.gov/idem/6765.htm">http://www.in.gov/idem/6765.htm</a> .                                                                                                                                                                                                                                                                                                                                                  |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| <b>Receiving Waters:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| S 1. The receiving stream is visibly free of excessive deposits of settled solids, floating debris, oil, scum, or billowy foam.                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| Comments:<br>The receiving stream was free of notable foam, algae or solids.                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| <b>Effluent Appearance:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| S 1. Treated effluent is free of excessive solids, floating debris, oil, scum, or billowy foam.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| Comments:<br>The effluent was clear and free of color at the time of the inspection.                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| <b>Permit:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| S 1. Does the facility have a current copy of the permit available for reference?                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| N 2. If the permit expires within 180 days, has a renewal application been submitted?                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |
| S 3. Receiving waters are accurately described in permit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                          |                     |                                                                                                                                  |                                    |                                             |                            |

N 4. The permit has been properly transferred if there is a new owner.

Comments:

The facility has a valid permit and the facility description, including units of treatment and receiving stream, is accurate.

**CSO/SSO:**

- N 1. CSO's are adequately monitored and maintained.
- S 2. No unauthorized overflow events in last 12 months.
- N 3. Facility has met SSO and dry weather CSO reporting requirements
- N 4. Any adverse impacts from SSO and CSO events have been properly mitigated.

Comments:

The facility has had no reported overflow/bypass events in the past 12 months.

**Facility/Site:**

- S 1. The facility has standby power or equivalent provision.
- S 2. An adequate alarm or notification system for power or equipment failure is available for the treatment facility and lift stations.
- S 3. Safe and adequate access is provided for inspection of all units and outfalls.
- S 4. Facilities and equipment do not appear beyond their useful life.
- 5. List any safety concerns:

Comments:

The facility has access to a portable generator that is shared with Carriage Estates Wastewater Plant. The facility has an alarm with auto-dialer. Inspector asked maintenance tech to check alarms on power, blower and influent pump regularly and document.

**Operation:**

- S 1. All facilities and systems necessary for achieving compliance with the terms and conditions of the permit are operated efficiently, including an anticipated bypass report for steps of treatment taken out of service.
- S 2. An adequate, qualified operating staff is provided to carry out the operation of the facility, including:
  - a. Certified Operator's on-site attendance and/or qualified operations personnel attendance is adequate.
  - b. Adequate documentation of operational activities, including system monitoring and cleaning.
  - c. Adequate funding to ensure proper operation.
- S 3. Solids handling procedures include:
  - a. Sufficient solids are wasted from the treatment system, in a timely manner, to maintain process efficiency.
  - b. Wasting of solids is based on appropriate operational targets and valid process control testing.
  - c. Adequate documentation of solids removal, handling, or control is available for review.
- S 4. The facility is operated efficiently during wet weather events.

Comments:

All units of treatment appear to be operating efficiently.

**Maintenance:**

- M 1. A maintenance record system has been established and includes maintenance/repair history and preventative maintenance plan.
- S 2. Facility maintenance activities appear adequate.
- S 3. Lift stations are adequately inspected, cleaned, and maintained, with adequate documentation of activities.
- S 4. Collection system maintenance activities appear adequate.

Comments:

Maintenance was rated as marginal due to lack of preventative maintenance documentation/plan. Maintenance tech stated he had created a preventative maintenance schedule, but was unable to locate it. He indicated it was probably lost and he would create a new one. Preventative maintenance plan should include items such as how often to clean tanks, change filters and a greasing schedule.

**Sludge:**

- S 1. Sludges, screenings, and slurries are handled and disposed of properly.

Comments:

A records review during the inspection showed adequate wasting, handling, and disposal of sludge. Sludge is removed from the facility and taken to Carriage Estates WWTP. The facility removed 15,000 gallons on 04/30/14.

**Self-Monitoring:**

- S 1. Samples are taken at pre-designated locations and are representative.
- S 2. Flow-proportioned samples are obtained where needed.
- S 3. The facility conducts sampling of all waste streams, including type and frequency, as required in the permit.

- S 4. Sample collection procedures, including automatic sampling, include:
- a. Samples are refrigerated during compositing.
  - b. Proper preservation techniques are used.
  - c. Containers and holding times conform to 40 CFR 136.3.
- S 5. Sample documentation is adequate and includes:
- a. Dates, times, and locations of sampling.
  - b. Name of individual performing sampling.
  - c. Instantaneous flow for flow-weighted aliquots.
  - d. Chain of Custody records.
- N 6. NPDES Permit Whole Effluent Toxicity (WET) testing requirements are being met.

Comments:

The Self Monitoring Program was rated as satisfactory. All sampling practices, including raw and intermediate unit process testing, are conducted accurately and at the frequency required by the permit.

**Flow Measurement:**

- S 1. Flow is properly monitored as required by the permit.
- S 2. Flow data and calibration records are available for review.

Comments:

The effluent flow meter was last calibrated 09/16/14 by BL Anderson.

**Laboratory:**

The following laboratory records were reviewed:

|                      |                       |                   |
|----------------------|-----------------------|-------------------|
| D. O. Bench Sheets   | Chlorine Bench Sheets | CBOD Bench Sheets |
| TSS Bench Sheets     | Ammonia Bench Sheets  | pH Bench Sheets   |
| E. coli Bench Sheets |                       |                   |

- M 1. The laboratory practices and protocol reviewed were adequate, including:
- a. Written laboratory QA/QC manual.
  - b. Samples are properly stored.
  - c. Approved analytical methods are used.
  - d. Calibration and maintenance of instruments is adequate.
  - e. QA/QC procedures are adequate.
  - f. Dates of analyses. (and times where required)
  - g. Name of person performing analyses.

Comments:

Laboratory was rated as marginal due to the balance not being calibrated. Part I. B. 5 of the permit states, in part, the analytical and sampling methods used shall conform to the current version of 40 CFR, Part 136, unless otherwise specified. At the time of the inspection it was determined the laboratory scales did not have a current (annual) calibration.

**Records/Reports:**

The following records/reports were reviewed:

DMRs for the period of January 2014 to August 2014 were reviewed as part of the inspection.

- S 1. All facility records for the period including the previous three years were available for review.
- M 2. DMRs and MROs are completed properly and accurately including:
- a. "No Ex" column is accurate.
  - b. Signatory requirements are met.
  - c. Reports are prepared by or under the direction of a certified operator.
- S 3. Bypass and Noncompliance reporting are adequate.

Comments:

Records/Reports was rated as marginal due to February and July DMRs needing to be revised and resubmitted. There were also a couple CBOD bench sheets missing.

**Compliance Schedules:**

- N 1. The NPDES Permit Schedule of Compliance monitoring and reporting milestones have been met.  
N 2. Agreed Order compliance milestones have been met.

Comments:

There is no Compliance Schedule in the current permit, and there is no Agreed Order.

**Pretreatment:**

- S 1. No evidence of interference from industrial or other sources of toxic substances was noted.  
N 2. For both Delegated and Non-Delegated pretreatment programs:  
a. Industrial or commercial dischargers are regulated as required.  
b. The permittee enforces the Sewer Use Ordinance (SOU) and the Enforcement Response Plan (ERP).  
c. The permittee submitted its annual pretreatment report to IDEM by April 1.  
N 3. Non-Delegated pretreatment programs have:  
a. Developed the Sewer Use Ordinance and submitted it to IDEM.  
b. Developed the Enforcement Response Plan and submitted it to IDEM.  
c. The permittee submitted sludge monitoring data (Cd, Cu, Pb, Hg, Mo, Ni, Zn) twice per year to IDEM's Pretreatment Group.  
N 4. Pretreatment records and procedures were adequate and include:  
a. Inventory of Industrial Waste Contributors/Industrial Survey.  
b. Keeping records of all Industrial User (IU) self-monitoring data.  
c. Conducting compliance monitoring at all Significant Industrial Users (SIUs) for all parameters in the industry's permit.  
d. Conducting annual inspections at all SIUs and documenting them with inspection reports.  
e. For any IU in noncompliance in the past year, the permittee has taken enforcement actions.  
N 5. If the non-delegated permittee accepts hauled waste:  
a. Does the POTW provide written permission to haulers?  
b. Does the POTW obtain samples from each hauled waste load and retain them for at least 48 hours?  
c. Does the POTW retain records of each load?

Comments:

The facility has no industrial sources.

**Effluent Limits Compliance:**

Yes 1. Were DMRs reviewed as part of the inspection?

DMRs for the period of January 2014 to August 2014 were reviewed as part of the inspection.

Yes 2. Were violations noted during the review of DMRs?

The Effluent Limits Violations area was rated unsatisfactory due to the following self-reported violations of the limits detailed in Part I. A. of the NPDES Permit:

| Month | Year | Outfall | Parameter        | Type             | Conc./Loading | Number |
|-------|------|---------|------------------|------------------|---------------|--------|
| Feb   | 2014 | 001     | TSS              | Max. Wkly. Avg.  | Loading       | 2      |
| Feb   | 2014 | 001     | TSS              | Monthly Avg.     | Loading       | 1      |
| Feb   | 2014 | 001     | Ammonia Nitrogen | Max. Wkly. Avg.  | Loading       | 1      |
| Apr   | 2014 | 001     | E. coli          | Monthly Geo. Mn. | Conc.         | 1      |
| Jul   | 2014 | 001     | Chlorine         | Daily Minimum    | Conc.         | 1      |

Comments:

**IDEM REPRESENTATIVE**

Inspector Name:

Kim Rohr

Email:

krohr@idem.IN.gov

Phone Number:

317-719-1666

**IDEM MANAGER REVIEW**

IDEM Manager:

Mark W. Stanifer

Date:

10/6/2014



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

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Michael R. Pence  
Governor

Carol S. Comer  
Commissioner

12/16/2015

Via Email to: [asu-inc@hotmail.com](mailto:asu-inc@hotmail.com)  
Mr. Scot Lods, President  
American Suburban Utilities  
3350 W. 250 N.  
West Lafayette, Indiana 47906

Dear Mr. Lods:

Re: **Inspection Summary/ Enforcement Referral**  
American Suburban Utilities  
NPDES Permit No. IN0038334  
West Lafayette, Tippecanoe County

An inspection of the above-referenced facility or location was conducted by a representative of the Indiana Department of Environmental Management, Office of Water Quality, pursuant to IC 13-18-3-9. A summary of the inspection is provided below:

Date(s) of Inspection: November 20, 2015  
Type of Inspection: Compliance Evaluation Inspection  
Inspection Results: Violations were observed and will be referred to the Enforcement Section.

The following concerns were noted:

1. Part I. A. 2 of the permit states, in part, the discharge from all point sources specified within this permit shall not cause receiving waters, including the mixing zone, to contain substances, materials, floating debris, oil, or scum: (1) that will settle to form putrescent or otherwise objectionable deposits; (2) that are in amounts sufficient to be unsightly or deleterious; (3) that produce color, visible oil sheen, odor, or other conditions in such degree as to create nuisance; (4) which are in amounts sufficient to be acutely toxic to, or to otherwise severely injure or kill aquatic life, other animals, plants, or humans; (5) which are in concentrations or combinations that will cause or contribute to the growth of aquatic plants or algae to such a degree as to create a nuisance, be unsightly, or otherwise impair the designated uses. Effluent Appearance was rated as **unsatisfactory** due to its dark appearance and the presence of debris and solids.
2. Part II. A. 3 of the permit states, in part, that in accordance with 327 IAC 5-2-8(4) the permittee shall furnish any information that it knows or has reason to believe would constitute cause for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The

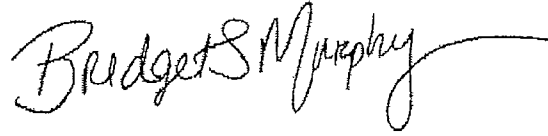
permit was given an overall rating of **unsatisfactory** because the facility has been discharging through an unpermitted outfall for the past 4 months and was using an unpermitted facility prior to November 18, 2016.

3. Operation was rated as **unsatisfactory** due to inadequate certified operator qualifications. This is a violation of Part II. A. 14 of the NPDES permit, which states in part, that the permittee shall have the wastewater treatment facilities under the direct supervision of an operator certified by the Commissioner as required by IC 13-18-11 and 327 IAC 5-22. In accordance with your facility's municipal classification, this certification must, at a minimum, be a Class 3 license. The facility operated for at least three weeks with no certified operator and the current certified operator has not demonstrated adequate on-site time.
4. Maintenance was rated as **unsatisfactory** due to an inadequate preventative maintenance program. This is a violation of Part II. B. 1 of the permit which states, in part, that all facilities shall be operated and maintained as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants.
5. The Self Monitoring Program was rated as **unsatisfactory** for not monitoring final effluent at the frequency required by the permit. This is a violation of Part I. A. 1 of the permit which sets forth the effluent monitoring frequencies applicable to the discharge from Outfall 001. The facility has not been conducting sampling the required amount of times per day and is not properly compositing flow-proportioned samples as required by permit.
6. Flow Measurement was rated as **unsatisfactory** for not monitoring final effluent at the frequency required by the permit. This is a violation of Part I. A. 1 of the permit which sets forth the effluent limitations and monitoring frequencies applicable to the discharge from Outfall 001. Specifically, the flow meter is currently installed in a location where turbulence from aeration is experienced causing inadequate flow totals. The facility must relocate the flow meter to an area where it will not be interfered with by aeration.
7. The Records/Reports evaluation generated an **unsatisfactory** rating. Part I. B. 8 of the permit states, in part, that the permittee shall retain, for a minimum of three years, all records and information resulting from the monitoring activities required by the permit, including all records of analyses performed. In cases where the original records are kept at another location, a copy of all such records shall be kept at the permitted facility. At the time of the inspection, the DMR and MRO records were unavailable for review. Additionally, the facility has been reporting on improper MROs. The facility must resubmit the previous months MROs on the appropriate form and keep copies of all DMR/MRO records on site for review during inspections.

This matter is being referred to the OWQ Enforcement Section for appropriate action. If formal action is initiated, you will be issued a Notice of Violation informing you of how to proceed in resolving this matter. Please direct any questions to Jason Palin at

317-504-0007 or by email to [japalin@idem.IN.gov](mailto:japalin@idem.IN.gov). A copy of the NPDES Wastewater Facility Inspection Report is enclosed for your records.

Sincerely,

A handwritten signature in black ink that reads "Bridget S. Murphy". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Bridget S. Murphy, Inspections Section Chief  
Compliance Branch  
Office of Water Quality

Enclosure



# NPDES Wastewater Facility Inspection Report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

|                                                                                                                                           |  |                                         |              |                                                                                        |                             |                                                                |  |
|-------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------|--------------|----------------------------------------------------------------------------------------|-----------------------------|----------------------------------------------------------------|--|
| NPDES Permit Number:<br><b>IN0038334</b>                                                                                                  |  | Facility Type:<br>Mixed Ownership Major |              | Facility Classification:<br>III                                                        |                             | TEMPO AI ID<br>55308                                           |  |
| Date(s) of Inspection: November 20, 2015                                                                                                  |  |                                         |              |                                                                                        |                             |                                                                |  |
| Type of Inspection: Compliance Evaluation Inspection                                                                                      |  |                                         |              |                                                                                        |                             |                                                                |  |
| Name and Location of Facility Inspected:<br><b>American Suburban Utilities</b><br>550 Salisbury Rd.<br>West Lafayette IN 47906 Tippecanoe |  |                                         |              | Receiving Waters:<br>Cole Creek                                                        |                             | Permit Expiration Date:<br>6/30/2020<br>Design Flow:<br>1.0MGD |  |
| On Site Representative(s):<br>First Name Last Name Title Email Phone<br>Ed Serowka                                                        |  |                                         |              |                                                                                        |                             |                                                                |  |
| Was a verbal summary of findings presented to the on-site representative? <b>Yes</b>                                                      |  |                                         |              |                                                                                        |                             |                                                                |  |
| Certified Operator:<br>Douglas Whitman                                                                                                    |  | Number:<br>13968                        | Class:<br>IV | Effective Date:<br>7-1-15                                                              | Expiration Date:<br>6-30-17 | Email:                                                         |  |
| Responsible Official:<br>Mr. Scot Lods, President<br>3350 W. 250 N.<br>West Lafayette, Indiana 47906                                      |  |                                         |              | Permittee: American Suburban Utilities<br>Email: asu-inc@hotmail.com<br>Phone:<br>Fax: |                             |                                                                |  |
|                                                                                                                                           |  |                                         |              | Contacted?<br>No                                                                       |                             |                                                                |  |

## INSPECTION FINDINGS

- ☐ Conditions evaluated were found to be satisfactory at the time of the inspection. (5)  
☐ Violations were discovered but corrected during the inspection. (4)  
☐ Potential problems were discovered or observed. (3)  
☐ Violations were discovered and require a submittal from you and/or a follow-up inspection by IDEM. (2)  
☒ Violations were discovered and may subject you to an appropriate enforcement response. (1)

## AREAS EVALUATED DURING INSPECTION

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

|   |                          |   |               |   |                  |   |                            |
|---|--------------------------|---|---------------|---|------------------|---|----------------------------|
| S | Receiving Waters         | S | Facility/Site | U | Self-Monitoring  | N | Compliance Schedules       |
| U | Effluent Appearance      | U | Operation     | U | Flow Measurement | N | Pretreatment               |
| U | Permit                   | U | Maintenance   | N | Laboratory       | S | Effluent Limits Compliance |
| S | CSO/SSO (Sewer Overflow) | S | Sludge        | U | Records/Reports  | N | Other:                     |

## DETAILED AREA EVALUATIONS

### Receiving Waters:

S 1. The receiving stream is visibly free of excessive deposits of settled solids, floating debris, oil, scum, or billowy foam.

Comments:

The receiving stream was free of notable foam, algae or solids.

### Effluent Appearance:

U 1. Treated effluent is free of excessive solids, floating debris, oil, scum, or billowy foam.

Comments:

Part I. A. 2 of the permit states, in part, the discharge from all point sources specified within this permit shall not cause receiving waters, including the mixing zone, to contain substances, materials, floating debris, oil, or scum: (1) that will settle to form putrescent or otherwise objectionable deposits; (2) that are in amounts sufficient to be unsightly or deleterious; (3) that produce color, visible oil sheen, odor, or other conditions in such degree as to create nuisance; (4) which are in amounts sufficient to be acutely toxic to, or to otherwise severely injure or kill aquatic life, other animals, plants, or humans; (5) which are in concentrations or combinations that will cause or contribute to the growth of aquatic plants or algae to such a degree as to create a nuisance, be unsightly, or otherwise impair the designated uses. Effluent Appearance was rated as **unsatisfactory** due to its dark appearance and the presence of debris and solids.



**Permit:**

- U 1. Does the facility have a current copy of the permit available for reference?
- N 2. If the permit expires within 180 days, has a renewal application been submitted?
- U 3. Receiving waters are accurately described in permit.
- N 4. The permit has been properly transferred if there is a new owner.

**Comments:**

Part II. A. 3 of the permit states, in part, that in accordance with 327 IAC 5-2-8(4) the permittee shall furnish any information that it knows or has reason to believe would constitute cause for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permit was given an overall rating of **unsatisfactory** because the facility has been discharging through an unpermitted outfall for the past 4 months and was using an unpermitted facility prior to November 18, 2015.

**CSO/SSO:**

- N 1. CSO's are adequately monitored and maintained.
- S 2. Evaluation of maintenance-related (clogged or blocked lines) overflow events in last 12 months.
- S 2. Evaluation of hydraulic (I&I) overflow events in last 12 months.
- N 3. Facility has met SSO and dry weather CSO reporting requirements
- N 4. Any adverse impacts from SSO and CSO events have been properly mitigated.

**Comments:**

**Facility/Site:**

- S 1. The facility has standby power or equivalent provision.
- S 2. An adequate alarm or notification system for power or equipment failure is available for the treatment facility and lift stations.
- S 3. Safe and adequate access is provided for inspection of all units and outfalls.
- S 4. Facilities and equipment do not appear beyond their useful life.
- 5. List any safety concerns:

**Comments:**

The facility has a standby generator being delivered on Monday, November 23, 2015. Previously they had access to a portable generator that will be replaced by the new, on-site generator.

**Operation:**

- S 1. All facilities and systems necessary for achieving compliance with the terms and conditions of the permit are operated efficiently, including an anticipated bypass report for steps of treatment taken out of service.
- U 2. An adequate, qualified operating staff is provided to carry out the operation of the facility, including:
  - a. Certified Operator's on-site attendance and/or qualified operations personnel attendance is adequate.
  - b. Adequate documentation of operational activities, including system monitoring and cleaning.
  - c. Adequate funding to ensure proper operation.
- S 3. Solids handling procedures include:
  - a. Sufficient solids are wasted from the treatment system, in a timely manner, to maintain process efficiency.
  - b. Wasting of solids is based on appropriate operational targets and valid process control testing.
  - c. Adequate documentation of solids removal, handling, or control is available for review.
- S 4. The facility is operated efficiently during wet weather events.

**Comments:**

Operation was rated as **unsatisfactory** due to inadequate certified operator qualifications. This is a violation of Part II. A. 14 of the NPDES permit, which states in part, that the permittee shall have the wastewater treatment facilities under the direct supervision of an operator certified by the Commissioner as required by IC 13-18-11 and 327 IAC 5-22. In accordance with your facility's municipal classification, this certification must, at a minimum, be a Class 3 license. The facility operated for at least three weeks with no certified operator and the current certified operator has not demonstrated adequate on-site time.

**Maintenance:**

- U 1. A maintenance record system has been established and includes maintenance/repair history and preventative maintenance plan.
- S 2. Facility maintenance activities appear adequate.
- S 3. Lift stations are adequately inspected, cleaned, and maintained, with adequate documentation of activities.
- S 4. Collection system maintenance activities appear adequate.

**Comments:**

Maintenance was rated as **unsatisfactory** due to an inadequate preventative maintenance program. This is a violation of Part II. B. 1 of the permit which states, in part, that all facilities shall be operated and maintained as

efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants.

**Sludge:**

- S 1. Sludges, screenings, and slurries are handled and disposed of properly.

Comments:

A records review during the inspection showed adequate wasting, handling, and disposal of sludge.

**Self-Monitoring:**

- S 1. Samples are taken at pre-designated locations and are representative.
- U 2. Flow-proportioned samples are obtained where needed.
- U 3. The facility conducts sampling of all waste streams, including type and frequency, as required in the permit.
- S 4. Sample collection procedures, including automatic sampling, include:
- a. Samples are refrigerated during compositing.
  - b. Proper preservation techniques are used.
  - c. Containers and holding times conform to 40 CFR 136.3.
- U 5. Sample documentation is adequate and includes:
- a. Dates, times, and locations of sampling.
  - b. Name of individual performing sampling.
  - c. Instantaneous flow for flow-weighted aliquots.
  - d. Chain of Custody records.
- N 6. NPDES Permit Whole Effluent Toxicity (WET) testing requirements are being met.

Comments:

The Self Monitoring Program was rated as **unsatisfactory** for not monitoring final effluent at the frequency required by the permit. This is a violation of Part I. A. 1 of the permit which sets forth the effluent monitoring frequencies applicable to the discharge from Outfall 001. The facility has not been conducting sampling the required amount of times per day and is not properly compositing flow-proportioned samples as required by permit.

**Flow Measurement:**

- U 1. Flow is properly monitored as required by the permit.
- U 2. Flow data and calibration records are available for review.

Comments:

Flow Measurement was rated as **unsatisfactory** for not monitoring final effluent at the frequency required by the permit. This is a violation of Part I. A. 1 of the permit which sets forth the effluent limitations and monitoring frequencies applicable to the discharge from Outfall 001. Specifically, the flow meter is currently installed in a location where turbulence from aeration is experienced causing inadequate flow totals. The facility must relocate the flow meter to an area where it will not be interfered with by aeration.

**Laboratory:**

Comments:

A full inspection of the laboratory could not be completed at the time of the inspection because bench sheets and data from the previous operator were missing. A full laboratory inspection will be completed during the next inspection at the facility.

**Records/Reports:**

The following records/reports were reviewed:

DMRs for the period of January 2015 to September 2015 were reviewed as part of the inspection.

- U 1. All facility records for the period including the previous three years were available for review.
- U 2. DMRs and MROs are completed properly and accurately including:
- a. "No Ex" column is accurate.
  - b. Signatory requirements are met.
  - c. Reports are prepared by or under the direction of a certified operator.
- S 3. Bypass and Noncompliance reporting are adequate.

Comments:

The Records/Reports evaluation generated an **unsatisfactory** rating. Part I. B. 8 of the permit states, in part, that the permittee shall retain, for a minimum of three years, all records and information resulting from the monitoring activities required by the permit, including all records of analyses performed. In cases where the original records are kept at another location, a copy of all such records shall be kept at the permitted facility. At the time of the inspection, the DMR and MRO records were unavailable for review. Additionally, the facility has been reporting on improper MROs. The facility must resubmit the previous months MROs on the appropriate form and keep copies of all DMR/MRO records on site for review during inspections.

**Compliance Schedules:**

- N 1. The NPDES Permit Schedule of Compliance monitoring and reporting milestones have been met.  
N 2. Agreed Order compliance milestones have been met.

Comments:

**Pretreatment:**

- N 1. No evidence of interference from industrial or other sources of toxic substances was noted.  
N 2. For both Delegated and Non-Delegated pretreatment programs:  
a. Industrial or commercial dischargers are regulated as required.  
b. The permittee enforces the Sewer Use Ordinance (SOU) and the Enforcement Response Plan (ERP).  
c. The permittee submitted its annual pretreatment report to IDEM by April 1.  
N 3. Non-Delegated pretreatment programs have:  
a. Developed the Sewer Use Ordinance and submitted it to IDEM.  
b. Developed the Enforcement Response Plan and submitted it to IDEM.  
c. The permittee submitted sludge monitoring data (Cd, Cu, Pb, Hg, Mo, Ni, Zn) twice per year to IDEM's Pretreatment Group.  
N 4. Pretreatment records and procedures were adequate and include:  
a. Inventory of Industrial Waste Contributors/Industrial Survey.  
b. Keeping records of all Industrial User (IU) self-monitoring data.  
c. Conducting compliance monitoring at all Significant Industrial Users (SIUs) for all parameters in the industry's permit.  
d. Conducting annual inspections at all SIUs and documenting them with inspection reports.  
e. For any IU in noncompliance in the past year, the permittee has taken enforcement actions.  
N 5. If the non-delegated permittee accepts hauled waste:  
a. Does the POTW provide written permission to haulers?  
b. Does the POTW obtain samples from each hauled waste load and retain them for at least 48 hours?  
c. Does the POTW retain records of each load?

Comments:

**Effluent Limits Compliance:**

Yes 1. Were DMRs reviewed as part of the inspection?

DMRs for the period of January 2015 to September 2015 were reviewed as part of the inspection.

No 2. Were violations noted during the review of DMRs?

Comments:

**IDEM REPRESENTATIVE**

Inspector Name:  
Jason Palin

Email:  
japalin@idem.IN.gov

Phone Number:  
317-504-0007

**IDEM MANAGER REVIEW**

IDEM Manager:

Bridget S. Murphy

Date:

12/1/2015



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels, Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

April 18, 2011

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

Via Certified Mail #: 91 7190 0005 2710 0013 1584

Scott Lods, President and Registered Agent  
American Suburban Utilities, Inc.  
3350 W 250 N  
West Lafayette, IN 47906

Dear Mr. Lods:

Re: Adoption of Agreed Order  
Commissioner of the Indiana Department  
of Environmental Management

v.

American Suburban Utilities, Inc.  
Carriage Estates Wastewater  
Treatment Plant  
NPDES Permit No. IN0043273  
Case No. 2009-18688-W  
West Lafayette, Tippecanoe County

This is to inform you that the Agreed Order in the above-referenced case has been approved and adopted by the Indiana Department of Environmental Management. A copy of the Agreed Order is enclosed.

Please note the terms of compliance contained in the Agreed Order. The time frames for compliance are effective upon your receipt of this correspondence. Please note that the civil penalty is due within 30 days after the effective date of the Agreed Order. Payment should be made payable to the Environmental Management Special Fund and sent to Cashier - Mail Code 50-10C, IDEM, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251. Please include the Case Number 2009-18688-W, on the front of the check. If you have any questions, please contact Aletha Lenahan, Water Enforcement Case Manager, at (317) 232-8407.

Sincerely,

Mark W. Stanifer, Chief  
Water Enforcement Section  
Office of Water Quality

Enclosure

cc: Michael Scanlon, Counsel for:  
American Suburban Utilities, Inc.  
Valerie Tachtiris, Deputy Attorney General,  
Environmental Enforcement Section, OAG



*Mitchell E. Daniels, Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

STATE OF INDIANA ) SS: BEFORE THE INDIANA DEPARTMENT OF  
 )  
COUNTY OF MARION ) ENVIRONMENTAL MANAGEMENT  
  
COMMISSIONER OF THE DEPARTMENT )  
OF ENVIRONMENTAL MANAGEMENT, )  
 )  
Complainant, )  
 )  
v. ) Case No. 2009-18688-W  
 )  
AMERICAN SUBURBAN UTILITIES, INC, )  
 )  
Respondent. )

Complainant and Respondent desire to settle and compromise this action without hearing or adjudication of any issue of fact or law, and consent to the entry of the following Findings of Fact and Order. Pursuant to Indiana Code (IC) 13-30-3-3, entry into the terms of this Agreed Order does not constitute an admission of any violation contained herein. Respondent's entry into this Agreed Order shall not constitute a waiver of any defense, legal or equitable, which Respondent may have in any future administrative or judicial proceeding, except a proceeding to enforce this order.

1. Complainant is the Commissioner (Complainant) of the Indiana Department of Environmental Management, a department of the State of Indiana created by IC 13-13-1-1.
2. Respondent is American Suburban Utilities, Inc. (Respondent), which owns and/or operates the Carriage Estates wastewater treatment plant (WWTP), which is a major semi-public sanitary WWTP. The collection system is comprised of a 100% sanitary sewer system by design. The National Pollutant Discharge Elimination System (NPDES), permit No. IN0043273 (the Permit) authorizes the discharge of 1.5 million gallons per day (mgd) of treated wastewater from the sequential batch reactor WWTP to receiving waters of the State named Indian Creek to the Wabash River from Outfall 001.

3. Respondent's main office is located at 3350 W 250 N, in West Lafayette, Indiana. The Carriage Estates WWTP is located at 4100 Bridgewater Drive, Tippecanoe County, in West Lafayette, Indiana (the Site).
4. The Indiana Department of Environmental Management (IDEM) has jurisdiction over the parties and the subject matter of this action.
5. Pursuant to IC 13-30-3-3, IDEM issued a Notice of Violation (NOV) on February 17, 2010, via Certified Mail to:  
  
Scott Lods, President and Registered Agent  
American Suburban Utilities, Inc.  
3350 W 250 N  
West Lafayette, IN 47906
6. During an investigation conducted by representatives of IDEM, the following violations were found:
7. Part I.A.1 of the Permit, and 327 Indiana Administrative Code (IAC) 5-2-8(1), state, in part, that Respondent is required to comply with all terms and conditions of the Permit.
8. Part I.A.2 of the Permit and 327 IAC 2-1-6, require in part, that at all times the discharge from any and all point sources specified within the permit shall assure that:
  - a. the receiving waters, including the mixing zone, shall meet the minimum conditions of being free from substances, materials, floating debris, oil, or scum attributable to municipal, industrial, agricultural, and other land use practices, or uses, or other discharges:
    - (A) that will settle to form putrescent or otherwise objectionable deposits;
    - (B) that are in amounts sufficient to be unsightly or deleterious;
    - (C) that produce color, visible oil sheen, odor, or other conditions in such degree as to create a nuisance;
    - (D) which are in amounts sufficient to be acutely toxic to, or to otherwise severely injure or kill aquatic life, other animals, plants, or humans; and
    - (E) which are in concentrations or combinations that will cause or contribute to the growth of aquatic plants or algae to such degree as to create a nuisance, be unsightly, or otherwise impair the designated uses; and
  - b. the receiving waters outside the mixing zone, shall not contain substances in concentrations which on the basis of available scientific data are believed to be sufficient to injure, be chronically toxic to, or be carcinogenic, mutagenic, or teratogenic to humans, animals, aquatic life, or plants.
9. Pursuant to IC 13-18-4-5, it is unlawful for any person to throw, run, drain, or otherwise dispose into any of the streams or waters of Indiana; or cause, permit, or suffer to be thrown, run, drained, allowed to seep, or otherwise disposed into any waters; any

organic or inorganic matter that causes or contributes to a polluted condition of any waters, as determined by a rule of the board adopted under sections 1 and 3 of this chapter.

10. Pursuant to IC 13-30-2-1, no person may discharge, emit, cause, allow, or threaten to discharge, emit, cause, or allow any contaminant or waste including any noxious odor, either alone or in combination with contaminants from other sources, into the environment or into any publicly owned treatment works in any form which causes or would cause pollution which violates rules, standards, or discharge or emission requirements adopted by the appropriate board pursuant to this title.
11. During inspections on March 26, 2007, July 29, 2008, and/or June 8, 2009, IDEM's representatives observed and documented that the rip rap at Outfall 001 was covered in dark colored solid material consisting of sanitary debris, settled solids, and/or decomposing algae as a result of discharges from Outfall 001. The receiving waters in Indian Creek were black and foamy. Specifically, on July 29, 2008, and June 8, 2009, IDEM's representatives observed and documented that they instructed Respondent and its certified operator to remediate the sanitary debris from the contaminated area at Outfall 001. Respondent's failure to take action to remediate the contaminated area and the pollutants in Indian Creek, which is a waters of the State, and in the surrounding soil; and/or failure to prevent further contamination from being deposited on the rip rap and flowing into waters of the State, is in violation of Part I.A.1 of the Permit, 327 IAC 5-2-8(1), Part I.A.2 of the Permit and 327 IAC 2-1-6, and thus also in violation of IC 13-18-4-5 and IC 13-30-2-1.
12. During an inspection of Respondent's Outfall 001 and Indian Creek on October 13, 2010, IDEM's representatives noted that algae was growing on the rip rap but appeared to be naturally occurring. No other solid materials consisting of floating sanitary debris, oil, scum, or foam, were observed and the effluent at Outfall 001 was clear at the time of the inspection, in accordance with Part I.A.1 of the Permit, 327 IAC 5-2-8(1), Part I.A.2 of the Permit and 327 IAC 2-1-6, and thus in accordance with IC 13-18-4-5 and IC 13-30-2-1.
13. Pursuant to 327 IAC 2-6.1-7, any person who operates, controls or maintains any mode of transportation or facility from which a spill occurs shall, upon discovery of a reportable spill to the soil or surface waters of the State, contain the spill, if possible, to prevent additional spilled material from entering the waters of the State; undertake or cause others to undertake activities needed to accomplish a spill response; and as soon as possible, but within two hours of discovery, communicate a spill report to the Department of Environmental Management, Office of Environmental Response.
14. A reportable spill to the soil of an unknown amount of wastewater leachate was discharged from a roll-off dumpster, which is used to remove sludge at the Site, for an undetermined period of time, and was not properly contained, and/or responded to, and/or reported by Respondent, in violation of 327 IAC 2-6.1-7.



15. Subsequent to the issuance of the NOV, Respondent claimed that the liner in the roll-off dumpster and the screening area were designed to allow any liquid that leaks from the dumpster to be drained, "in compliance with the 'Ten State' Standards". Upon further review, IDEM's allegation that the wastewater leachate observed and documented to be discharging from a roll-off dumpster at the time of the June 8, 2009 inspection is not considered a reportable spill as long as the leachate remains contained within the confines of the Site and does not pose a potential threat to the Waters of the State. However, IDEM upholds its position that Respondent failed to maintain the integrity of the dumpster liner to allow for most of the solids to be captured and properly removed from the Site, as part of Respondent's on-going routine maintenance schedule, in violation of Part I.A.1 of the Permit, and 327 IAC 5-2-8(1).
16. Pursuant to Part I.B.1 of the Permit, samples and measurements taken as required herein shall be representative in volume and nature of the monitored discharge flow and shall be taken at times, which reflect the full range and concentration of the effluent parameters normally expected to be present. Samples shall not be taken at times to avoid showing elevated levels of any parameter.
17. During the inspection on July 29, 2008, IDEM's representatives observed and documented that Respondent's representative indicated that the effluent flow meter was not working, and was unable to be repaired or calibrated; and the E. coli samples were not collected in approved sample containers, all in violation of Part I.B.1 of the Permit.
18. Based on information provided by Respondent since the July 29, 2008 inspection, Respondent's sample collection procedures result in the collection of representative samples, as required by the Permit. The effluent flow meter is operable and can be repaired and calibrated; and appropriate E. coli sample containers are now being used by Respondent.
19. Pursuant to Part I.B.6 of the Permit and 327 IAC 5-2-14(a), state in part, that Respondent, required to monitor under 327 IAC 5-2-13, shall record and maintain records of all monitoring information and activities for each measurement or sample taken pursuant to the requirements of the permit. This information is required for raw influent, intermediate unit treatment processes, and final effluent, and shall include the following:
  - (1) the date, exact place and time of sampling or measurements;
  - (2) the person(s) who performed the sampling or measurements;
  - (3) the date(s) analyses were performed;
  - (4) the person(s) who performed the analyses;
  - (5) the analytical techniques or methods used; and
  - (6) the results of such measurements and analyses.

20. During the inspection on July 29, 2008, IDEM's representative noted that the certified operator did not record method numbers on Respondent's bench sheets, in violation of Part I.B.6 of the Permit and 327 IAC 5-2-14(a).
21. Subsequent to the July 29, 2008 inspection, IDEM was made aware that the missing method numbers on Respondent's bench sheets were due to an error during photocopying, which produced copies that were partially or fully cut off. This error has been corrected and Respondent is now in compliance with Part I.B.6 of the Permit and 327 IAC 5-2-14(a).
22. Pursuant to Part II.B.1(a)(1) and Part II.B.1(a)(2) of the Permit, and in accordance with 327 IAC 5-2-8(8), the permittee shall at all times maintain in good working order and efficiently operate all facilities and systems (and related appurtenances) for collection and treatment that are installed or used by the permittee; and necessary for achieving compliance with the terms and conditions of the Permit.
23. During the inspections conducted on May 15, 2007, July 28, 2008, and/or May 18, 2009, IDEM's representative observed and documented one or more of the following violations, which indicates that the WWTP was not being properly operated and maintained at the time of the inspections. The following operation and maintenance deficiencies are all in violation of Part II.B.1(a)(2) of the Permit, and 327 IAC 5-2-8(8):
  - (A) Headworks and primary treatment is inadequate;
  - (B) Effluent flow meter was not working, and was unable to be repaired or calibrated;
  - (C) Plastic liner in roll-off dumpster located in the bar screening area was not functioning properly. Liner was torn, causing leachate to flow behind and under the dumpster and discharge leachate upon the ground;
  - (D) Weeds and other vegetation at Outfall 001 need to be removed to ensure that the WWTP effluent discharge pipe is accessible at all times.
  - (E) Portable ladders need to be replaced with permanent stairs to ensure worker safety;
  - (F) Sludge in chlorine contact tank: Approximately two feet settled on the bottom and a large quantity of sludge was floating on the surface of the chlorine contact tank.
24. Based on information provided to IDEM by Respondent, the above noted violations have been corrected, or will be addressed in the Order portion of this Agreed Order.
25. Subsequent to the issuance of the NOV, IDEM conducted a record review. It was noted that on August 8, 2007, Respondent sent a response to IDEM's inspection on March 26, 2007, in which Respondent indicated that it started engineering to replace the manual bar screen at the head of the WWTP with an automatic bar screen. To date, Respondent has not installed the automatic bar screen.
26. During an inspection on October 13, 2010, IDEM's representatives rated the WWTP as marginal due to the continued problems or potential problems that were discovered or observed at the time of the inspection including the following:

- (A) The lift station located on Moorehouse Road was in need of a larger, more effective visual alarm; and
  - (B) Access to the influent bar screen via a temporary ladder is limited and needs to be improved. Specifically, use of the ladder by Respondent's employees presents slip, trip, and fall hazards during adverse weather conditions, which prevents employees from conducting the required scheduled cleaning of influent bar screen on a regular basis and therefore remains in violation of Part II.B.1(a)(2) of the Permit, and 327 IAC 5-2-8(8).
27. Subsequent to the October 13, 2010 inspection, Respondent notified IDEM that the visual alarm at the Moorehouse Road lift station is adequate to comply with the provisions of Part II.B.1(a)(1) and Part II.B.1(a)(2) of the Permit, and 327 IAC 5-2-8(8).
28. Part II.C.1 of the Permit and 327 IAC 5-2-8(10)(B) and (F), the permittee shall give notice to the Commissioner as soon as possible of any planned alterations or additions to the facility (which includes any point source) that could significantly change the nature of, or increase the quantity of, pollutants discharged. Following such notice, the permit may be modified to revise existing pollutant limitations and/or to specify and limit any pollutants not previously limited. Material and substantial alterations or additions to the permittee's operations that were not covered by the permit (e.g. production changes, relocation or combination of discharge points, changes in the nature or mix of products produced) are also cause for modification of the permit.
29. During an inspection July 29, 2008, IDEM's representatives observed that the WWTP was receiving a large quantity of milky white substance at the headworks of the plant. The influent was traced, via manhole inspections, directly to Lafayette Venetian Blinds, Inc. Respondent has failed to report any of its industrial users, including but not limited to Lafayette Venetian Blinds, Inc., to IDEM and/or submit a new or modified NPDES permit application that includes its industrial users, as required by 327 IAC 5-2-3, which is in violation of Part II.C.1 of the Permit and 327 IAC 5-2-8(10)(B) and (F).
30. Subsequent to the issuance of the NOV, IDEM conducted an additional review of the July 29, 2008 inspection where IDEM's representatives observed that the WWTP was receiving a large quantity of milky white substance at the headworks of the plant, as well as Part II.C.1 of the Permit and 327 IAC 5-2-8(10)(B) and (F). It was determined that while the discharge from Lafayette Venetian Blinds, Inc. to Respondent's WWTP was illegal, it was a one-time event and Respondent did not allow the pollutant to discharge into waters of the State. In addition, Respondent is not a publically owned treatment works and is therefore not subject to the NPDES industrial pretreatment program rules; and is not required to report industrial users, and/or modify the Permit to include industrial users, as long as it complies with all other provisions of the Permit and applicable NPDES permit rules.
31. 327 IAC 5-22-10.5(a), requires, in part, that the certified operator is required to be knowledgeable of the actual operations; and test reports and results are representative of the actual operational and compliance conditions. The certified operator is required to give adequate supervision to each wastewater treatment plant under his or her

- responsible charge to ensure the proper operation, maintenance, management, and supervision.
32. Incomplete data on the bench sheets, and the consistently poor operating conditions of the WWTP, as noted in Paragraph 30 above, are evidence of violations of 327 IAC 5-22-10.5(a).
  33. During an inspection on October 13, 2010, IDEM's representatives reviewed maintenance logs for 2009 and to date in 2010, for units of treatment and lift stations. It was noted that Respondent's maintenance program included daily, weekly, and annual preventative maintenance schedules. Operators checked the lift stations daily and the manholes three to five per day and logged any flow changes in the collection system. Bench sheets reviewed were accurate and complete, including method number and calibration information, all in accordance with 327 IAC 5-22-10.5(a).
  34. In recognition of the settlement reached, Respondent waives any right to administrative and judicial review of this Agreed Order.

## II. ORDER

1. This Agreed Order shall be effective (Effective Date) when it is approved by Complainant or Complainant's delegate, and has been received by Respondent. This Agreed Order shall have no force or effect until the Effective Date.
2. Beginning on the Effective Date, and continuing until the completion of the requirements of this Agreed Order, Respondent shall operate the existing WWTP as efficiently and effectively as possible.
3. Within 120 days of the Effective Date, Respondent shall install a permanent staircase to provide safer access to the influent bar screen. The new staircase is required to meet industry standards to protect employees from hazardous working conditions, including but not limited to handrails, and non-skid rungs or steps.
4. Beginning on the Effective Date, Respondent shall increase the frequency of its routine cleanout of the roll-off dumpster and/or replacement of the liner to a minimum of once every six months, or more frequently, as required, in order to properly handle the solids that collect in the influent bar screen.
5. Within 10 days of completion of the work required in Order Paragraph 3 above, Respondent shall submit to IDEM a written report of completion.
6. Beginning on the Effective Date and continuing until all terms of this Agreed Order have been met, Respondent shall, at all times, operate its existing wastewater treatment plant as efficiently and effectively as possible, and shall be subject to stipulated penalties for its failure to comply with permit limitations.

7. All submittals required by this Agreed Order, unless notified otherwise in writing, shall be sent to:

Aletha Lenahan, Water Enforcement Case Manager  
Indiana Department of Environmental Management  
Office of Water Quality – Mail Code 60-02W  
100 North Senate Avenue, Room N1255  
Indianapolis, Indiana 46204-2254

8. Respondent is liable for a civil penalty of Ten Thousand, One Hundred Twenty-Five Dollars (\$10,125). Said penalty amount shall be due and payable to the Environmental Management Special Fund within 30 days of the Effective Date. In the event that the civil penalty is not paid within 30 days of the Effective Date, Respondent shall pay interest on the unpaid balance at the rate established by IC 24-4.6-1-101. The interest shall continue to accrue until the civil penalty is paid in full.
9. In the event the terms and conditions of the following paragraphs are violated, Complainant may assess and Respondent shall pay a stipulated penalty in the following amount:

| Paragraphs: | Violations:                                                                                                 | Penalty Amounts:                          |
|-------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| 3           | Failure to timely complete installation of permanent staircase at the influent bar screen.                  | \$500 per each week or part thereof late. |
| 4           | Failure to timely clean out the roll-off dumpster, as necessary.                                            | \$500 per each week or part thereof late. |
| 5           | Failure to timely submit written notification to IDEM completion of the work required by Order Paragraph 3. | \$500 per each week or part thereof late. |
| 6           | Failure to operate existing WWTP as efficiently and effectively as possible.                                | \$1,000 per effluent violation.           |

10. Stipulated penalties shall be due and payable within 30 days after Respondent receives written notice that Complainant has determined a stipulated penalty is due. Assessment and payment of stipulated penalties shall not preclude Complainant from seeking any additional relief against Respondent for violation of this Agreed Order. In lieu of any of the stipulated penalties set out above, Complainant may seek any other remedies or sanctions available by virtue of Respondent's violation of this Agreed Order or Indiana law, including, but not limited to, civil penalties pursuant to IC 13-30-4.
11. Civil and stipulated penalties are payable by check to the Environmental Management Special Fund. Checks shall include the Case Number 2009-18688-W, of this action and shall be mailed to:

Indiana Department of Environmental Management  
Cashier – Mail Code 50-10C  
100 North Senate Avenue

Indianapolis, IN 46204-2251

12. This Agreed Order shall apply to and be binding upon Respondent and its successors and assigns. This agreed Order shall apply to and be binding upon Respondent and its successors and assigns. Respondent's signatories to this Agreed Order certify that they are fully authorized to execute this Agreed Order and legally bind the party they represent. No change in ownership, corporate, or partnership status of Respondent shall in any way alter its status or responsibilities under this Agreed Order.
13. In the event that any terms of this Agreed Order are found to be invalid, the remaining terms shall remain in full force and effect and shall be construed and enforced as if this Agreed Order did not contain the invalid terms.
14. Respondent shall provide a copy of this Agreed Order, if in force, to any subsequent owners or successors before ownership rights are transferred. Respondent shall ensure that all contractors, firms and other persons performing work under this Agreed Order comply with the terms of this Agreed Order.
15. This Agreed Order is not and shall not be interpreted to be a permit or a modification of an existing permit. This Agreed Order, and IDEM's review or approval of any submittal made by Respondent pursuant to this Agreed Order, shall not in any way relieve Respondent of its obligation to comply with the requirements of its applicable permits or any applicable Federal or State law or regulation.
16. Complainant does not, by its approval of this Agreed Order, warrant or aver in any manner that Respondent's compliance with any aspect of this Agreed Order will result in compliance with the provisions of any permit, order, or any applicable Federal or State law or regulation. Additionally, IDEM or anyone acting on its behalf shall not be held liable for any costs or penalties Respondent may incur as a result of Respondent's efforts to comply with this Agreed Order.
17. Nothing in this Agreed Order shall prevent or limit IDEM's rights to obtain penalties or injunctive relief under any applicable Federal or State law or regulation, except that IDEM may not, and hereby waives its right to, seek additional civil penalties for the same violations specified in the NOV.
18. Nothing in this Agreed Order shall prevent IDEM [or anyone acting on its behalf] from communicating with the United States Environmental Protection Agency (EPA) or any other agency or entity about any matters relating to this enforcement action. IDEM or anyone acting on its behalf shall not be held liable for any costs or penalties Respondent may incur as a result of such communications with the EPA or any other agency or entity.
19. This Agreed Order shall remain in effect until Respondent has complied with all terms and conditions of Order Paragraphs 3 through 11 and IDEM issues a Resolution of Case letter.

**TECHNICAL RECOMMENDATION:**

Department of Environmental Management

By: Mark W. Stanifer  
Mark W. Stanifer, Chief  
Water Enforcement Section  
Office of Water Quality

Date: 3-24-2011

**RESPONDENT:**

American Suburban Utilities, Inc.

By: Scott L. Lods

Printed: Scott L. Lods

Title: President

Date: 6-Apr-11

**COUNSEL FOR COMPLAINANT:**

Department of Environmental Management

By: Valerie Taghtiris  
Valerie Taghtiris  
Deputy Attorney General  
Environmental Enforcement Section  
Office of the Attorney General

Date: 24 March 2011

**COUNSEL FOR RESPONDENT:**

Michael T. Scanlon, Attorney  
Barnes & Thornburg, LLP

By: Michael T. Scanlon

Date: April 7, 2011

APPROVED AND ADOPTED BY THE INDIANA DEPARTMENT OF ENVIRONMENTAL  
MANAGEMENT THIS 18 DAY OF April, 2011.

For The Commissioner:

Bruno Pigott  
Bruno Pigott  
Assistant Commissioner  
Office of Water Quality



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204  
(800) 451-6027 • (317) 232-8603 • www.idem.in.gov

Michael R. Pence  
Governor

Thomas W. Easterly  
Commissioner

|                                    |   |                                      |
|------------------------------------|---|--------------------------------------|
| STATE OF INDIANA                   | ) | SS: BEFORE THE INDIANA DEPARTMENT OF |
|                                    | ) | ENVIRONMENTAL MANAGEMENT             |
| COUNTY OF MARION                   | ) |                                      |
|                                    |   |                                      |
| COMMISSIONER OF THE DEPARTMENT     | ) |                                      |
| OF ENVIRONMENTAL MANAGEMENT,       | ) |                                      |
|                                    | ) |                                      |
| Complainant,                       | ) |                                      |
|                                    | ) |                                      |
| v.                                 | ) | Case No. 2013-21924-W                |
|                                    | ) |                                      |
| AMERICAN SUBURBAN UTILITIES, INC., | ) |                                      |
|                                    | ) |                                      |
| Respondent.                        | ) |                                      |

**AGREED ORDER**

Complainant and Respondent desire to settle and compromise this action without hearing or adjudication of any issue of fact or law, and consent to the entry of the following Findings of Fact and Order. Pursuant to Indiana Code (IC) 13-30-3-3, entry into the terms of this Agreed Order does not constitute an admission of any violation contained herein. Respondent's entry into this Agreed Order shall not constitute a waiver of any defense, legal or equitable, which Respondent may have in any future administrative or judicial proceeding, except a proceeding to enforce this order.

**I. FINDINGS OF FACT**

1. Complainant is the Commissioner (Complainant) of the Indiana Department of Environmental Management (IDEM), a department of the State of Indiana created by IC 13-13-1-1.
2. Respondent is American Suburban Utilities, Inc. (Respondent), which owns and operates the Carriage Estates Wastewater Treatment Plant, a major semi-public wastewater treatment plant (WWTP) located at 4100 Bridgeway Drive, West Lafayette, Tippecanoe County, Indiana (the Site).
3. Respondent is authorized by its National Pollutant Discharge Elimination System (NPDES) Permit No. IN0043273 (the Permit) to discharge wastewater treated in accordance with the terms and conditions of the Permit from its wastewater treatment plant (WWTP) to receiving waters named Indian Creek (a waters of the State) via Outfall 001.



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4. IDEM has jurisdiction over the parties and the subject matter of this action pursuant to IC 13-30-3.
5. Pursuant to IC 13-30-3-3, IDEM issued a Notice of Violation (NOV) via Certified Mail to American Suburban Utilities, Inc.
6. Pursuant to 327 IAC 2-6.1-5 and Part II.C.3 of the Permit, spills from a facility that damage the waters of the state so as to cause death or acute injury or illness to humans or animals must be reported to IDEM.

On August 26, 2013 Respondent notified IDEM's, Office of Land Quality, Emergency Response Section by phone of a discharge of partially treated wastewater to Indian Creek,

On August 26, 2013, in response to a complaint, Indiana Department of Natural Resources (IDNR) staff observed and reported dead fish located approximately 1.5 miles downstream from Respondent's discharge of partially treated waste at Outfall 001. Live fish were observed upstream from Respondent's Outfall 001.

Respondent's failure to report that its discharge of partially treated wastewater caused a fish kill was in violation of 327 IAC 2-6.1-5 and Part II.C.3 of the Permit

7. Pursuant to 327 IAC 2-6.1-7, any person who operates, controls, or maintains any facility from which a spill occurs shall, upon discovery of a reportable spill to the soil or surface waters of the state, do the following:
  - (1) Contain the spill, if possible, to prevent additional spilled material from entering the waters of the state.
  - (2) Undertake or cause others to undertake activities needed to accomplish a spill response.
  - (3) As soon as possible, but within two (2) hours of discovery, communicate a spill report to IDEM, Office of Land Quality, Emergency Response Section: Area Code 1-888-233-7745 for in-state calls.
  - (4) Submit to IDEM, Office of Land Quality, Emergency Response Section (MC 66-30), 2525 N. Shadeland Ave., Suite 100, Indianapolis, IN 46219-1787, a written copy of the spill report if requested in writing by the department.

A spill response for the purposes of 327 IAC 2-6.1, means, A) The spill is contained; and B) Free material is removed or neutralized.

On August 26, 2013 Respondent notified IDEM's, Office of Land Quality, Emergency Response Section by phone of a discharge of partially treated wastewater to Indian Creek.

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Respondent has not provided documentation that an adequate spill response as defined by 327 IAC 2-6.1 was conducted. Respondent conducted some activities in an attempt to contain and/or neutralize the discharge of partially treated wastewater; however, Respondent has not provided documentation indicating that its spill response was successful in containing the discharge of partially treated wastewater to Indian Creek, or that the free material was removed or neutralized.

Respondent's failure to contain and remove or neutralize the free material from the discharge of inadequately treated wastewater to Indian Creek on August 26, August 27, and August 28, 2013, was in violation of 327 IAC 2-6.1-7(1).

Respondent's failure to undertake or cause others to undertake activities needed to accomplish an adequate spill response for the discharge of inadequately treated wastewater to Indian Creek on August 26, August 27, and August 28, 2013, was in violation of 327 IAC 2-6.1-7(2).

8. Pursuant to IC 13-30-2-1, a person may not discharge, emit, cause, allow, or threaten to discharge, emit, cause, or allow any contaminant or waste, including any noxious odor either alone or in combination with contaminants from other sources, into the environment in any form that causes or would cause pollution that violates or would violate rules, standards, or discharge or emission requirements adopted by the appropriate board under the environmental management laws.

Pursuant to 327 IAC 5-2-2, any discharge of pollutants into waters of the state as a point source discharge, except for exclusions made in 327 IAC 5-2-4, is prohibited unless in conformity with a valid NPDES permit obtained prior to the discharge.

Pursuant to 327 IAC 2-1-6 and Part I.A.2 of the Permit, at all times the discharge from any and all point sources specified within the Permit shall not cause receiving waters:

A. including the mixing zone, to contain substances, materials, floating debris, oil, scum or other pollutants:

- (1) that will settle to form putrescent or otherwise objectionable deposits;
- (2) that are in amounts sufficient to be unsightly or deleterious;
- (3) that produce color, visible oil sheen, odor, or other conditions in such degree as to create a nuisance;

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- (4) which are in amounts sufficient to be acutely toxic to, or to otherwise severely injure or kill aquatic life, other animals, plants, or humans;
- (5) which are in concentrations or combinations that will cause or contribute to the growth of aquatic plants or algae to such a degree as to create a nuisance, be unsightly, or otherwise impair the designated uses.

B. outside the mixing zone, to contain substances in concentrations which on the basis of available scientific data are believed to be sufficient to injure, be chronically toxic to, or be carcinogenic, mutagenic, or teratogenic to humans, animals, aquatic life, or plants.

An investigation indicates that Respondent discharged partially treated wastewater from its Outfall 001 to Indian Creek in an amount sufficient to be acutely toxic, to severely injure and kill aquatic life resulting in a fish kill.

On August 26, 2013, Indiana Department of Natural Resources (IDNR) staff observed and reported dead fish located approximately 1.5 miles downstream from Respondent's discharge of partially treated waste at Outfall 001. Live fish were observed upstream from Respondent's outfall 001.

Respondent's discharge of partially treated wastewater to Indian Creek on August 26, 2013, in an amount sufficient to be acutely toxic, to severely injure and kill aquatic life resulting in a fish kill was in violation of 327 IAC 2-1-6 and Part I.A.2 of the Permit, 327 IAC 5-2-8(1) and Part II.A.1 of the Permit, 327 IAC 5-2-2, and IC 13-30-2-1.

9. Pursuant to 327 IAC 5-2-8(3) and Part II.A.2 of the Permit, Respondent is required to take all reasonable steps to minimize or correct any adverse impact to the environment resulting from noncompliance with the Permit. During periods of noncompliance, Respondent is required to conduct such accelerated or additional monitoring for the affected parameters, as appropriate or as requested by IDEM, to determine the nature and impact of the noncompliance.

Respondent did not conduct sufficient accelerated or additional monitoring for the affected parameters to determine the nature and impact of their noncompliance.

- A. Respondent conducted monitoring of dissolved oxygen (DO) at several locations in Indian Creek on August 26, 2013; Respondent did not report any additional DO monitoring until August 31, 2013. Respondent's monitoring of DO in Indian Creek was insufficient to determine the nature and impact of the noncompliance and the effect of their attempts to minimize or correct the adverse impact to the environment. Respondent

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also did not report the DO concentration of the final effluent on August 26, 2013, when the discharge of partially treated wastewater occurred.

- B. Respondent conducted monitoring of ammonia at several locations in Indian Creek on August 26, 2013, and did not report any additional ammonia monitoring until August 31, 2013. Respondent's monitoring of ammonia in Indian Creek was insufficient to support their assertion that the fish in Indian Creek were not effected by the elevated ammonia levels discharged by the WWTP from Outfall 001.
- C. The documentation of monitoring results submitted by Respondent for DO and ammonia was insufficient. The sampling locations were poorly labeled, and not all sampling locations were identified. No units were reported for monitoring results, and the time of sampling was not provided.

Respondent's failures to take all reasonable steps to minimize or correct the adverse impact to the environment resulting from noncompliance with the Permit, and Respondent's failure to conduct accelerated or additional monitoring for the affected parameters to determine the nature and impact of the noncompliance during the period of noncompliance, are in violation of 327 IAC 5-2-8(3) and Part II.A.2 of the Permit, and 327 IAC 5-2-8(1) and Part II.A.1 of the Permit.

10. Pursuant to 327 IAC 5-2-8(1) and Part II.A.1 of the Permit, Respondent is required to comply with all terms and conditions of its Permit.

Pursuant to 327 IAC 5-2-8(8) and Part II.B.1 of the Permit, Respondent is required to maintain in good working order and efficiently operate all facilities and systems (and related appurtenances) for collection and treatment that are: (1) installed or used by the permittee; and (2) necessary for achieving compliance with the terms and conditions of the permit. Respondent is also required to operate the permitted facility in a manner which will minimize upsets and discharges of excessive pollutants, and to properly remove and dispose of excessive solids and sludges.

Respondent reported on August 26, 2013 that sometime during the night on August 25, 2013 or the morning on August 26, 2013 the blowers at the WWTP kicked off, resulting in partially treated wastewater being discharged into Indian Creek from Outfall 001 and causing a fish kill. The alarm system did not function properly and WWTP staff were not notified of the plant failure in a timely manner. Based on information provided to IDEM, Respondent has demonstrated that the failure of the alarm system was due to an intermittent short in the electronics that was not detected during normal inspections of that system. Following the discovery of the intermittent short, the alarm system was repaired.

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In its report dated September 23, 2013, Respondent stated that the plant failure was caused by the CSBR blower motors overheating and failing due to high ambient temperature, enclosed blower building, and inlet filter clogging, all foreseeable circumstance that cause equipment failure. Respondent did not operate the facility in a manner to minimize upsets and discharges of excessive pollutants by enclosing the blower building, thereby reducing ventilation and contributing to the motors overheating and blower failure.

During an inspection (By IDEM) on March 27, 2014, maintenance was rated as marginal due to inadequate documentation of maintenance activities and failure to implement a preventative maintenance program. A WWTP is required to have a preventative maintenance schedule for equipment and all maintenance (preventative and repair) is required to be documented in a permanent record that is available for inspection. Maintenance was also rated as marginal during the inspection because the old tertiary treatment pond, which was used to hold partially treated wastewater during the incident on August 26, 2013, was not cleaned out.

Respondent's failure to maintain the WWTP in good working order, failure to efficiently operate all facilities and systems for collection and treatment, and failure to operate the permitted facility in a manner which will minimize upsets and discharges of excessive pollutants, were in violation of 327 IAC 5-2-8(8) and Part II.B.1 of the Permit, and 327 IAC 5-2-8(1) and Part II.A.1 of the Permit.

11. Pursuant to Part I.A of the Permit, Respondent is required to comply with effluent limitations contained in the Permit that are applicable to the discharges from Outfall 001.

IDEM records, including the Discharge Monitoring Report (DMR) and Monthly Reports of Operation (MRO) submitted by Respondent to IDEM for August and September 2013 indicate that Respondent failed to comply with the weekly average concentration and loading effluent limitations for ammonia-nitrogen contained in the Permit during the weeks of August 25 – 31, 2013 and September 1 – 7, 2013; and failed to comply with the monthly average concentration and loading effluent limitations for ammonia contained in the Permit during August and September 2013, in violation of IC 13-30-2-1, 327 IAC 5-2-2, 327 IAC 5-2-8(1), Part II.A.1 of the Permit, and Part I.A of the Permit.

12. Pursuant to Part II.B.2.g of the Permit, any overflow or release of sanitary wastewater from the wastewater treatment facility or collection system into the environment which is not specifically authorized by the Permit is expressly prohibited.

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Pursuant to 327 IAC 5-2-8(10) and Part II.C.3 of the Permit, Respondent is required to report to IDEM information of any discharge from the sanitary sewer system within 24 hours from the time Respondent becomes aware of such noncompliance.

On April 19, 2013, a resident of the area served by Carriage Estates WWTP submitted videos of sanitary sewer overflows (SSOs) from 3 different sanitary sewer manholes of the Carriage Estates sewer collection system that occurred on April 18, 2013, to the Office of Utility Consumer Counselor (OUC). In connection with the Indiana Utility Regulatory Commission case (Cause No. 44272), the OUC asked Respondent several questions related to the SSOs, including whether the SSO's were reported to IDEM. In answers to these OUC questions, Respondent admitted that Respondent had not reported these SSOs to IDEM.

The SSOs that occurred from 3 manholes on April 18, 2013, were in violation of Part II.B.2.g of the Permit, and 327 IAC 5-2-8(1) and Part II.A.1 of the Permit.

Respondent's failure to report the SSOs that occurred from 3 manholes on April 18, 2013, was in violation of 327 IAC 5-2-8(10) and Part II.C.3 of the Permit, and 327 IAC 5-2-8(1) and Part II.A.1 of the Permit.

13. In recognition of the settlement reached, Respondent waives any right to administrative and judicial review of this Agreed Order.

## II. ORDER

1. This Agreed Order shall be effective (Effective Date) when it is adopted by Complainant or Complainant's delegate (as evidenced by signature), and the adopted Agreed Order has been received by Respondent. This Agreed Order shall have no force or effect until the Effective Date.
2. Respondent shall comply with statutes, rules, and permit conditions listed in the findings above at issue.
3. Respondent shall ensure that its WWTP is at all times maintained in good working order and that all facilities and systems for collection and treatment are efficiently operated. Specifically, within 90 days of the Effective Date, Respondent shall:
  - A. Update and implement the preventative maintenance schedule for WWTP equipment and document all maintenance (preventative and repair) in a

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permanent record. The maintenance record shall be maintained on site and be made available for inspection; and

- B. Develop a routine maintenance and testing procedure to ensure proper operation of the alarm system. The procedure should include a testing schedule and schedule for regular inspection and replacement of faulty equipment. Respondent shall ensure that the alarm system is operational at all times, and capable of notifying Respondent's authorized representatives of failure of equipment at the WWTP.
4. Within 90 days of the Effective Date, Respondent shall develop a Compliance and Emergency Response Plan that will be implemented to minimize the potential for the release of inadequately treated wastewater, prevent sanitary sewer overflows (SSOs), and ensure an effective response to such instances should they occur.

The Compliance and Emergency Response Plan, at a minimum, must include:

- A. Identification of equipment at the WWTP and the sanitary sewer collection system that's failure may result in the discharge of inadequately treated sewage and identification of materials and equipment for facilitating rapid response in the case of equipment failure;
- B. Preventive maintenance for equipment at the WWTP and the sanitary sewer collection system, back up equipment for essential equipment, and maintenance and storage of equipment and supplies necessary to respond to discharges of inadequately treated wastewater and SSOs;
- C. Procedures for expeditiously stopping, containing, and cleaning up spills, discharges of inadequately treated wastewater, and SSOs and other unauthorized releases pursuant to the regulations that are applicable to each type of unauthorized release. The procedures may distinguish between response actions for unauthorized releases that are subject to the requirements in 327 IAC 2-6.1 and unauthorized releases that are subject to other requirements. Employees who may cause, detect or respond to these releases must be trained in these procedures and have necessary response equipment available;
- D. Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies. These procedures should include guidelines for providing all relevant information about the incident to emergency response and regulatory agencies. State or local requirements may necessitate reporting spills or discharges to local emergency response, public health, or drinking water supply agencies.

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Contact information must be in locations that are readily accessible and available;

- E. Procedures for documenting how and where potential discharges of inadequately treated wastewater and SSOs could occur, and the potentially affected areas that would be impacted by such releases; and
  - F. A procedure for documenting all significant pollutants and the extent of exposure that actually occurred at exposed areas and in the receiving waters.
5. The Compliance and Emergency Response Plan required by Paragraph 4 above is subject to IDEM approval. In the event IDEM determines that the plan submitted by Respondent is deficient or otherwise unacceptable, Respondent shall revise and resubmit the plan to IDEM within 30 days of receipt of IDEM's notice. After three submissions of such plan by Respondent, IDEM may modify and approve any such plan and Respondent must implement the plan as modified by IDEM. IDEM's final decision regarding the plan, including but not limited to IDEM's modification and approval of the plan, is a final agency action subject to review pursuant to IC 4-21.5.
6. All submittals required by this Agreed Order, unless Respondent is notified otherwise in writing by IDEM, shall be sent to:

Amari Farren, Enforcement Case Manager  
Indiana Department of Environmental Management  
Surface Water, Operations & Enforcement Branch  
Office of Water Quality – Mail Code 60-02W  
100 North Senate Avenue, Room 1255  
Indianapolis, IN 46204-2251

7. Respondent is liable for reimbursement to the Indiana Department of Natural Resources (IDNR) for the value of damages under authority of IC 14-22-10-6. IDNR has determined this figure to be Eight Hundred and Nine Dollars and 91 Cents (\$809.91). Payment shall be made to the Contaminants Account within thirty (30) days of the Effective Date of this Order. Respondent shall provide the Enforcement Case Manager with documentation of the reimbursement immediately upon payment and sent to:

Attention to: Restoration Biologist  
IDNR Division of Fish and Wildlife  
Room W-273, IGCS  
402 West Washington Street  
Indianapolis, Indiana 46204



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8. Respondent is assessed and agrees to pay a civil penalty of Thirty-Four Thousand, Five Hundred Dollars (\$34,500). Said penalty amount shall be due and payable to the Environmental Management Special Fund in four installment payments of \$8,625 each, according to the following schedule:
- A. The first installment of \$8,625 shall be due within 30 days of the Effective Date;
  - B. The second installment of \$8,625 shall be due within 120 days of the Effective Date;
  - C. The third installment of \$8,625 shall be due within 210 days of the Effective Date; and
  - D. The fourth installment of \$8,625 shall be due within 300 days of the Effective Date.
- In the event civil penalty installments are not paid when due; Respondent shall pay interest on the unpaid balance at the rate established by IC 24-4.6-1-101. The interest shall continue to accrue until the civil penalty is paid in full.
9. In the event the terms and conditions of the following paragraphs are violated, IDEM may assess and Respondent shall pay the corresponding stipulated penalty:

| <b>Paragraph</b> | <b>Violation</b>                                                                                                                                                                                                     | <b>Stipulated Penalty</b>             |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| 3A               | Failure to update and implement a preventative maintenance schedule within 90 days of the Effective Date                                                                                                             | \$250 per week late                   |
| 3A               | Failure to maintain permanent records of maintenance at the Site or make them available for inspection.                                                                                                              | \$250 per violation                   |
| 3B               | Failure to ensure the WWTP has an operational alarm system capable of immediately notifying Respondent's certified operator or other authorized representative in the event of failure of any equipment at the WWTP. | \$250 per violation.                  |
| 3B               | Failure to develop a routine maintenance and testing procedure to ensure proper operation of the alarm system.                                                                                                       | \$200 per week late.                  |
| 4                | Failure to submit a Compliance and Emergency Response Plan.                                                                                                                                                          | \$500 per week late, or part thereof. |
| 5                | Failure to submit a revised Compliance and Emergency Response Plan, if necessary within the required time period.                                                                                                    | \$300 per week late, or part thereof. |

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10. Stipulated penalties shall be due and payable no later than the 30<sup>th</sup> day after Respondent receives written notice that IDEM has determined a stipulated penalty is due, the 30<sup>th</sup> day being a "Due Date." IDEM may notify Respondent at any time that a stipulated penalty is due. Failure to notify Respondent in writing in a timely manner of a stipulated penalty assessment shall not waive IDEM's right to collect such stipulated penalty or preclude IDEM from seeking additional relief against Respondent for violation of this Agreed Order. Neither assessment nor payment of stipulated penalties shall preclude IDEM from seeking additional relief against Respondent for a violation of this Agreed Order. Such additional relief includes any remedies or sanctions available pursuant to Indiana law, except, civil penalties pursuant to IC 13-30-4. In lieu of stipulated penalties, IDEM may elect to seek any remedies or sanctions available pursuant to Indiana law, including, but not limited to, civil penalties pursuant to IC 13-30-4 against Respondent for a violation of this Agreed Order.
11. *Force majeure*, for purposes of this Agreed Order, is defined as any event arising from causes totally beyond the control and without fault of Respondent that delays or prevents the performance of any obligation under this Agreed Order despite Respondent's best efforts to fulfill the obligation. The requirement that Respondent exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential *force majeure* event and best efforts to address the effects of any potential *force majeure* event (1) as it is occurring and (2) following the potential *force majeure* event, such that the delay is minimized to the greatest extent possible. *Force majeure* does not include (1) changed business or economic conditions; (2) financial inability to complete the work required by this Agreed Order; or (3) increases in costs to perform the work.

Respondent shall notify IDEM by calling the case manager within three (3) calendar days and by writing no later than seven (7) calendar days after it has knowledge of any event which Respondent contends is a force majeure. Such notification shall describe (1) the anticipated length of the delay; (2) the cause or causes of the delay; (3) the measures taken or to be taken by Respondent to minimize the delay; and (4) the timetable by which these measures will be implemented. Respondent shall include with any notice all available documentation supporting its claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of force majeure for that event. Respondent shall have the burden of demonstrating that the event is a force majeure. The decision of whether an event is a force majeure shall be made by IDEM.

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If a delay is attributable to a force majeure, IDEM shall extend, in writing, the time period for performance under this Agreed Order, by the amount of time that is directly attributable to the event constituting the force majeure.

12. Civil and stipulated penalties are payable by check to the "Environmental Management Special Fund." Checks shall include the Case Number 2013-21924-W of this action and shall be mailed to:  
  
Indiana Department of Environmental Management  
Cashier – Mail Code 50-10C  
100 North Senate Avenue  
Indianapolis, IN 46204-2251
13. This Agreed Order shall apply to and be binding upon Respondent and its successors and assigns. Respondent's signatories to this Agreed Order certify that they are fully authorized to execute this Agreed Order and legally bind the party they represent. No change in ownership, corporate, or partnership status of Respondent shall in any way alter its status or responsibilities under this Agreed Order.
14. In the event that the monies due to IDEM pursuant to this Agreed Order are not paid on or before their Due Date, Respondent shall pay interest on the unpaid balance and any accrued interest at the rate established by IC 24-4.6-1. The interest shall be computed as having accrued from the Due Date until the date that Respondent pays any unpaid balance. The interest shall continue to accrue on the first of each month until the civil penalty and any interest accrued are paid in full. Such interest shall be payable to the Environmental Management Special Fund, and shall be payable to IDEM in the manner specified above.
15. In the event that any terms of this Agreed Order are found to be invalid, the remaining terms shall remain in full force and effect and shall be construed and enforced as if this Agreed Order did not contain the invalid terms.
16. Respondent shall provide a copy of this Agreed Order, if in force, to any subsequent owners or successors before ownership rights are transferred. Respondent shall ensure that all contractors, firms and other persons performing work under this Agreed Order comply with the terms of this Agreed Order.
17. This Agreed Order is not and shall not be interpreted to be a permit or a modification of an existing permit. This Agreed Order, and IDEM's review or approval of any submittal made by Respondent pursuant to this Agreed Order, shall not in any way relieve Respondent of its obligation to comply with the requirements of its applicable permits or any applicable Federal or State law or regulation.

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18. Complainant does not, by its approval of this Agreed Order, warrant or aver in any manner that Respondent's compliance with any aspect of this Agreed Order will result in compliance with the provisions of any permit, order, or any applicable Federal or State law or regulation. Additionally, IDEM or anyone acting on its behalf shall not be held liable for any costs or penalties Respondent may incur as a result of Respondent's efforts to comply with this Agreed Order.
19. Nothing in this Agreed Order shall prevent or limit IDEM's rights to obtain penalties or injunctive relief under any applicable Federal or State law or regulation, except that IDEM may not, and hereby waives its right to, seek additional civil penalties for the same violations specified in the NOV and/or this Agreed Order.
20. Nothing in this Agreed Order shall prevent IDEM [or anyone acting on its behalf] from communicating with the United States Environmental Protection Agency (EPA) or any other agency or entity about any matters relating to this enforcement action. IDEM or anyone acting on its behalf shall not be held liable for any costs or penalties Respondent may incur as a result of such communications with EPA or any other agency or entity.
21. This Agreed Order shall remain in effect until Respondent has complied with all terms and conditions of Order Paragraphs 3 through 12 and IDEM issues a Resolution of Case (close out) letter.

Respondent is required to notify IDEM in writing, at the address specified in Order Paragraph 6 above, of the date on which all of the terms and conditions of this Agreed Order have been met. While Respondent may be required to provide updates to IDEM concerning the completion of individual terms and conditions, Respondent must provide IDEM with a written response identifying the specific date upon which all terms and conditions have been met that will be the last date of effectiveness for this Agreed Order.

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TECHNICAL RECOMMENDATION:  
Department of Environmental Management

By: Mary E. Hoover

Mary E. Hoover, Chief  
Water Enforcement Section,  
Surface Water, Operations and  
Enforcement Branch  
Office of Water Quality

Date: September 10, 2014

RESPONDENT:  
American Suburban Utilities, Inc.

By: Scott L. Lods

Printed: Scott L. Lods

Title: Owner

Date: 15-September-2014

COUNSEL FOR RESPONDENT:

By: [Signature]

Date: 9/16/14

APPROVED AND ADOPTED BY THE INDIANA DEPARTMENT OF ENVIRONMENTAL  
MANAGEMENT THIS 22 DAY OF September, 2014.

For the Commissioner:

[Signature]

Bruno Pigott  
Assistant Commissioner  
Office of Water Quality

Daily Activity Sheet

OUCS DR 6-16b, Attachment 3  
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Date: 30 October 2015

Name: Devin Eric Kasper

EAH

MON TUE WED THUR FRI SAT SUN

| Weather Conditions |     |       |       |               |  |  |  |
|--------------------|-----|-------|-------|---------------|--|--|--|
| Temp               | 44° |       | Sunny | <u>Cloudy</u> |  |  |  |
| Fog                |     | Sleet | Snow  | Wind          |  |  |  |

| Lift Station Check | Hour Meter |         | Floats | Skim | Pump Down | Spray | Check |
|--------------------|------------|---------|--------|------|-----------|-------|-------|
|                    | #1         | #2      |        |      |           |       |       |
| Kimberly Est.      | 32330.2    | 31788.8 | Wed    | Wed  | Wed       |       |       |
| Copper Beech       | 6336.9     | 6646.3  |        |      | Tue       |       |       |
| Willowbrook        | 1976.3     | 1708.2  | Tue    | Tue  | Tue       |       |       |

| CE-2 Flow per Day: I: |               |           |  | CH-2 Flow per Day:    |               |            |  |
|-----------------------|---------------|-----------|--|-----------------------|---------------|------------|--|
| RAIN:                 | E:            | 1826000   |  | RAIN:                 | 158000        |            |  |
| Blowers:              | Wet Well:     |           |  | Blowers:              | Wet Well:     | Surge Tank |  |
| #1 38048.08           | #1 11626.2    |           |  | #1 33590.8            | #1 15809.2    | #1 14504.0 |  |
| #2 37607.01           | #2 6139.2     |           |  | #2 out                | #2 15482.0    | #2 4632.4  |  |
| #3 69044.4            | #3 9547.0     |           |  | #3 28026.1            | #3            |            |  |
| #4 15441.0            |               |           |  | #4 13393.10           |               |            |  |
| #5 out                |               |           |  | #5 4379.63            |               |            |  |
| CL Tank: 117          | Final CL: 101 |           |  | CL Tank: 139          | Final CL: 102 |            |  |
| DO:                   | 7.5   7.5     | 7.6   7.4 |  | DO:                   | 8.3   8.3     | 1          |  |
| PH: Influent/Effluent | 7.9           | 18.1      |  | PH: Influent/Effluent | 8.2           | 18.1       |  |

| CE-2                                         | Check | CH-2                                | Check |
|----------------------------------------------|-------|-------------------------------------|-------|
| 1). Head Works Wet Well                      | ✓     | 1). Head Works Wet Well             | ✓     |
| 2). Normal Flow out of Chlorine Contact Tank | ✓     | 2). Aeration Blower Running         | ✓     |
| 3). Clean Bar Screens                        | ✓     | 3). 4 Sludge Return Lines           | ✓     |
| 4). Aeration Tank at Proper Level            | ✓     | 4). Chlorine - De-Chlor. Fill Tubes | ✓     |
| 5). Chlorine                                 | ✓     | 5). Clean Solids Off Top Of Water   | ✓     |
| 6). Screens on Decanters                     | ✓     | 6). Scrape Clarifier Walls          | ✓     |

Sign: Devin Kasper

OVER

OUCC DR 6-16b, Attachment 3

Page 5 of 609

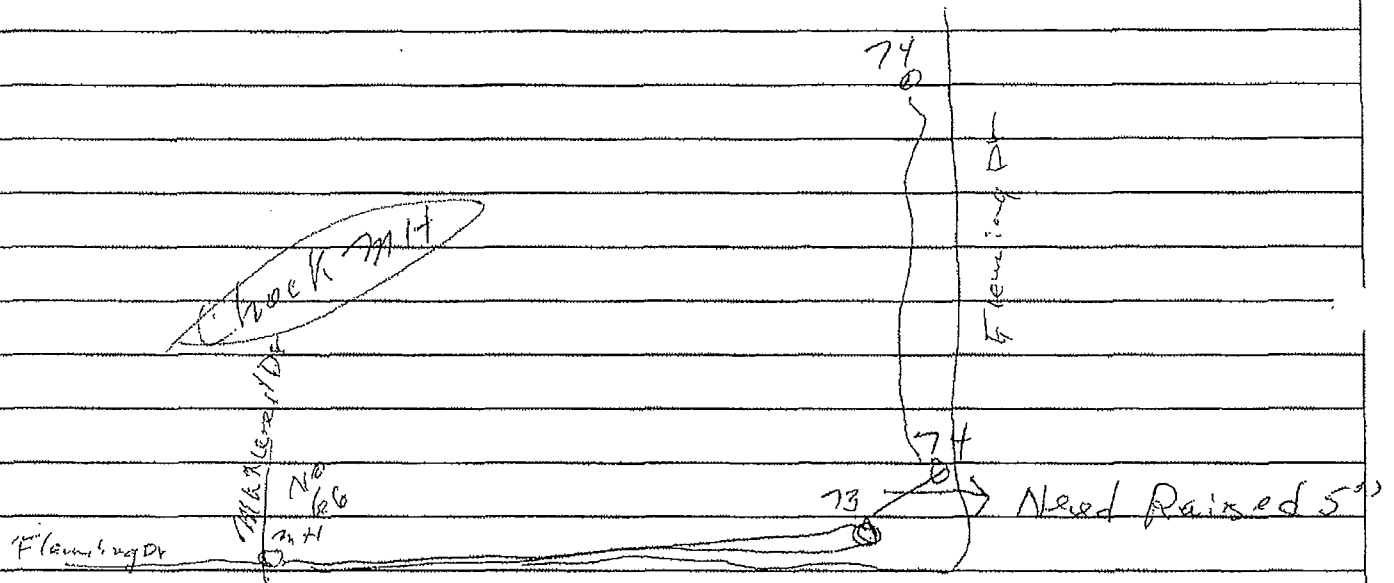
Rounds Testing Water Samples

7 Line Locates

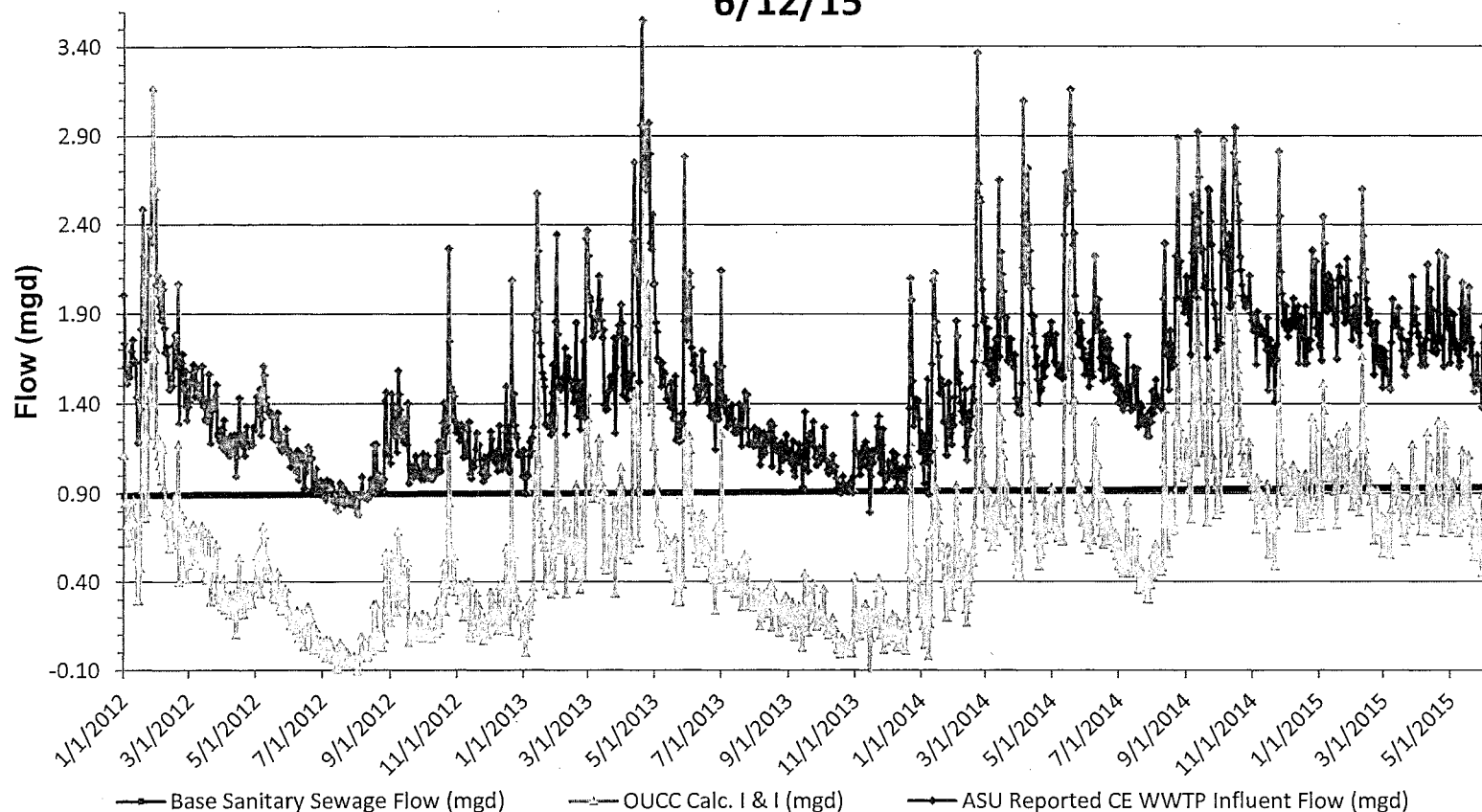
2 Tap Inspections

Waist at CE (1) (2) (3) SBR

M.H. CBL 4, 5, 6



## Raw Sewage Flow Components - Carriage Estates WWTP 1/1/12 to 6/12/15



Estimated 2012 connected population  
 Estimated 2014 connected population  
 OUCC 2014 Est. Base Sanitary Flow (MGD)  
 OUCC 2014 Est. Infiltration & Inflow (MGD)  
 OUCC Calc. Exfiltration Days (2012-June 2015)  
 OUCC Calc. Infiltration Days (2012-June 2015)

| OUCC Est. | OUCC Est. (1) | ASU Population Data Range (2)    |        |        |        |
|-----------|---------------|----------------------------------|--------|--------|--------|
| 10,000    | 12,160        | 12,900                           | 15,000 | 18,000 | 20,000 |
| 11,000    | 12,820        | 15,911                           | 16,500 | 19,800 | 22,000 |
| 0.78      | 0.92          | ASU did not report or estimate   |        |        |        |
| 1.02      | 0.88          | ASU does not monitor or estimate |        |        |        |
| 0         | 29            | 109                              | 242    | 487    | 632    |
| 1,259     | 1,230         | 1,150                            | 1,017  | 772    | 627    |

Notes: (1) Shaded cells show OUCC population estimates, flow components (total 2014 influent flow of 1.80 mgd), and infiltration/exfiltration days.  
 (2) ASU listed populations on submittals to IDEM (e.g. CE WWTP Design Summaries) or provided in 44272 Rebuttal Testimony (Serowka R-10).  
 (3) Increasing number of exfiltration days shown based on increasing ASU population assumptions.



No. OUCC 1-4

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Requested:**

Petitioner stated in a response to inspection letter to Indiana Department of Environmental Management (IDEM) dated November 30, 2011 that a minimum of three manholes are inspected every week. Please provide a copy of the inspection report form that is used for these inspections.

**Requested By:** Daniel M. LeVay, Office of Utility Consumer Counselor (OUCC)  
317-232-4294 – [dlevay@oucc.in.gov](mailto:dlevay@oucc.in.gov)

**Information Provided:**

ASU does not use a written form. ASU's staff is trained to visually inspect for backups, leaks, broken lids and pipe to make sure there is not infiltration or inflow.

No. OUCC 1-5

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Requested:**

Please provide a brief description of how issues that are found during the manhole inspections are resolved.

**Requested By:** Daniel M. LeVay, Office of Utility Consumer Counselor (OUCC)  
317-232-4294 – [dlevay@oucc.in.gov](mailto:dlevay@oucc.in.gov)

**Information Provided:**

It depends on the severity of the situation. If it needs immediate action ASU's inspector calls the office for immediate dispatch of its personnel needed to correct the situation. If it is not urgent the situation is discussed in the following day's morning meeting to schedule any repair if necessary.

No. OUCC 1-6

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Requested:**

Please provide a brief description of how issues are resolved that are found during the televised inspections of the fifteen percent (15%) of the sewer lines each year.

**Requested By:** Daniel M. LeVay, Office of Utility Consumer Counselor (OUCC)  
317-232-4294 – [dlevay@oucc.in.gov](mailto:dlevay@oucc.in.gov)

**Information Provided:**

When ASU televises lines, any problems are documented and solutions are discussed in the morning staff meeting. During the meeting a consensus will be reached as to the most cost effective method to handle the situation.

No. OUCC 1-11

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Requested:**

Please provide a list of projects that have been undertaken in the past three years to address infiltration and inflow (I&I) and the cost to repair.

- a. 2012 I&I Projects list and cost of each project.
- b. 2011 I&I Projects list and cost of each project.
- c. 2010 I&I Projects list and cost of each project.

**Requested By:** Daniel M. LeVay, Office of Utility Consumer Counselor (OUCC)  
317-232-4294 – [dlevay@oucc.in.gov](mailto:dlevay@oucc.in.gov)

**Information Provided:**

- a. 2012 I&I Projects list and cost of each project.

|         |                                                                |
|---------|----------------------------------------------------------------|
| Sept-12 | Klondike Main Repair                                           |
|         | Cost \$88,373.62                                               |
| Dec-12  | Hawthorne Force Main Repair                                    |
|         | Cost not tracked; included in Waste Water Maintenance Accounts |

- b. 2011 I&I Projects list and cost of each project.

|        |                                                                                                                                              |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Mar-11 | Jet sewer on Bridgeway Dr. to Carriage Estates plant. Cut roots in line and patched infiltration with Avanti Grout.                          |
|        | Cost not tracked; included in Waste Water Maintenance Accounts                                                                               |
| May-11 | Jet Vac sewer behind Cheswick apartments to Carrington Estates. Repaired manholes with Avanti Grout.                                         |
|        | Cost not tracked; included in Waste Water Maintenance Accounts                                                                               |
| Oct-11 | Jet lines at Moorehouse Court, TV sewer along Fleming Drive at Lindberg Village. Replaced cleanout caps where source of inflow was detected. |
|        | Cost not tracked; included in Waste Water Maintenance Accounts                                                                               |

No. OUCC 1-11

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Provided (Cont'd):**

c. 2010 I&I Projects list and cost of each project.

|      |                                                                                                                                                       |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2010 | Jetted, cleaned and Televised section of Main behind County Road 400 from Carriage Estates to US Highway 52; patched manhole leaks with Avanti grout. |
|      | Cost not tracked; included in Waste Water Maintenance Accounts                                                                                        |

OUCC DR 05-022

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide a list of projects that were undertaken in 2013, 2014, and 2015 to date to remove infiltration and inflow, the quantity of I&I removed, and the associated project costs.

- a. 2013 I&I Projects list, I&I removed (gallons per day) and the cost of each project.
- b. 2014 I&I Projects list, I&I removed (gallons per day) and the cost of each project.
- c. 2015 I&I Projects list, I&I removed (gallons per day) and the cost of each project.

**Information Provided:**

- a. None
- b. None
- c. None

No. OUCC 3-6

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Requested:**

On page 6, lines 16 thru 22 of Mr. Edward J. Serowka's testimony, Mr. Serowka discusses inflow and infiltration (I&I) and how ASU decided to treat I&I instead of repairing known sources. Describe the methodology ASU or its consulting engineer employed to determine that the proposed projects would be more cost effective than repairing the known sources of I&I. Please provide any cost benefit analysis performed. Please show all calculations and state all assumptions.

**Requested By:** Daniel M. LeVay, Office of Utility Consumer Counselor (OUCC)  
317-232-4294 – [dlevay@oucc.in.gov](mailto:dlevay@oucc.in.gov)

**Information Provided:**

Petitioner objects to the request on the grounds and to the extent that it misstates and mischaracterizes Mr. Serowka's testimony.

Subject to and without waiver of the foregoing objection, Petitioner responds as follows:

First, Petitioner believes the OUCC is addressing Mr. Serowka's testimony on page Serowka-16 and not Serowka-6.

In the above rephrasing of Mr. Serowka's testimony it states that "Mr. Serowka discusses inflow and infiltration (I&I) and how ASU decided to treat I&I instead of repairing known sources." This is not Mr. Serowka's testimony. Mr. Serowka does not believe that he has at any point testified that known sources of I&I have not been repaired. I&I exists in every sewer system. Mr. Serowka's discussion was focused on the unreasonableness of spending large sums of manpower, money and resources to prepare an I&I analysis for a system the size of the American Suburban Utilities Carriage Estates Sewer System. In the end, after spending hundreds of thousands of dollars for an analysis, all the utility ends up with is reports that do not actually solve any problems.

It is clear from the review and analysis of the hydraulic flow to the Carriage Estates II Wastewater Treatment Plant over the years 2009, 2010, 2011 and 2012 that the current average peaking factor over the last four (4) years is 1.54. In other words, the level of I&I in Petitioner's system is not excessive such as might warrant a specific I&I analysis. Therefore, since Petitioner is using a peaking factor of 2.0 for the plant expansion, there is no reason not to believe that the Carriage Estates III Wastewater Treatment Plant would be able to treat the I&I instead of trying to eliminate it by expensive repair/replacement of existing lines.

No. OUCC 3-6

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Provided (Continued):**

The procedures used by American Suburban Utility in their responses to OUCC's Request No. 1, Questions 1.4, 1.5, and 1.6 describe how I&I is addressed and Petitioner believes these are the most cost effective methods.



No. OUCC 3-7

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Requested:**

Is any of the 6.8 MGD capacity of the new plant allocated to treat I&I? If so, how much?

**Requested By:** Daniel M. LeVay, Office of Utility Consumer Counselor (OUCC)  
317-232-4294 – [dlevay@oucc.in.gov](mailto:dlevay@oucc.in.gov)

**Information Provided:**

The proposed Design Average Daily Flow (ADF) for the Carriage Estates III Wastewater Treatment Plant (CEIITP) is 6.8 MGD. The definition of Average Daily Flow as used by the Facility Construction and Engineering Support Section of the Indiana Department of Environmental Management Office of Water Quality was stated in our Response to OUCC's Data Request 1 for Question 1.7. Therefore, the ADF does include infiltration and inflow (I&I).

The maximum amount of I&I that can be treated at CEIITP is determined by the Facility Construction and Engineering Support Section and is once again determined by the "Recommended Standards for Wastewater Facilities," 2004 Edition, published by the Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers. In Chapter 10 "Engineering Reports and Facility Plans," on page 10-6 (Exhibit EJS 1 – OUCC Request 3) Figure 1 shows the Rates of Peak Hourly Flow to Daily Average Flow and is based on 100 gallons/capita/day. Therefore, an ADF of 6.80 Million Gallons per Day is based on a population equivalent of 68,000 individuals. Using Figure 1, it is determined that the wet weather peaking factor is 2.2 which would require that the plant expansion be designed for an Average Daily Flow (ADF) of 6.8 MGD and a Peak Wet Weather Flow (PWWF) of 15.0 MGD ( $6.8 \text{ MGD} \times 2.2 = 15.0 \text{ MGD}$ ). Petitioner however is using a peaking factor of only 2.0 for a Peak Wet Weather Flow of 13.6 MGD, slightly below what IDEM will allow. This is the hydraulic volume which the expanded CEIITP can handle over an eight to twelve hour wet weather event without upsetting the treatment process or exceeding effluent limits.

No. OUCC 5-3

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Requested:**

On page six (6) lines 19 to 21 of his testimony, Mr. Serowka states that some sources (I&I) were not cost effective to repair and that ASU decided to treat the I&I at its Carriage Estates Wastewater Treatment Plant. Please provide a list of the sources of I&I that were not repaired and the estimated daily flow into the system under dry and wet conditions.

**Requested By:** Daniel M. LeVay, Office of Utility Consumer Counselor (OUCC)  
317-232-4294 – [dlevay@oucc.in.gov](mailto:dlevay@oucc.in.gov)

**Information Provided:**

American Suburban Utilities does not maintain a list of potential I & I situations which it feels do not warrant repairs. As previously stated in American Suburban Utilities response to Question 1.6 in OUCC Data Request Set No. 1 dated 14 January, 2013, ASU discusses any issue concerning sewer inspection at its morning staff meetings and discussion is made on how to address the situation. If it is decided to make repairs, then the repairs are scheduled. Otherwise nothing is recorded.

ASU in its response to OUCC Question 1.7 in Data Request No. 1 stated that the Average Daily Flow (ADF) to Carriage Estates II Wastewater Treatment Plant was 1.42 MGD wet, where as the estimated dry Average Daily Flow was 1.15 MGD.

No. OUCC 5-4

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Requested:**

Please provide a list of I&I that has been discovered but not fixed during the televised inspections of the 15% of sewer mains each year and the estimated flow into the system under dry and wet conditions.

**Requested By:** Daniel M. LeVay, Office of Utility Consumer Counselor (OUCC)  
317-232-4294 – [dlevay@oucc.in.gov](mailto:dlevay@oucc.in.gov)

**Information Provided:**

Refer to American Suburban Utilities response to Question 5.3.

No. OUCC 5-6

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Requested:**

Please provide a list of sewer main rehabilitation (slip lining, cured in place lining, etc.) and sewer main replacements that ASU has undertaken in the past ten (10) years not listed on Data Request 1.11.

**Requested By:** Daniel M. LeVay, Office of Utility Consumer Counselor (OUCC)  
317-232-4294 – [dlevay@oucc.in.gov](mailto:dlevay@oucc.in.gov)

**Information Provided:**

American Suburban Utilities has rehabilitated the following lines:

- West 400 North – approx. 1200' of 8" vitrified clay replaced with 8" SDR 35
- Lindberg Project – approx. 5,000' of 10" vitrified clay replaced with 15" SDR 26 & 35

No. OUCC 5-8

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**  
**Cause No. 44272**

**Information Requested:**

Please provide a list of manhole rehabilitations (cured in place spray lining, plugging, etc.) that ASU has undertaken in the past ten (10) years not listed on Data Request 1.11.

**Requested By:** Daniel M. LeVay, Office of Utility Consumer Counselor (OUCC)  
317-232-4294 – [dlevay@oucc.in.gov](mailto:dlevay@oucc.in.gov)

**Information Provided:**

American Suburban Utilities does not track manhole repairs. ASU inspects 3 manholes a day and repairs as needed.

OUCC DR 05-003

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In his direct testimony under Cause No. 44272, Mr. Serowka discussed reduction of infiltration and inflow on pages 16 and 17, and stated on page 17, lines 5-6, that "it is necessary to treat a reasonable level of I&I at the CEIITP." Please state what portion of the 4.0 mgd design average flow for the CE WWTP was allocated by Mr. Serowka or ASU for infiltration and inflow.

**Information Provided:**

Carriage Estates III Wastewater Treatment Plant Influent Design Criteria:

|                                  |         |
|----------------------------------|---------|
| Average Daily Design Flow (ADF): | 4.0 MGD |
| Peak Dry Weather Flow (PDWF)     | 6.0 MGD |
| Peak Wet Weather Flow (PWWF)*    | 8.0 MGD |

\*Based on a 100 year storm event.

OUCC DR 05-004

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

In his direct testimony under Cause No. 44272, Mr. Serowka stated on page 15, lines 17 - 18, that "ASU feels that the expanded CEIITP will be capable of handling the 100 year storm event without bypassing." Please state the flow in million gallons per day (mgd) allocated by Mr. Serowka or ASU for the 100 year storm event in the design flows for the Carriage Estates Wastewater Treatment Plant (CE WWTP).

**Information Provided:**

See response to OUCC DR 5-3.

OUCC DR 05-027

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Has an infiltration and inflow (I&I) study been conducted by or on behalf of ASU in the last five years? If so, please state who conducted the I&I Study and provide a copy of the study. If no studies were conducted, so state.

**Information Provided:**

No studies have been conducted within the last five (5) years.



OUCC DR 05-028

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Have temporary flow meters been installed in the collection system by or on behalf of ASU in the last five years? If so, please indicate the monitoring location(s). If no flow meters were installed, so state.

**Information Provided:**

No flow meters have been installed in the collection system within the last five (5) years.

OUCC DR 05-029

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Has an influent flow study been conducted by or on behalf of ASU in the last five years for the Carriage Estates and County Home wastewater plants? If so, please state who conducted the Influent Flow Studies and provide a copy of the studies. If no studies were conducted, so state.

**Information Provided:**

No influent flow studies have been conducted for either the Carriage Estates II or the County Home II Wastewater Treatment Plant.

OUCC DR 05-031

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state whether ASU identified any segment of the collection system that experiences surcharging, and if so, please explain what ASU has done to address the surcharging.

**Information Provided:**

The three (3) manholes prior to the Carriage Estates II Wastewater Treatment Plant will surcharge and overflow with rain events greater than the 100 year storm event since approximately 70% of ASU collection system serviced by the CEIIWWTP discharged into these manholes. The result is that the plant's headworks cannot pump this volume of water fast enough into the plant for treatment.

ASU is addressing this situation in two (2) ways:

- a. ASU is attempting to divide the collection system more evenly so that more flows goes to the larger and newer north collection system thus taking pressure off the east system.
- b. Expanding the Carriage Estates II W.W.T.P. including larger and deeper influent auxiliary manholes and a new larger influent lift station so that the influent can be removed faster from the collection system and treated in the expanded plant.

OUCC DR 05-032

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state whether ASU has any plans to identify and reduce I&I in the next five years, including proposed annual budgets for I&I reduction.

**Information Provided:**

There are no plans or budgets to identify I&I sources over the next five (5) years because ASU's collection system is 80% PVC pipe and most of it is less than ten (10) years old and in good condition.

OUCC DR 05-033

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state whether ASU has identified defects in specific manholes and sewer locations where infiltration and inflow is entering ASU's collection system.

**Information Provided:**

There are none.

OUCG DR 12-006

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

Cause No. 44676

**Information Requested:**

Regarding ASU's response to OUCG DR 5-3, please confirm that the portion of the 4.0 mgd design average flow for the CE WWTP allocated by Mr. Serowka for infiltration and inflow is 0.0 mgd.

**Information Provided:**

No, that statement is not correct. The Recommended Standards for Wastewater Treatment (Ten State Standards) defines the Design Average Flow (ADF) as follows:

**11.24 Hydraulic Capacity**

**11.241 Flow Definitions and Identification**

The following flows for the design year shall be identified and used as a basis for design for sewers, lift stations, wastewater treatment plants, treatment units, and other wastewater handling facilities. Where any of the terms defined in this Section are used in these design standards, the definition contained in this Section applies.

a. Design Average Flow

The design average flow is the average of the daily volumes to be received for a continuous 12 month period expressed as a volume per unit time. However, the design average flow for facilities having critical seasonal high hydraulic loading periods (e.g., recreational areas, campuses, industrial facilities) shall be based on the daily average flow during the seasonal period.

Therefore, the average daily flow to the plant is the average of the total of the actual sewage flow plus the I&I entering the collection system over the years. Based on these average flows the 4.0 MGD Average Design Flow will contain I&I flows but these I&I flows can only be estimated. Notably, the response to OUCG DR 5-3 also provided the Peak Dry Weather Flow (6.0 MGD) and Peak Wet Weather Flow (8.0 MGD) design criteria.

OUCG DR 12-007

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Regarding ASU's response to OUCG DR 5-4 asking for ASU to state the flow in mgd allocated by Mr. Serowka or ASU for the 100 year storm event in the design flows for the CE WWTP, please confirm that the 100 year storm flow is 4.0 MGD which is the difference between the Peak Wet Weather Flow (PWWF) of 8.0 MGD and the Average Daily Design Flow (ADF) of 4.0 MGD.

**Information Provided:**

The peaking factor used to arrive at the 100 year storm flow capacity for the Carriage Estates III W.W.T.P. was 2.0 which resulted in a peak wet weather flow of 8.0 MGD which is 4.0 MGD above the ADF.

OUCG DR 16-005 (Supplemental)

DATA INFORMATION REQUEST  
American Suburban Utilities, Inc.

Cause No. 44676

**Information Requested:**

In response to OUCG DR 3-6 under Cause No. 44272, ASU stated that "I&I exists in every sewer system." and in his direct testimony under Cause No. 44272, Mr. Serowka stated on page 17, lines 5-6, that "it is necessary to treat a reasonable level of I&I at the CEIITP." Please state the reasonable levels of I&I assumed or estimated by or on behalf of ASU in the current influent flows and in the design of the Carriage Estates WWTP using the following format.

|                                                    | Current Year | Design Year | Future |
|----------------------------------------------------|--------------|-------------|--------|
| Year                                               | 2013         | 2030        | 2040   |
| ASU Assumed Population                             | 15,000       | 40,000      | 60,000 |
| Domestic, Commercial, and Institutional Flow (MGD) |              |             |        |
| Reasonable Level of Infiltration & Inflow (MGD)    |              |             |        |
| Design Average Flow (MGD)                          | 1.50         | 4.0         | 6.0    |
| Annual Average Flow (MGD)                          | 1.41         | 4.0         | 6.0    |

**Original Information Provided:**

To be provided.

**Supplemental Information Provided:**

The above request will be answered based on the requirements listed in Ten States Standard which states the following:

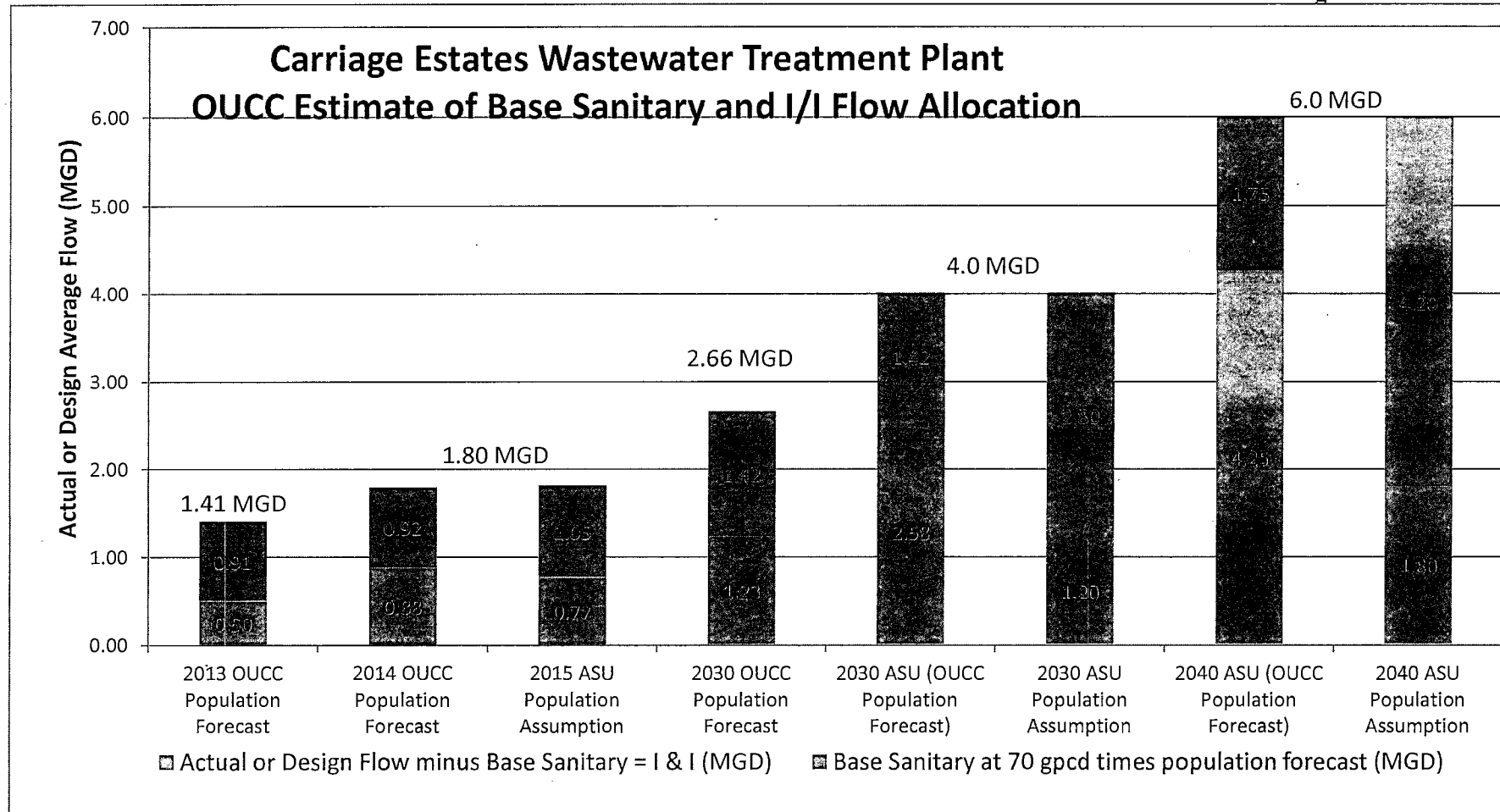
**"11.243 Hydraulic Capacity for Wastewater Facilities to serve New Collection Systems**



- a. The sizing of wastewater facilities receiving flows from new wastewater collection systems shall be based on an average daily flow of 100 gallons (380 L) per capita plus wastewater flow from industrial plants and major institutional and commercial facilities unless water use data or other justification upon which to better estimate flow is provided.
- b. The 100 gal/cap/d [380 L/(capita·d)] figure shall be used which, in conjunction with a peaking factor from Figure 1, is intended to cover normal infiltration for systems built with modern construction techniques. Refer to Section 31. However, an additional allowance should be made where conditions are unfavorable."

|                                                                     | Current Year | Design Year | Future |
|---------------------------------------------------------------------|--------------|-------------|--------|
| Year                                                                | 2013         | 2030        | 2040   |
| ASU Assumed Population                                              | 15,000       | 40,000      | 60,000 |
| Domestic, Commercial, and Institutional Flow (MGD)                  | 1.50         | 4.0         | 6.0    |
| Flow including Infiltration & Inflow (MGD)                          | 5.55         | 10.0        | 13.8   |
| Reasonable Level of I&I as Determined by Ten States Standards (MGD) | 4.05         | 6.0         | 7.8    |
| ASU Plant ADF Size                                                  | 1.50         | 4.0         | 6.0    |
| ASU Plant PWWF Size                                                 | 3.75         | 8.0         | 12.0   |

As can be seen from the above data, ASU's proposed Carriage Estates III Wastewater Treatment Plant sizing is less than required by the Ten States Standards since ASU used "water data or other justification upon which to better estimate flow..." which once again, proves that the ASU collection system does not have excessive I&I.



| Year                                    | 2013   | 2014   | 2015   | 2030   | 2030   | 2030   | 2040   | 2040   |
|-----------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Current or Design Average Flow (MGD)    | 1.41   | 1.80   | 1.82   | 2.66   | 4.0    | 4.0    | 6.0    | 6.0    |
| OUCC Population Estimate                | 12,596 | 12,816 | 11,756 | 20,322 | 20,322 |        | 24,978 |        |
| OUCC Base Sanitary Flow (MGD)           | 0.91   | 0.92   |        | 1.42   | 1.4    |        | 1.7    |        |
| ASU Population Listed on Constr. Permit |        |        | 15,000 |        |        | 40,000 |        | 60,000 |
| ASU Base Sanitary Flow (MGD)            |        |        | 1.05   |        |        | 2.8    |        | 4.2    |
| OUCC Est. Infiltration & Inflow (MGD)   | 0.50   | 0.88   | 0.77   | 1.23   | 2.6    | 1.2    | 4.3    | 1.8    |

## Population/Flows Based on Extrapolated IBRC Forecasts with 75% of Wabash Township Growth Occurring in the CE WWTP Service Area

| Straightline population growth |            |          |                    |             |
|--------------------------------|------------|----------|--------------------|-------------|
| Year                           | Population | % Growth | gallons/capita/day |             |
|                                |            |          | 70                 | 100         |
| 2013                           | 12,596     |          | Base Sanitary      | Base w/ I/I |
| 2014                           | 12,816     | 1.7%     |                    |             |
| 2015                           | 11,756     | -8.3%    | 822,913            | 1,800,000   |
| 2016                           | 12,327     | 4.9%     | 862,888            | 1,857,107   |
| 2017                           | 12,898     | 4.6%     | 902,863            | 1,914,214   |
| 2018                           | 13,469     | 4.4%     | 942,839            | 1,971,322   |
| 2019                           | 14,040     | 4.2%     | 982,814            | 2,028,429   |
| 2020                           | 14,611     | 4.1%     | 1,022,789          | 2,085,536   |
| 2021                           | 15,182     | 3.9%     | 1,062,764          | 2,142,643   |
| 2022                           | 15,753     | 3.8%     | 1,102,739          | 2,199,751   |
| 2023                           | 16,324     | 3.6%     | 1,142,714          | 2,256,858   |
| 2024                           | 16,896     | 3.5%     | 1,182,689          | 2,313,965   |
| 2025                           | 17,467     | 3.4%     | 1,222,664          | 2,371,072   |
| 2026                           | 18,038     | 3.3%     | 1,262,639          | 2,428,180   |
| 2027                           | 18,609     | 3.2%     | 1,302,614          | 2,485,287   |
| 2028                           | 19,180     | 3.1%     | 1,342,589          | 2,542,394   |
| 2029                           | 19,751     | 3.0%     | 1,382,564          | 2,599,501   |
| * 2030                         | 20,322     | 2.9%     | 1,422,539          | 2,656,609   |
| 2031                           | 20,788     | 2.3%     | 1,455,135          | 2,703,174   |
| 2032                           | 21,253     | 2.2%     | 1,487,730          | 2,749,739   |
| 2033                           | 21,719     | 2.2%     | 1,520,326          | 2,796,304   |
| 2034                           | 22,185     | 2.1%     | 1,552,921          | 2,842,869   |
| 2035                           | 22,650     | 2.1%     | 1,585,517          | 2,889,434   |
| 2036                           | 23,116     | 2.1%     | 1,618,112          | 2,935,999   |
| 2037                           | 23,582     | 2.0%     | 1,650,708          | 2,982,564   |
| 2038                           | 24,047     | 2.0%     | 1,683,304          | 3,029,129   |
| 2039                           | 24,513     | 1.9%     | 1,715,899          | 3,075,694   |
| * 2040                         | 24,978     | 1.9%     | 1,748,495          | 3,122,259   |

| Percentage population growth |            |          |                    |           | OUCG Est.     |
|------------------------------|------------|----------|--------------------|-----------|---------------|
| Year                         | Population | % Growth | gallons/capita/day |           | Housing Units |
|                              |            |          | 70                 | 100       |               |
| 2013                         | 12,596     |          | 881,723            | 1,411,870 | 5,184         |
| 2014                         | 12,816     | 3.7%     | 897,119            | 1,800,206 | 5,278         |
| 2015                         | 11,756     | 3.7%     | 822,913            | 1,800,000 | 4,845         |
| 2016                         | 12,193     | 3.7%     | 853,496            | 1,843,689 | 5,029         |
| 2017                         | 12,646     | 3.7%     | 885,215            | 1,889,002 | 5,220         |
| 2018                         | 13,116     | 3.7%     | 918,113            | 1,936,000 | 5,418         |
| 2019                         | 13,603     | 3.7%     | 952,234            | 1,984,743 | 5,624         |
| 2020                         | 14,109     | 3.7%     | 987,622            | 2,035,298 | 5,837         |
| 2021                         | 14,633     | 3.7%     | 1,024,326          | 2,087,732 | 6,059         |
| 2022                         | 15,177     | 3.7%     | 1,062,394          | 2,142,115 | 6,289         |
| 2023                         | 15,741     | 3.7%     | 1,101,876          | 2,198,519 | 6,528         |
| 2024                         | 16,326     | 3.7%     | 1,142,826          | 2,257,019 | 6,775         |
| 2025                         | 16,933     | 3.7%     | 1,185,298          | 2,317,692 | 7,033         |
| 2026                         | 17,562     | 3.7%     | 1,229,348          | 2,380,621 | 7,300         |
| 2027                         | 18,215     | 3.7%     | 1,275,035          | 2,445,889 | 7,577         |
| 2028                         | 18,892     | 3.7%     | 1,322,421          | 2,513,582 | 7,864         |
| 2029                         | 19,594     | 3.7%     | 1,371,567          | 2,583,791 | 8,163         |
| 2030                         | 20,322     | 3.7%     | 1,422,539          | 2,656,609 | 8,473         |
| 2031                         | 20,746     | 2.1%     | 1,452,193          | 2,698,971 | 8,656         |
| 2032                         | 21,178     | 2.1%     | 1,482,464          | 2,742,216 | 8,843         |
| 2033                         | 21,620     | 2.1%     | 1,513,367          | 2,786,363 | 9,035         |
| 2034                         | 22,070     | 2.1%     | 1,544,914          | 2,831,429 | 9,230         |
| 2035                         | 22,530     | 2.1%     | 1,577,118          | 2,877,436 | 9,430         |
| 2036                         | 23,000     | 2.1%     | 1,609,994          | 2,924,401 | 9,634         |
| 2037                         | 23,479     | 2.1%     | 1,643,555          | 2,972,346 | 9,842         |
| 2038                         | 23,969     | 2.1%     | 1,677,816          | 3,021,289 | 10,055        |
| 2039                         | 24,468     | 2.1%     | 1,712,791          | 3,071,253 | 10,273        |
| 2040                         | 24,978     | 2.1%     | 1,748,495          | 3,122,259 | 10,495        |

|                               |      |                                     |      |             |             |      |
|-------------------------------|------|-------------------------------------|------|-------------|-------------|------|
| 2013-2030 average growth rate | 3.7% | Tippecanoe Co. 2010 Housing Density | 2.43 | people/unit | Design Year | 2030 |
| 2031-2040 average growth rate | 2.1% | Tippecanoe Co. 2040 Housing Density | 2.38 | people/unit | Future Year | 2040 |

Note: No reduction of 2015 I/I flows and 75% of Wabash Township growth is assumed to occur in ASU's CE WWTP service area.

Wabash Township Population                      2013      63,346                      2030      74,767                      2040      80,976

**STATSINDIANA** Indiana Population Projections 

|                                                                      |                                                 |                                                                                                                          |                                                                  |
|----------------------------------------------------------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| Select General Area<br><input type="text" value="Indiana Counties"/> | Select Year<br><input type="text" value="All"/> | Projections<br><input type="text" value="Total, Functional Groups"/>                                                     | Help<br>Custom Region<br><input type="checkbox"/> Group Counties |
| Select Geography<br><input type="text" value="Tippecanoe"/>          |                                                 | <input type="checkbox"/> Show % of Total<br><input type="button" value="Get Data"/> <input type="button" value="Print"/> |                                                                  |

Data by Topic | I

# Indiana Population Projections - Tippecanoe County, Total

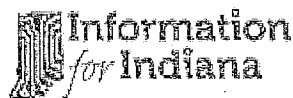
| Year | Total   | Preschool<br>0-4 | School Age<br>5-19 | College Age<br>20-24 | Young Adult<br>25-44 | Older Adult<br>45-64 | Seniors<br>65+ |
|------|---------|------------------|--------------------|----------------------|----------------------|----------------------|----------------|
| 2010 | 172,780 | 11,030           | 35,786             | 31,483               | 43,346               | 34,756               | 16,379         |
| 2015 | 182,205 | 10,924           | 38,329             | 32,101               | 44,868               | 36,363               | 19,620         |
| 2020 | 190,530 | 11,525           | 40,064             | 32,007               | 46,486               | 36,747               | 23,701         |
| 2025 | 197,949 | 11,987           | 41,397             | 32,487               | 47,672               | 36,687               | 27,719         |
| 2030 | 204,842 | 12,274           | 42,376             | 33,370               | 48,914               | 37,098               | 30,810         |
| 2035 | 210,704 | 12,534           | 43,540             | 32,975               | 50,442               | 38,559               | 32,654         |
| 2040 | 215,936 | 12,774           | 44,409             | 33,484               | 51,087               | 40,085               | 34,097         |
| 2045 | 220,839 | 13,016           | 45,114             | 33,913               | 52,315               | 41,225               | 35,256         |
| 2050 | 225,765 | 13,261           | 45,792             | 34,169               | 53,611               | 42,438               | 36,494         |

Notes: 2010 data are census counts from the U.S. Census Bureau.

Metro areas that show (pt) include only projections for the Indiana counties in that area.

Source: STATS Indiana, using data from the Indiana Business Research Center, IU Kelley School of Business

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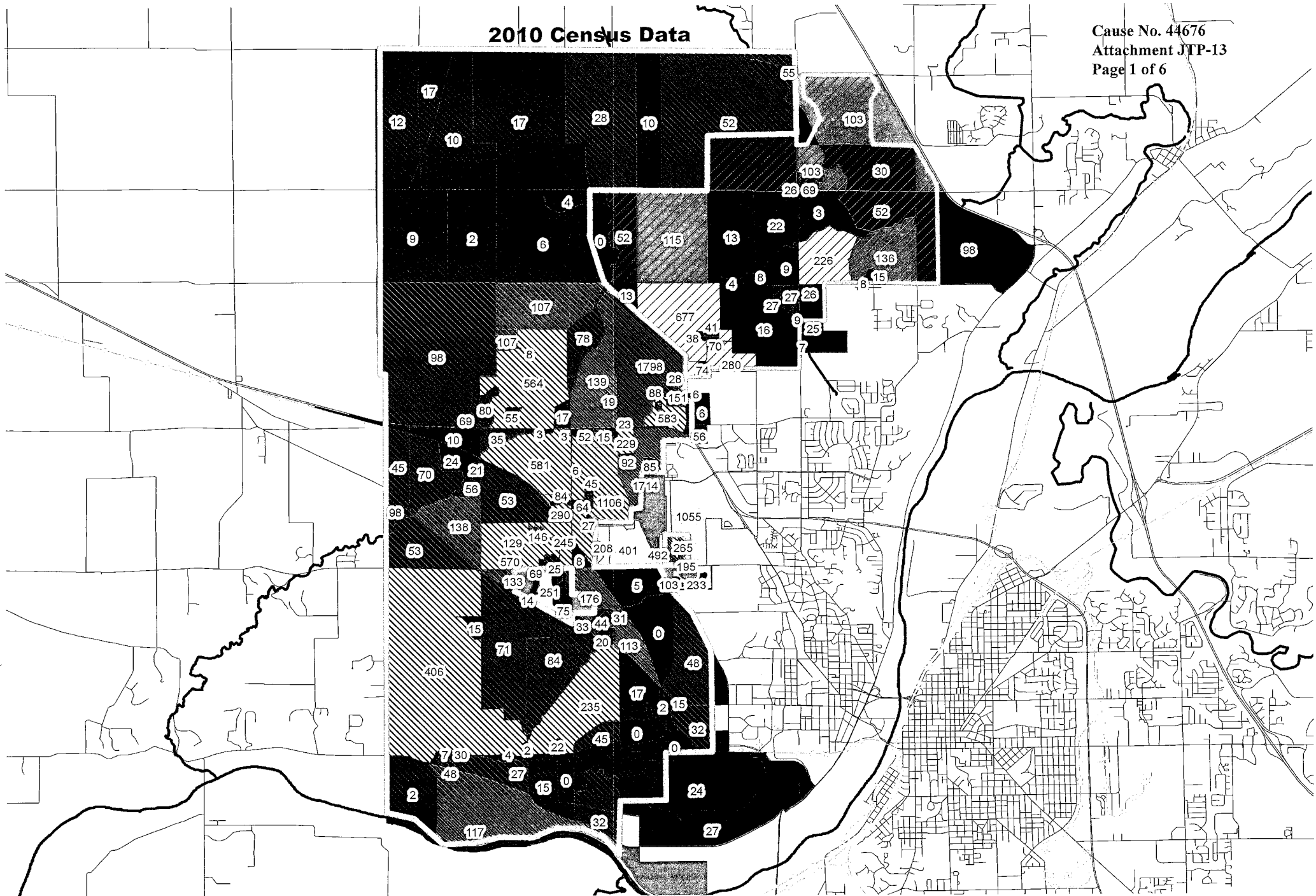
**Tippecanoe County Township Population Forecasts 2011 to 2014 Based on 2010 Census Data**  
Indiana Business Research Center

| Geographic Area     | Population Estimates (July 1 of Each Year) |         |         |         |         | 1-Apr-10          |         | Change<br>2010 to 2014 |         |
|---------------------|--------------------------------------------|---------|---------|---------|---------|-------------------|---------|------------------------|---------|
|                     | 2010                                       | 2011    | 2012    | 2013    | 2014    | Estimates<br>Base | Census  | Number                 | Percent |
|                     |                                            |         |         |         |         |                   |         |                        |         |
| Tippecanoe County   | 173,011                                    | 175,485 | 178,180 | 180,925 | 183,074 |                   | 172,780 |                        |         |
| Fairfield Township  | 51,149                                     | 51,835  | 52,092  | 52,705  | 52,748  | 51,113            | 51,113  | 1,599                  | 3.10%   |
| Jackson Township    | 499                                        | 507     | 521     | 532     | 541     | 499               | 499     | 42                     | 8.40%   |
| Lauramie Township   | 2,600                                      | 2,643   | 2,723   | 2,783   | 2,824   | 2,596             | 2,596   | 224                    | 8.60%   |
| Perry Township      | 7,180                                      | 7,314   | 7,546   | 7,720   | 7,840   | 7,161             | 7,161   | 660                    | 9.20%   |
| Randolph Township   | 934                                        | 952     | 982     | 1,004   | 1,017   | 931               | 931     | 83                     | 8.90%   |
| Sheffield Township  | 3,875                                      | 3,945   | 4,068   | 4,160   | 4,222   | 3,865             | 3,865   | 347                    | 9.00%   |
| Shelby Township     | 2,355                                      | 2,396   | 2,460   | 2,513   | 2,544   | 2,352             | 2,352   | 189                    | 8.00%   |
| Tippecanoe Township | 7,714                                      | 7,833   | 8,050   | 8,215   | 8,344   | 7,702             | 7,702   | 630                    | 8.20%   |
| Union Township      | 1,613                                      | 1,640   | 1,690   | 1,727   | 1,751   | 1,610             | 1,610   | 138                    | 8.60%   |
| Wabash Township     | 59,371                                     | 60,143  | 61,281  | 62,203  | 63,648  | 59,279            | 59,279  | 4,277                  | 7.20%   |
| Washington Township | 2,438                                      | 2,480   | 2,557   | 2,614   | 2,653   | 2,432             | 2,432   | 215                    | 8.80%   |
| Wayne Township      | 1,583                                      | 1,612   | 1,663   | 1,702   | 1,727   | 1,580             | 1,580   | 144                    | 9.10%   |
| Wea Township        | 31,700                                     | 32,185  | 32,547  | 33,047  | 33,215  | 31,660            | 31,660  | 1,515                  | 4.80%   |

Note: The Carriage Estates Wastewater Treatment Plant and sewage collection system are located entirely within Wabash Township.

# 2010 Census Data

Cause No. 44676  
Attachment JTP-13  
Page 1 of 6



County Home Tributary Population

| OUCC 2010<br>Assumed %<br>in ASU CH | 2010<br>Census | 2010 CH<br>WWTP | 2011 -<br>2014<br>Increase | 2014 CH<br>WWTP | OUCC 2015<br>Assumed %<br>in ASU | 2015<br>Increase | 2015 CH<br>WWTP |
|-------------------------------------|----------------|-----------------|----------------------------|-----------------|----------------------------------|------------------|-----------------|
| 0%                                  | 103            | -               | -                          | -               | 0%                               | -                | -               |
| 100%                                | 103            | 103             | 8                          | 111             | 100%                             | -2               | 113             |
| 0%                                  | 30             | -               | -                          | -               | 0%                               | -                | -               |
| 100%                                | 26             | 26              | 2                          | 28              | 100%                             | 1                | 28              |
| 100%                                | 69             | 69              | 5                          | 74              | 100%                             | 1                | 75              |
| 100%                                | 43             | 43              | 3                          | 46              | 100%                             | 1                | 47              |
| 0%                                  | 52             | -               | -                          | -               | 0%                               | -                | -               |
| 0%                                  | 115            | -               | -                          | -               | 0%                               | -                | -               |
| 0%                                  | 13             | -               | -                          | -               | 0%                               | -                | -               |
| 0%                                  | 22             | -               | -                          | -               | 0%                               | -                | -               |
| 100%                                | 3              | 3               | 0                          | 3               | 100%                             | 0                | 3               |
| 100%                                | 52             | 52              | 4                          | 56              | 100%                             | 1                | 57              |
| 0%                                  | 4              | -               | -                          | -               | 0%                               | -                | -               |
| 0%                                  | 8              | -               | -                          | -               | 0%                               | -                | -               |
| 0%                                  | 9              | -               | -                          | -               | 0%                               | -                | -               |
| 85%                                 | 226            | 192             | 14                         | 206             | 85%                              | 4                | 210             |
| 0%                                  | 8              | -               | -                          | -               | 0%                               | -                | -               |
| 0%                                  | 15             | -               | -                          | -               | 0%                               | -                | -               |
| 85%                                 | 136            | 116             | 9                          | 124             | 85%                              | 2                | 126             |
| 0%                                  | 98             | -               | -                          | -               | 0%                               | -                | -               |
| 0%                                  | 13             | -               | -                          | -               | 0%                               | -                | -               |
| 0%                                  | 677            | -               | -                          | -               | 100%                             | 13               | 740             |
| 0%                                  | 27             | -               | -                          | -               | 0%                               | -                | -               |
| 100%                                | 27             | 27              | 2                          | 29              | 100%                             | 1                | 30              |
| 100%                                | 26             | 26              | 2                          | 28              | 100%                             | 1                | 28              |
| 0%                                  | 38             | -               | -                          | -               | 100%                             | 1                | 42              |
| 0%                                  | 41             | -               | -                          | -               | 100%                             | 1                | 45              |
| 0%                                  | 55             | -               | -                          | -               | 100%                             | 1                | 77              |
| 0%                                  | 16             | -               | -                          | -               | 0%                               | -                | -               |
| 0%                                  | 9              | -               | -                          | -               | 0%                               | -                | -               |
| 0%                                  | 25             | -               | -                          | -               | 0%                               | -                | -               |
| 0%                                  | 70             | -               | -                          | -               | 100%                             | 1                | 77              |
| 0%                                  | 64             | -               | -                          | -               | 100%                             | -                | -               |
| 0%                                  | 7              | -               | -                          | -               | 0%                               | -                | -               |
| 0%                                  | 74             | -               | -                          | -               | 100%                             | 1                | 81              |
| 0%                                  | 280            | -               | -                          | -               | 100%                             | 5                | 306             |
| <b>Total</b>                        | <b>2,584</b>   | <b>657</b>      | <b>48</b>                  | <b>705</b>      |                                  | <b>37</b>        | <b>2,084</b>    |

Source: Tippecanoe County Planning Department based on U.S. Census data

County Home Tributary Population

| OUCC 2010 |        | 2011 -  |          |         | OUCC 2015 |          |         |
|-----------|--------|---------|----------|---------|-----------|----------|---------|
| Assumed % | 2010   | 2010 CH | 2014     | 2014 CH | Assumed % | 2015     | 2015 CH |
| in ASU CH | Census | WWTP    | Increase | WWTP    | in ASU    | Increase | WWTP    |

Wabash Township Population

| 2010   | 2014 Est. | Increase | % Incr. | Annual % |
|--------|-----------|----------|---------|----------|
| 63,648 | 59,279    | 4,369    | 7.37%   | 1.79%    |

Source: Stats Indiana produced by the Indiana Business Research Center

OUCC Estimated Population Tributary to each WWTP

|         | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   |
|---------|--------|--------|--------|--------|--------|--------|
| CH WWTP | 657    | 669    | 681    | 693    | 705    | 2,084  |
| CE WWTP | 11,936 | 12,156 | 12,376 | 12,596 | 12,816 | 11,756 |
| Total   | 12,593 | 12,825 | 13,057 | 13,289 | 13,521 | 13,840 |



Carriage Estates Tributary Population

| OUCC<br>Assumed %<br>in ASU CE | 2010<br>Census | 2010 CE<br>WWTP | 2011 -<br>2014<br>Increase | 2014 CE<br>WWTP | OUCC 2015<br>Assumed %<br>in ASU | 2015<br>Increase | 2015 CE<br>WWTP |
|--------------------------------|----------------|-----------------|----------------------------|-----------------|----------------------------------|------------------|-----------------|
| 0%                             | 12             | -               | -                          | -               | 0%                               | -                | -               |
| 0%                             | 17             | -               | -                          | -               | 0%                               | -                | -               |
| 0%                             | 10             | -               | -                          | -               | 0%                               | -                | -               |
| 0%                             | 17             | -               | -                          | -               | 0%                               | -                | -               |
| 0%                             | 28             | -               | -                          | -               | 0%                               | -                | -               |
| 0%                             | 10             | -               | -                          | -               | 0%                               | -                | -               |
| 0%                             | 52             | -               | -                          | -               | 0%                               | -                | -               |
| 0%                             | 55             | -               | -                          | -               | 0%                               | -                | -               |
| 0%                             | 9              | -               | -                          | -               | 0%                               | -                | -               |
| 0%                             | 2              | -               | -                          | -               | 0%                               | -                | -               |
| 0%                             | 6              | -               | -                          | -               | 0%                               | -                | -               |
| 0%                             | 4              | -               | -                          | -               | 0%                               | -                | -               |
| 0%                             | 98             | -               | -                          | -               | 0%                               | -                | -               |
| 0%                             | 107            | -               | -                          | -               | 0%                               | -                | -               |
| 85%                            | 107            | 91              | 7                          | 98              | 85%                              | 1                | 99              |
| 100%                           | 8              | 8               | 1                          | 9               | 100%                             | 0                | 9               |
| 0%                             | 78             | -               | -                          | -               | 0%                               | -                | -               |
| 100%                           | 677            | 677             | 50                         | 727             | 0%                               | -                | -               |
| 100%                           | 38             | 38              | 3                          | 41              | 0%                               | 1                | -               |
| 100%                           | 41             | 41              | 3                          | 44              | 0%                               | 1                | -               |
| 100%                           | 70             | 70              | 5                          | 75              | 0%                               | 1                | -               |
| 100%                           | 74             | 74              | 5                          | 79              | 0%                               | 1                | -               |
| 100%                           | 280            | 280             | 21                         | 301             | 0%                               | 5                | -               |
| 100%                           | 1,798          | 1,798           | 133                        | 1,931           | 100%                             | 35               | 1,965           |
| 100%                           | 564            | 564             | 42                         | 606             | 100%                             | 11               | 616             |
| 100%                           | 139            | 139             | 10                         | 149             | 100%                             | 3                | 152             |
| 100%                           | 28             | 28              | 2                          | 30              | 100%                             | 1                | 31              |
| 100%                           | 88             | 88              | 6                          | 94              | 100%                             | 2                | 96              |
| 100%                           | 151            | 151             | 11                         | 162             | 100%                             | 3                | 165             |
| 0%                             | 6              | -               | -                          | -               | 100%                             | -                | -               |
| 100%                           | 69             | 69              | 5                          | 74              | 100%                             | 1                | 75              |
| 100%                           | 80             | 80              | 6                          | 86              | 100%                             | 2                | 87              |
| 100%                           | 55             | 55              | 4                          | 59              | 100%                             | 1                | 60              |
| 100%                           | 19             | 19              | 1                          | 20              | 100%                             | 0                | 21              |
| 100%                           | 23             | 23              | 2                          | 25              | 100%                             | 0                | 25              |
| 100%                           | 29             | 29              | 2                          | 31              | 100%                             | 1                | 32              |
| 100%                           | 583            | 583             | 43                         | 626             | 100%                             | 11               | 637             |
| 100%                           | 227            | 227             | 17                         | 244             | 100%                             | 4                | 248             |
| 0%                             | 6              | -               | -                          | -               | 0%                               | -                | -               |
| 0%                             | -              | -               | -                          | -               | 0%                               | -                | -               |
| 100%                           | 82             | 82              | 6                          | 88              | 100%                             | 2                | 90              |

Carriage Estates Tributary Population

| OUCC      |        | 2011 -  |          |         | OUCC 2015 |          |         |
|-----------|--------|---------|----------|---------|-----------|----------|---------|
| Assumed % | 2010   | 2010 CE | 2014     | 2014 CE | Assumed % | 2015     | 2015 CE |
| in ASU CE | Census | WWTP    | Increase | WWTP    | in ASU    | Increase | WWTP    |
| 100%      | 26     | 26      | 2        | 28      | 100%      | 1        | 28      |
| 100%      | 24     | 24      | 2        | 26      | 100%      | 0        | 26      |
| 100%      | 58     | 58      | 4        | 62      | 100%      | 1        | 63      |
| 0%        | 10     | -       | -        | -       | 0%        | -        | -       |
| 100%      | 35     | 35      | 3        | 38      | 100%      | 1        | 38      |
| 100%      | 3      | 3       | 0        | 3       | 100%      | 0        | 3       |
| 100%      | 3      | 3       | 0        | 3       | 100%      | 0        | 3       |
| 100%      | 52     | 52      | 4        | 56      | 100%      | 1        | 57      |
| 100%      | 130    | 130     | 10       | 140     | 100%      | 3        | 142     |
| 100%      | 15     | 15      | 1        | 16      | 100%      | 0        | 16      |
| 100%      | 229    | 229     | 17       | 246     | 100%      | 4        | 250     |
| 0%        | 24     | -       | -        | -       | 0%        | -        | -       |
| 100%      | 581    | 581     | 43       | 624     | 100%      | 11       | 635     |
| 100%      | 92     | 92      | 7        | 99      | 100%      | 2        | 101     |
| 100%      | 85     | 85      | 6        | 91      | 100%      | 2        | 93      |
| 0%        | 45     | -       | -        | -       | 0%        | -        | -       |
| 0%        | 70     | -       | -        | -       | 0%        | -        | -       |
| 100%      | 30     | 30      | 2        | 32      | 100%      | 1        | 33      |
| 100%      | 21     | 21      | 2        | 23      | 100%      | 0        | 23      |
| 100%      | 6      | 6       | 0        | 6       | 100%      | 0        | 7       |
| 100%      | 56     | 56      | 4        | 60      | 100%      | 1        | 61      |
| 100%      | 53     | 53      | 4        | 57      | 100%      | 1        | 58      |
| 100%      | 84     | 84      | 6        | 90      | 100%      | 2        | 92      |
| 100%      | 45     | 45      | 3        | 48      | 100%      | 1        | 49      |
| 100%      | 42     | 42      | 3        | 45      | 100%      | 1        | 46      |
| 0%        | 1,714  | -       | -        | -       | 0%        | -        | -       |
| 100%      | 42     | 42      | 3        | 45      | 100%      | 1        | 46      |
| 0%        | 14     | -       | -        | -       | 0%        | -        | -       |
| 100%      | 1,106  | 1,106   | 82       | 1,188   | 100%      | 21       | 1,209   |
| 0%        | 98     | -       | -        | -       | 0%        | -        | -       |
| 35%       | 138    | 48      | 4        | 52      | 35%       | 1        | 53      |
| 100%      | 84     | 84      | 6        | 90      | 100%      | 2        | 92      |
| 100%      | 290    | 290     | 21       | 311     | 100%      | 6        | 317     |
| 100%      | 64     | 64      | 5        | 69      | 100%      | 1        | 70      |
| 100%      | 80     | 80      | 6        | 86      | 100%      | 2        | 87      |
| 100%      | 27     | 27      | 2        | 29      | 100%      | 1        | 30      |
| 100%      | 67     | 67      | 5        | 72      | 100%      | 1        | 73      |
| 0%        | 53     | -       | -        | -       | 0%        | -        | -       |
| 100%      | 50     | 50      | 4        | 54      | 100%      | 1        | 55      |
| 100%      | 129    | 129     | 10       | 139     | 100%      | 2        | 141     |
| 100%      | 146    | 146     | 11       | 157     | 100%      | 3        | 160     |
| 100%      | 245    | 245     | 18       | 263     | 100%      | 5        | 268     |

Carriage Estates Tributary Population

| OUCC      |        | 2011 -  |          |         | OUCC 2015 |          |         |
|-----------|--------|---------|----------|---------|-----------|----------|---------|
| Assumed % | 2010   | 2010 CE | 2014     | 2014 CE | Assumed % | 2015     | 2015 CE |
| in ASU CE | Census | WWTP    | Increase | WWTP    | in ASU    | Increase | WWTP    |
| 0%        | 208    | -       | -        | -       | 0%        | -        | -       |
| 0%        | 401    | -       | -        | -       | 0%        | -        | -       |
| 0%        | 492    | -       | -        | -       | 0%        | -        | -       |
| 100%      | 542    | 542     | 40       | 582     | 100%      | 10       | 592     |
| 100%      | 265    | 265     | 20       | 285     | 100%      | 5        | 290     |
| 0%        | 1,055  | -       | -        | -       | 0%        | -        | -       |
| 100%      | 570    | 570     | 42       | 612     | 100%      | 11       | 623     |
| 100%      | 156    | 156     | 11       | 167     | 100%      | 3        | 171     |
| 100%      | 8      | 8       | 1        | 9       | 100%      | 0        | 9       |
| 0%        | 195    | -       | -        | -       | 100%      | -        | -       |
| 100%      | 265    | 265     | 20       | 285     | 100%      | 5        | 290     |
| 100%      | 570    | 570     | 42       | 612     | 100%      | 11       | 623     |
| 100%      | 8      | 8       | 1        | 9       | 100%      | 0        | 9       |
| 100%      | 25     | 25      | 2        | 27      | 100%      | 0        | 27      |
| 100%      | 70     | 70      | 5        | 75      | 100%      | 1        | 77      |
| 100%      | 195    | 195     | 14       | 209     | 100%      | 4        | 213     |
| Total     | 16,938 | 11,936  | 880      | 12,816  |           | 217      | 11,756  |

Note: The above calculations show all population counted. It does not account for homes within ASU's Service Area that are still on private well and septic and is therefore an upper limit..

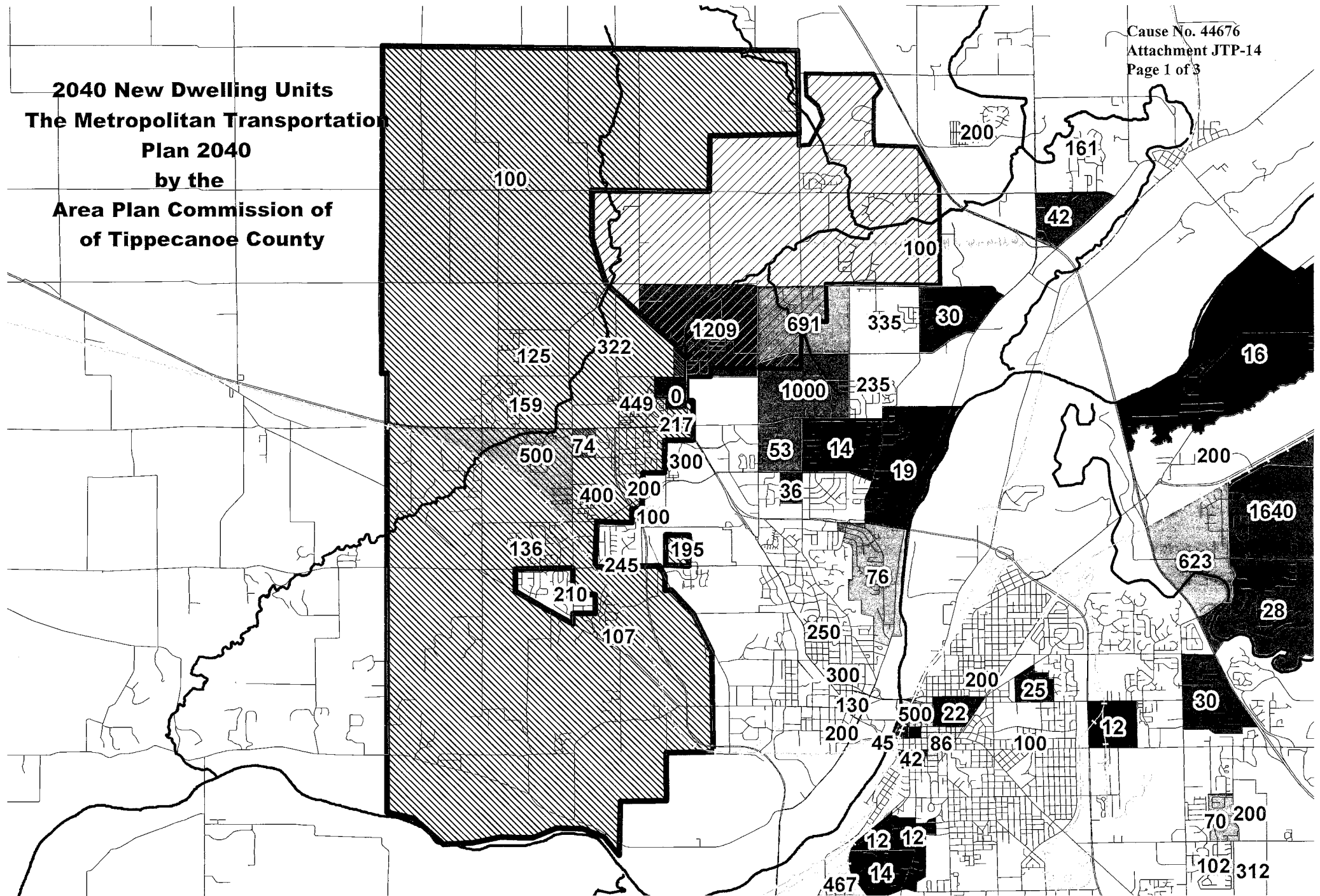
Source: Tippecanoe County Planning Department based on U.S. Census data

Wabash Township Population

| 2010   | 2014 Est. | Increase | % Incr. | Annual % |
|--------|-----------|----------|---------|----------|
| 63,648 | 59,279    | 4,369    | 7.37%   | 1.79%    |

Source: Stats Indiana produced by the Indiana Business Research Center

**2040 New Dwelling Units  
The Metropolitan Transportation  
Plan 2040  
by the  
Area Plan Commission of  
of Tippecanoe County**



**New housing units in ASU Service Area by 2030 and 2040**

Source: OUCC Review of Figure 5 - 2040 Housing Growth Distribution in *The Metropolitan Transportation Plan 2040* by The Area Plan Commission of Tippecanoe County, June 2012.

|                         | ASU Service Area            |                                           | CE WWTP Service Area    |                           | CH WWTP Service Area    |                           |
|-------------------------|-----------------------------|-------------------------------------------|-------------------------|---------------------------|-------------------------|---------------------------|
|                         | Within ASU Service Area (%) | Dwelling Units in ASU Service Area (2040) | % of New Dwelling Units | No. of New Dwelling Units | % of New Dwelling Units | No. of New Dwelling Units |
| 2040 New Dwelling Units |                             |                                           |                         |                           |                         |                           |
| 100                     | 100%                        | 100                                       | 100%                    | 100                       | 0%                      | 0                         |
| 200                     | 0%                          | 0                                         | 0%                      | 0                         | 100%                    | 0                         |
| 161                     | 0%                          | 0                                         | 0%                      | 0                         | 100%                    | 0                         |
| 100                     | 60%                         | 60                                        | 0%                      | 0                         | 100%                    | 60                        |
| 42                      | 0%                          | 0                                         | 0%                      | 0                         | 100%                    | 0                         |
| 125                     | 100%                        | 125                                       | 100%                    | 125                       | 0%                      | 0                         |
| 322                     | 100%                        | 322                                       | 100%                    | 322                       | 0%                      | 0                         |
| 1209                    | 100%                        | 1,209                                     | 0%                      | 0                         | 100%                    | 1209                      |
| 691                     | 60%                         | 415                                       | 0%                      | 0                         | 100%                    | 415                       |
| 335                     | 0%                          | 0                                         | 0%                      | 0                         | 100%                    | 0                         |
| 30                      | 0%                          | 0                                         | 0%                      | 0                         | 100%                    | 0                         |
| 159                     | 100%                        | 159                                       | 100%                    | 159                       | 0%                      | 0                         |
| 449                     | 100%                        | 449                                       | 100%                    | 449                       | 0%                      | 0                         |
| 217                     | 100%                        | 217                                       | 100%                    | 217                       | 0%                      | 0                         |
| 1000                    | 10%                         | 100                                       | 0%                      | 0                         | 100%                    | 100                       |
| 235                     | 0%                          | 0                                         | 0%                      | 0                         | 100%                    | 0                         |
| 500                     | 100%                        | 500                                       | 100%                    | 500                       | 0%                      | 0                         |
| 74                      | 100%                        | 74                                        | 100%                    | 74                        | 0%                      | 0                         |
| 300                     | 0%                          | 0                                         | 0%                      | 0                         | 100%                    | 0                         |
| 53                      | 0%                          | 0                                         | 0%                      | 0                         | 100%                    | 0                         |
| 14                      | 0%                          | 0                                         | 0%                      | 0                         | 100%                    | 0                         |
| 19                      | 0%                          | 0                                         | 0%                      | 0                         | 100%                    | 0                         |
| 400                     | 100%                        | 400                                       | 100%                    | 400                       | 0%                      | 0                         |
| 200                     | 60%                         | 120                                       | 100%                    | 120                       | 0%                      | 0                         |
| 100                     | 0%                          | 0                                         | 0%                      | 0                         | 100%                    | 0                         |
| 136                     | 100%                        | 136                                       | 100%                    | 136                       | 0%                      | 0                         |
| 245                     | 50%                         | 123                                       | 100%                    | 123                       | 0%                      | 0                         |
| 195                     | 20%                         | 39                                        | 100%                    | 39                        | 0%                      | 0                         |
| 210                     | 75%                         | 158                                       | 100%                    | 158                       | 0%                      | 0                         |
| 107                     | 100%                        | 107                                       | 100%                    | 107                       | 0%                      | 0                         |
| 76                      | 0%                          | 0                                         | 0%                      | 0                         | 100%                    | 0                         |
| 250                     | 0%                          | 0                                         | 0%                      | 0                         | 100%                    | 0                         |
| 300                     | 0%                          | 0                                         | 0%                      | 0                         | 100%                    | 0                         |
| 130                     | 0%                          | 0                                         | 0%                      | 0                         | 100%                    | 0                         |
| 200                     | 0%                          | 0                                         | 0%                      | 0                         | 100%                    | 0                         |
| 45                      | 0%                          | 0                                         | 0%                      | 0                         | 100%                    | 0                         |
| Total                   | 8,929                       | 4,812                                     |                         | 3,028                     |                         | 1,784                     |

**New housing units in CE WWTP Service Area by 2030 and 2040**

Source: OUCC Review of Figure 5 - 2040 Housing Growth Distribution in *The Metropolitan Transportation Plan 2040* by The Area Plan Commission of Tippecanoe County, June 2012.

| Year | CE WWTP<br>New<br>Dwelling<br>Units | Est. Flow at<br>310 gpd /<br>Dwelling<br>Unit | CE<br>WWTP<br>Flow<br>(MGD) | CE<br>WWTP<br>Flow<br>(MGD) | CH<br>WWTP<br>New<br>Dwelling | Est. Flow<br>at 310<br>gpd /<br>Dwelling | CH<br>WWTP<br>Flow<br>(MGD) | CH<br>WWTP<br>Flow<br>(MGD) |
|------|-------------------------------------|-----------------------------------------------|-----------------------------|-----------------------------|-------------------------------|------------------------------------------|-----------------------------|-----------------------------|
| 2013 | 108                                 | 33,524                                        | 1.44                        |                             | 64                            | 19,747                                   | 0.14                        |                             |
| 2014 | 216                                 | 67,049                                        | 1.48                        | 1.80                        | 127                           | 39,494                                   | 0.18                        | 0.15                        |
| 2015 | 324                                 | 100,573                                       | 1.51                        | 1.90                        | 191                           | 59,241                                   | 0.21                        | 0.25                        |
| 2016 | 433                                 | 134,097                                       | 1.54                        | 1.93                        | 255                           | 78,988                                   | 0.24                        | 0.28                        |
| 2017 | 541                                 | 167,621                                       | 1.58                        | 1.97                        | 319                           | 98,735                                   | 0.28                        | 0.32                        |
| 2018 | 649                                 | 201,146                                       | 1.61                        | 2.00                        | 382                           | 118,482                                  | 0.31                        | 0.35                        |
| 2019 | 757                                 | 234,670                                       | 1.64                        | 2.03                        | 446                           | 138,229                                  | 0.34                        | 0.38                        |
| 2020 | 865                                 | 268,194                                       | 1.68                        | 2.07                        | 510                           | 157,976                                  | 0.38                        | 0.42                        |
| 2021 | 973                                 | 301,719                                       | 1.71                        | 2.10                        | 573                           | 177,723                                  | 0.41                        | 0.45                        |
| 2022 | 1081                                | 335,243                                       | 1.75                        | 2.14                        | 637                           | 197,470                                  | 0.45                        | 0.49                        |
| 2023 | 1190                                | 368,767                                       | 1.78                        | 2.17                        | 701                           | 217,217                                  | 0.48                        | 0.52                        |
| 2024 | 1298                                | 402,291                                       | 1.81                        | 2.20                        | 764                           | 236,964                                  | 0.51                        | 0.55                        |
| 2025 | 1406                                | 435,816                                       | 1.85                        | 2.24                        | 828                           | 256,711                                  | 0.55                        | 0.59                        |
| 2026 | 1514                                | 469,340                                       | 1.88                        | 2.27                        | 892                           | 276,458                                  | 0.58                        | 0.62                        |
| 2027 | 1622                                | 502,864                                       | 1.91                        | 2.30                        | 956                           | 296,205                                  | 0.61                        | 0.65                        |
| 2028 | 1730                                | 536,389                                       | 1.95                        | 2.34                        | 1019                          | 315,952                                  | 0.65                        | 0.69                        |
| 2029 | 1838                                | 569,913                                       | 1.98                        | 2.37                        | 1083                          | 335,699                                  | 0.68                        | 0.72                        |
| 2030 | 1947                                | 603,437                                       | 2.01                        | 2.40                        | 1147                          | 355,446                                  | 0.71                        | 0.75                        |
| 2031 | 2055                                | 636,961                                       | 2.05                        | 2.44                        | 1210                          | 375,193                                  | 0.75                        | 0.79                        |
| 2032 | 2163                                | 670,486                                       | 2.08                        | 2.47                        | 1274                          | 394,940                                  | 0.78                        | 0.82                        |
| 2033 | 2271                                | 704,010                                       | 2.11                        | 2.50                        | 1338                          | 414,687                                  | 0.81                        | 0.85                        |
| 2034 | 2379                                | 737,534                                       | 2.15                        | 2.54                        | 1401                          | 434,434                                  | 0.85                        | 0.89                        |
| 2035 | 2487                                | 771,059                                       | 2.18                        | 2.57                        | 1465                          | 454,181                                  | 0.88                        | 0.92                        |
| 2036 | 2595                                | 804,583                                       | 2.21                        | 2.60                        | 1529                          | 473,928                                  | 0.91                        | 0.95                        |
| 2037 | 2704                                | 838,107                                       | 2.25                        | 2.64                        | 1593                          | 493,675                                  | 0.95                        | 0.99                        |
| 2038 | 2812                                | 871,631                                       | 2.28                        | 2.67                        | 1656                          | 513,422                                  | 0.98                        | 1.02                        |
| 2039 | 2920                                | 905,156                                       | 2.32                        | 2.71                        | 1720                          | 533,169                                  | 1.02                        | 1.06                        |
| 2040 | 3,028                               | 938,680                                       | 2.35                        | 2.74                        | 1,784                         | 552,916                                  | 1.05                        | 1.09                        |

Assumed Gallons per Day /Dwelling Unit

310

2013 CE WWTP Flow (MGD)

1.41

2013 CE WWTP Flow (MGD)

0.11

2014 CE WWTP Flow (MGD)

1.80

2014 CE WWTP Flow (MGD)

0.15

Required Population/Flows for the Carriage Estates WWTP based on ASU Design Year (2030) and Future Year (2040) Flows

| Straightline population growth |            |          |                    |             | Percentage population growth |                                                   |          |                    |           | OUCC Est.     | Housing     |
|--------------------------------|------------|----------|--------------------|-------------|------------------------------|---------------------------------------------------|----------|--------------------|-----------|---------------|-------------|
| Year                           | Population | % Growth | gallons/capita/day |             | Year                         | Population                                        | % Growth | gallons/capita/day |           | Housing Units | Units Added |
|                                |            |          | 70                 | 100         |                              |                                                   |          | 70                 | 100       |               |             |
| * 2013                         | 15,000     |          | 1,050,000          | 1,500,000   | 2013                         | 15,000                                            |          | 1,050,000          | 1,500,000 | 6,173         |             |
| 2014                           | 16,471     | 9.8%     | 1,152,941          | 1,647,059   | 2014                         | 15,891                                            | 5.9%     | 1,112,362          | 1,589,089 | 6,544         | 372         |
| 2015                           | 17,941     | 8.9%     | 1,255,882          | 1,794,118   | 2015                         | 16,835                                            | 5.9%     | 1,178,429          | 1,683,469 | 6,938         | 394         |
| 2016                           | 19,412     | 8.2%     | 1,358,824          | 1,941,176   | 2016                         | 17,835                                            | 5.9%     | 1,248,419          | 1,783,455 | 7,356         | 418         |
| 2017                           | 20,882     | 7.6%     | 1,461,765          | 2,088,235   | 2017                         | 18,894                                            | 5.9%     | 1,322,566          | 1,889,379 | 7,799         | 443         |
| 2018                           | 22,353     | 7.0%     | 1,564,706          | 2,235,294   | 2018                         | 20,016                                            | 5.9%     | 1,401,116          | 2,001,595 | 8,269         | 470         |
| 2019                           | 23,824     | 6.6%     | 1,667,647          | 2,382,353   | 2019                         | 21,205                                            | 5.9%     | 1,484,333          | 2,120,475 | 8,766         | 498         |
| 2020                           | 25,294     | 6.2%     | 1,770,588          | 2,529,412   | 2020                         | 22,464                                            | 5.9%     | 1,572,491          | 2,246,416 | 9,294         | 528         |
| 2021                           | 26,765     | 5.8%     | 1,873,529          | 2,676,471   | 2021                         | 23,798                                            | 5.9%     | 1,665,886          | 2,379,837 | 9,854         | 560         |
| 2022                           | 28,235     | 5.5%     | 1,976,471          | 2,823,529   | 2022                         | 25,212                                            | 5.9%     | 1,764,827          | 2,521,182 | 10,447        | 593         |
| 2023                           | 29,706     | 5.2%     | 2,079,412          | 2,970,588   | 2023                         | 26,709                                            | 5.9%     | 1,869,645          | 2,670,921 | 11,076        | 629         |
| 2024                           | 31,176     | 5.0%     | 2,182,353          | 3,117,647   | 2024                         | 28,296                                            | 5.9%     | 1,980,688          | 2,829,555 | 11,743        | 667         |
| 2025                           | 32,647     | 4.7%     | 2,285,294          | 3,264,706   | 2025                         | 29,976                                            | 5.9%     | 2,098,327          | 2,997,610 | 12,450        | 707         |
| 2026                           | 34,118     | 4.5%     | 2,388,235          | 3,411,765   | 2026                         | 31,756                                            | 5.9%     | 2,222,952          | 3,175,646 | 13,199        | 750         |
| 2027                           | 35,588     | 4.3%     | 2,491,176          | 3,558,824   | 2027                         | 33,643                                            | 5.9%     | 2,354,979          | 3,364,256 | 13,994        | 795         |
| 2028                           | 37,059     | 4.1%     | 2,594,118          | 3,705,882   | 2028                         | 35,641                                            | 5.9%     | 2,494,848          | 3,564,068 | 14,837        | 843         |
| 2029                           | 38,529     | 4.0%     | 2,697,059          | 3,852,941   | 2029                         | 37,757                                            | 5.9%     | 2,643,024          | 3,775,748 | 15,730        | 893         |
| * 2030                         | 40,000     | 3.8%     | 2,800,000          | 4,000,000   | 2030                         | 40,000                                            | 5.9%     | 2,800,000          | 4,000,000 | 16,677        | 947         |
| 2031                           | 42,000     | 5.0%     | 2,940,000          | 4,200,000   | 2031                         | 41,655                                            | 4.1%     | 2,915,863          | 4,165,519 | 17,380        | 704         |
| 2032                           | 44,000     | 4.8%     | 3,080,000          | 4,400,000   | 2032                         | 43,379                                            | 4.1%     | 3,036,521          | 4,337,887 | 18,114        | 733         |
| 2033                           | 46,000     | 4.5%     | 3,220,000          | 4,600,000   | 2033                         | 45,174                                            | 4.1%     | 3,162,171          | 4,517,388 | 18,878        | 764         |
| 2034                           | 48,000     | 4.3%     | 3,360,000          | 4,800,000   | 2034                         | 47,043                                            | 4.1%     | 3,293,021          | 4,704,316 | 19,674        | 796         |
| 2035                           | 50,000     | 4.2%     | 3,500,000          | 5,000,000   | 2035                         | 48,990                                            | 4.1%     | 3,429,286          | 4,898,979 | 20,504        | 830         |
| 2036                           | 52,000     | 4.0%     | 3,640,000          | 5,200,000   | 2036                         | 51,017                                            | 4.1%     | 3,571,189          | 5,101,698 | 21,369        | 865         |
| 2037                           | 54,000     | 3.8%     | 3,780,000          | 5,400,000   | 2037                         | 53,128                                            | 4.1%     | 3,718,963          | 5,312,805 | 22,271        | 902         |
| 2038                           | 56,000     | 3.7%     | 3,920,000          | 5,600,000   | 2038                         | 55,326                                            | 4.1%     | 3,872,853          | 5,532,647 | 23,210        | 940         |
| 2039                           | 58,000     | 3.6%     | 4,060,000          | 5,800,000   | 2039                         | 57,616                                            | 4.1%     | 4,033,111          | 5,761,587 | 24,190        | 979         |
| * 2040                         | 60,000     | 3.4%     | 4,200,000          | 6,000,000   | 2040                         | 60,000                                            | 4.1%     | 4,200,000          | 6,000,000 | 25,210        | 1,021       |
| 2013-2030 average growth rate  |            |          | 5.9%               | Design Year | 2030                         | Tippecanoe Co. 2010 Housing Density (people/unit) |          |                    |           |               | 2.43        |
| 2031-2040 average growth rate  |            |          | 4.1%               | Future Year | 2040                         | Tippecanoe Co. 2040 Housing Density (people/unit) |          |                    |           |               | 2.38        |

Note: No reduction of I/I flows

Note: Shaded cells are ASU population & flow design values or ASU response to OUCC.

**Carriage Estates Wastewater Treatment Plant - CSBR Tanks - Organic Loadings - BOD5**

| Parameter                                                       | 1999 Design | Actual Operation at OUCC Estimated Population |        |        | OUCC Forecasted Population & BOD5 Load |        |        | ASU Assumed Population |        |
|-----------------------------------------------------------------|-------------|-----------------------------------------------|--------|--------|----------------------------------------|--------|--------|------------------------|--------|
| Actual Year or Design Year                                      | 2010        | 2013                                          | 2014   | 2015   | 2030                                   | 2035   | 2040   | 2030                   | 2040   |
| Design or OUCC Estimated Population                             | 4,850       | 12,596                                        | 12,816 | 11,756 | 20,322                                 | 22,530 | 24,978 | 40,000                 | 60,000 |
| Design Avg. Flow (MGD)                                          | 1.5         |                                               |        |        | 2.66                                   | 2.88   | 3.12   | 4.0                    | 6.0    |
| ASU Reported Annual Average Flow (MGD)                          |             | 1.41                                          | 1.80   | 1.85   |                                        |        |        |                        |        |
| Design BOD5 Concentration (mg/l)                                | 200         |                                               |        |        | 140                                    | 144    | 149    | 200                    | 200    |
| ASU Reported cBOD5 Concentration (mg/l)                         |             | 111                                           | 112    | 113    |                                        |        |        |                        |        |
| cBOD5 x 1.16 converted to BOD5 Conc. (mg/l)                     |             | 129                                           | 130    | 131    |                                        |        |        |                        |        |
| OUCC Est. 12/2015 BOD5 Load (lbs/day) (1)                       |             |                                               |        |        | 1,635                                  | 1,635  | 1,635  | 1,635                  | 1,635  |
| OUCC Est. BOD5 - added population (lbs./d)                      |             |                                               |        |        | 1,456                                  | 1,832  | 2,248  | 4,659                  | 8,059  |
| Design or Actual BOD5 Loading (lbs./d)                          | 2,502       | 1,517                                         | 1,958  | 2,027  | 3,091                                  | 3,467  | 3,883  | 6,672                  | 10,008 |
| % of 1999 Design BOD5 Loading Capacity                          |             | 61%                                           | 78%    | 81%    |                                        |        |        |                        |        |
| Required Aeration Basin Volume (1,000 CF)                       | 167         | 101                                           | 131    | 135    | 206                                    | 231    | 259    | 445                    | 667    |
| Actual or Design No. of Tanks & Aeration Vol.                   |             |                                               |        |        | OUCC Recommended                       |        |        |                        |        |
| Number of CSBR Tanks - Actual or Design                         | 4           | 4                                             | 4      | 4      |                                        | 6 (3)  |        | 3                      | 4      |
| Volume of Each CSBR tank (1,000 cubic feet)                     | 60          | 60                                            | 60     | 60     |                                        | 60     |        | 176                    | 176    |
| 3 of 4 CSBR tanks in service (1,000 cu. feet)                   | 180         | 180                                           | 180    | 180    |                                        |        |        | 528                    | 528    |
| 4 of 4 CSBR tanks in service (1,000 cu. feet)                   | 240         | 240                                           | 240    | 240    |                                        |        |        | 704                    | 704    |
| 5 of 6 CSBR tanks in service (1,000 cu. feet)                   |             |                                               |        |        |                                        | 301    |        |                        |        |
| 6 of 6 CSBR tanks in service (1,000 cu. feet)                   |             |                                               |        |        |                                        | 361    |        |                        |        |
| Organic Loading (lbs. BOD5/1,000 CF) - all tanks                | 10.4        | 6.3                                           | 8.1    | 8.4    |                                        | 9.6    |        | 9.5                    | 14.2   |
| Organic Loading with one tank out of service                    | 13.9        | 8.4                                           | 10.9   | 11.2   |                                        | 11.5   |        | 12.6                   | 19.0   |
| Organic loading per Ten States Standards - lbs. BOD5/capita/day |             |                                               | 0.17   |        |                                        |        |        |                        |        |
| Organic loading per Ten States Standards (lbs. BOD5 / 1,000 CF) |             |                                               | 15     |        |                                        |        |        |                        |        |

Notes: (1) Accounts for flows diverted to County Home WWTP by Big-3 Sewer based on 482 homes removed and 2.43 people/home at 0.17 lbs. BOD5/person/day = 199 lbs/d of BOD5 subtracted from CE WWTP's actual average BOD5 load (2013-2015) of 1976 lbs./d.

(2) Existing CSBR Tank Dimensions are 113 ft. long by 38 ft. wide by 14 ft. deep (high water level).

(3) The OUCC recommends constructing two additional CSBR Tanks of the same dimensions and capacity as ASU's four existing CSBR Tanks.

(4) ASU's 2030 and 2040 Design does not comply with Ten States Standards for organic loading (15 lbs. BOD5 / 1,000 cu. feet of CSBR Tank volume).



OUCC DR 04-032

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please state if FTDC or ASU has employed Patriot Pumps or Mersino Dewatering, Inc. for dewatering services on the Big-3 Sewer Project or on past projects. If so, please indicate the year when either of these firms was last engaged by FTDC or ASU.

**Information Provided:**

Neither firm was employed for dewatering services.

OUCC DR 11-025

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please confirm that neither ASU nor FTDC has ever employed Patriot Pumps or Mersino Dewatering, Inc. for dewatering services.

**Information Provided:**

They have not.

OUCC DR 11-027

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please explain why only Plan Sheet C111 was sent to Patriot Pumps and Mersino Dewatering, Inc.

**Information Provided:**

FTDC was doing dewatering themselves so it was sent to Patriot and Mersino to determine if an outside agency could be more cost effective to dewater the next 500 feet.

For further explanation please reference response to OUCC Data Request 11-23 and materials referenced therein.

OUCC DR 04-007

**DATA INFORMATION REQUEST**  
**American Suburban Utilities, Inc.**

**Cause No. 44676**

**Information Requested:**

Please provide a copy of the executed construction contract between ASU and FTDC for the Big-3 Sewer Project.

**Information Provided:**

No formal construction contract was executed between ASU and FTDC. FTDC Proposal dated January 13, 2014 was considered the construction contract by ASU. Refer to Cause No. 44676, Petitioner's Exhibit No. 1, Attachment EJS-3, Pages 3 through 6.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

Michael R. Pence  
Governor

January 22, 2014

Thomas W. Easterly  
Commissioner

VIA CERTIFIED MAIL

91 7190 0005 2710 0031 5953

Mr. Scott Lods, President  
American Suburban Utilities, Inc.  
3350 West 250 North  
West Lafayette, Indiana 47906

Dear Mr. Lods:

Re: 327 IAC 3 Construction  
Permit Application  
Plans and Specifications for  
Los Tres Grandes  
Sanitary Sewer  
Permit Approval No. 20892  
West Lafayette, Indiana  
Tippecanoe County

The application, plans and specifications, and supporting documents for the above-referenced project have been reviewed and processed in accordance with rules adopted under 327 IAC 3. Enclosed is the Construction Permit (Approval No. 20892), which applies to the construction of the above-referenced proposed sanitary sewer system to be located along the south side of the Hadley Lake Legal Drain between Morehouse Road and County Road 50 West in West Lafayette, Indiana.

Please review the enclosed permit carefully and become familiar with its terms and conditions. In addition, it is imperative that the applicant, consulting architect/engineer (A/E), inspector, and contractor are aware of these terms, conditions, and reporting and testing requirements.

It should be noted that any person affected or aggrieved by the agency's decision in authorizing the construction of the above-referenced facility may, within fifteen (15) days from date of mailing, appeal this permit by filing a request with the Office of Environmental Adjudication for an adjudicatory hearing in accordance with IC 4-21.5-3-7 and IC 13-15-6. The procedure for appeal is outlined in more detail in Part III of the attached construction permit.

Plans and specifications were prepared by TBIRD Design Services Corporation, certified by Justin R. Frazier, P.E., and submitted for review on December 12, 2013, with additional information submitted on January 10, 2014.



Any questions concerning this permit may be addressed to Kevin D. Czerniakowski, P.E., of our staff, at 317/234-8226. Questions concerning appeal procedures should be addressed to the Office of Environmental Adjudication, at 317/232-8591.

Sincerely,

A handwritten signature in black ink, appearing to read "Dale T. Schnaith". The signature is fluid and cursive, with the first name "Dale" and last name "Schnaith" clearly distinguishable.

Dale T. Schnaith, Chief  
Facility Construction and  
Engineering Support Section  
Office of Water Quality

Project No. SP-1443  
Enclosures

cc: Tippecanoe County Health Department  
Tippecanoe County Commissioner  
TBIRD Design Services Corporation

Page 1 of 5  
Permit Approval No. 20892

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
AUTHORIZATION FOR CONSTRUCTION OF  
SANITARY SEWER SYSTEM  
UNDER 327 IAC 3

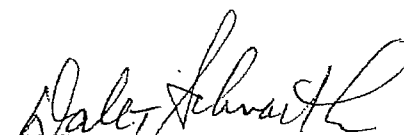
DECISION OF APPROVAL

American Suburban Utilities, Inc., in accordance with the provisions of IC 13-15 and 327 IAC 3 is hereby issued a permit to construct the sanitary sewer system to be located along the south side of the Hadley Lake Legal Drain between Morehouse Road and County Road 50 West in West Lafayette, Indiana. The permittee is required to comply with requirements set forth in Parts I, II and III hereof. The permit is effective pursuant to IC 4-21.5-3-4(d). If a petition for review and a petition for stay of effectiveness are filed pursuant to IC 13-15-6, an Environmental Law Judge may be appointed for an adjudicatory hearing. The force and effect of any contested permit provision may be stayed at that time.

NOTICE OF EXPIRATION DATE

Authorization to initiate construction of this sanitary sewer system shall expire at midnight February 1, 2015. In order to receive authorization to initiate construction beyond this date, the permittee shall submit such information and forms as required by the Indiana Department of Environmental Management. It is requested that this information be submitted sixty (60) days prior to the expiration date to initiate construction. This permit shall be valid for a period of five (5) years from the date below for full construction completion.

Signed this 22nd day of January, 2014, for the Indiana Department of Environmental Management.

  
Dale T. Schnaith, Chief  
Facility Construction and  
Engineering Support Section  
Office of Water Quality

Page 2 of 5  
Permit Approval No. 20892

### SANITARY SEWER SYSTEM DESCRIPTION

The proposed project shall consist of approximately 4,870 feet of 21-inch diameter PVC ASTM F697 sanitary sewer pipe and approximately 7,219 feet of 15-inch diameter PVC SDR26 (ASTM D3034) which will allow for the removal of three existing lift stations along the referenced project location. There is no additional sanitary flow associated with this project. The proposed sanitary sewer will be connected to an existing 21-inch diameter sanitary sewer located approximately 100' east and 2,975' south of the intersection of County Road 600 North and County Road 50 West in West Lafayette, Indiana.

Inspection during construction and maintenance after completion will be provided by American Suburban Utilities, Inc. Wastewater treatment will be provided by American Suburban Utilities at the County Home Wastewater Treatment Plant.

### CONDITIONS AND LIMITATIONS TO THE AUTHORIZATION FOR CONSTRUCTION OF SANITARY SEWERS

During the period beginning on the effective date of this permit and extending until the expiration date, the permittee is authorized to construct the above described sanitary sewer system. Such construction shall conform to all provisions of State Rule 327 IAC 3 and the following specific provisions:

#### PART I

#### SPECIFIC CONDITIONS AND LIMITATIONS TO THE CONSTRUCTION PERMIT

Unless specific authorization is otherwise provided under the permit, the permittee shall comply with the following conditions:

1. All local permits shall be obtained before construction is begun on this project.
2. If pollution or nuisance conditions are created, immediate corrective action will be taken by the permittee.
3. The separation of sanitary sewers from water mains and drinking water wells must comply with 327 IAC 3-6-9.
4. All gravity sewer pipe must be leak tested using either a hydrostatic test or air test in accordance with 327 IAC 3-6-19(d). If using a hydrostatic test, the rate of exfiltration or infiltration shall not exceed 200 gallons per inch of pipe diameter per linear mile per day. Air test shall be as prescribed.



Page 3 of 5  
Permit Approval No. 20892

5. The results of the gravity sewer leakage test and/or force main leakage test on the completed sewer shall be submitted to this office within three months of completion of construction.
6. Deflection tests must be performed on all flexible\* pipe after the final backfill has been in place at least 30 days. No pipe shall exceed a vertical deflection of 5%. Deflection test results shall be submitted with the infiltration/exfiltration test results. (\*The following are considered nonflexible pipes: vitrified clay pipe, concrete pipe, ductile iron pipe, cast iron pipe, asbestos cement pipe.)
7. Manholes shall be air tested in accordance with ASTM C1244-93, Standard Test Method for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test. The manhole test results shall be submitted with the gravity sewer leakage test results.

Failure to submit test results within the allotted time period or failure to meet guidelines as set forth in the above conditions could be subject to enforcement proceedings as provided by 327 IAC 3-5-3.

Page 4 of 5  
Permit Approval No. 20892

## PART II

### GENERAL CONDITIONS

1. No significant or material changes in the scope of the plans or construction of this project shall be made unless the following provisions are met:
  - a. Request for permit modification is made 60 days in advance of the proposed significant or material changes in the scope of the plans or construction;
  - b. Submit a detailed statement of such proposed changes;
  - c. Submit revised plans and specifications including a revised design summary; and
  - d. Obtain a revised construction permit from this agency.
2. This permit may be modified, suspended, or revoked for cause including, but not limited to the following:
  - a. Violation of any term or conditions of this permit:
  - b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts.
3. Nothing herein shall be construed as guaranteeing that the proposed sanitary sewer system shall meet standards, limitations or requirements of this or any other agency of state or federal government, as this agency has no direct control over the actual construction and/or operation of the proposed project.

Page 5 of 5  
Permit Approval No. 20892

### PART III

#### APPEALS PROCEDURE

Anyone wishing to challenge this agency's decision for authorizing the construction of this facility may do so, provided that a petition for administrative review is filed as required by IC 4-21.5-3-7. The petition must be submitted within fifteen (15) days of the date of mailing of this permit notification. The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by this decision, or otherwise entitled to review by law. Additionally, IC 13-15-6-2 requires that your petition include:

1. The name and address of the person making the request;
2. The interest of the person making the request;
3. Identification of any persons represented by the person making the request;
4. The reasons, with particularity, for the request;
5. The issues, with particularity, proposed for consideration at the hearing; and
6. Identification of the permit terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing permits of the type granted or denied by the Assistant Commissioner's action.
7. Pursuant to IC 4-21.5-3-1(f), any document serving as a petition for review or review and stay must be filed with the Office of Environmental Adjudication. Filing of such a document is complete on the earliest of the following dates:
  - a. The date on which the petition is delivered to the Office of Environmental Adjudication, Indiana Government Center North, 100 North Senate Avenue, Room 501, Indianapolis, Indiana 46204;
  - b. The date of the postmark on the envelope containing the petition, if the petition is mailed by United States mail; or
  - c. The date on which the petition is deposited with a private carrier, as shown by a receipt issued by the carrier, if the petition is sent by private carrier.

PROJECT NO.  
SP-1443

INTRA-OFFICE MEMO

FROM: 327 IAC Construction Permit Coordinator  
Engineering Plan Review Section  
Office of Water Quality

TO: KDC

SUBJECT: Project: Los Tres Grandes Sanitary Sewer  
Location: West Lafayette, Tippecanoe County  
# Units: N/A  
Design Flow: 0 gpd  
Received On: 12/12/13  
Connection To: 21-inch  
Wastewater Treatment By: County Home/American Suburban Utilities  
Maintenance Provided By: American Suburban Utilities

Capacity Certification/Allocation ☒

New one needed if more than one  
year old

Sanitary Sewer Design Summary ☒

Should match the capacity letter

Signed Application ☒

Signed by applicant for SRF projects  
(Applicant's Engineer can sign in most  
cases)

Plans and Specifications ☒

Each page must be signed or sealed  
by an Indiana P.E. or L.S. (if no lift  
station work is being done) Plan view,  
Profile view, Details, Specifications  
(ASTM, SDR, Bedding, Separation, etc.)

Potentially Affected Person List ☒

*Form filled out signed & dated on  
bottom and says "see attached"*

Names and addresses on signed and  
dated form, mailing list and mailing  
labels (with 65-42FC code)

Certification Letter of P.E. or L.S. ☒

The supervising P.E. or L.S.



**APPLICATION FOR SANITARY SEWER  
CONSTRUCTION PERMIT PER 327 IAC 3**  
STATE FORM 53159 (R2 / 9-08)

Indiana Department of Environmental Management  
Office of Water Quality – Mail Code 65-42  
Facilities Construction Section  
100 North Senate Avenue, room N1255  
Indianapolis, IN 46204-2251

**INSTRUCTIONS:**

1. This form must be filled out completely.
2. Additional pages (attachments following this form) are part of this application form and must be filled out completely.
3. Submission of plans and specifications are part of the application.
4. Submit the application form, additional pages, plans and specifications to the above address.
5. If you have any questions regarding this application, call IDEM's Office of Water Quality at (317) 232-8670.

| APPLICANT                                                                                                                                                                                                                                                         |  | APPLICANT'S ENGINEER OR LAND SURVEYOR                                                                                                                                                                                                                                                                                                                                                                          |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Name<br>SCOTT LODS                                                                                                                                                                                                                                                |  | Name<br>JUSTIN FRAZIER                                                                                                                                                                                                                                                                                                                                                                                         |  |
| Company Name<br>AMERICAN SUBURBAN UTILITIES, INC.                                                                                                                                                                                                                 |  | Company Name<br>TBIRD DESIGN SERVICES CORP                                                                                                                                                                                                                                                                                                                                                                     |  |
| Address<br>3350 WEST 250 NORTH                                                                                                                                                                                                                                    |  | Address<br>105 NORTH 10 <sup>TH</sup> STREET                                                                                                                                                                                                                                                                                                                                                                   |  |
| Address<br>WEST LAFAYETTE, IN 47906                                                                                                                                                                                                                               |  | Address<br>LAFAYETTE, IN 47901                                                                                                                                                                                                                                                                                                                                                                                 |  |
| Telephone number<br>765-463-4449                                                                                                                                                                                                                                  |  | Telephone number<br>765-742-1900                                                                                                                                                                                                                                                                                                                                                                               |  |
| NAME AND LOCATION OF PROPOSED FACILITY                                                                                                                                                                                                                            |  | ATTACHMENT CHECKLIST                                                                                                                                                                                                                                                                                                                                                                                           |  |
| Name<br>Los Tres Grandes Sanitary Sewer                                                                                                                                                                                                                           |  | A. Sanitary Sewer Design Summary Form: X Yes                                                                                                                                                                                                                                                                                                                                                                   |  |
| Location (Referenced to two existing streets)<br>½ MILE NORTH OF INTERSECTION OF                                                                                                                                                                                  |  | B. Capacity Certification/Allocation Letter: X Yes                                                                                                                                                                                                                                                                                                                                                             |  |
| Location:<br>COUNTY ROAD 500 NORTH AND COUNTY ROAD 50 WEST                                                                                                                                                                                                        |  | C. Certification of Registered Engineer or Land Surveyor Letter: X Yes                                                                                                                                                                                                                                                                                                                                         |  |
| Location                                                                                                                                                                                                                                                          |  | D. Plans and Specifications: X Yes                                                                                                                                                                                                                                                                                                                                                                             |  |
| City<br>WEST LAFAYETTE                                                                                                                                                                                                                                            |  | E. Identification of Potentially Affected Persons (see note below): X Yes                                                                                                                                                                                                                                                                                                                                      |  |
| County<br>TIPPECANOE                                                                                                                                                                                                                                              |  | F. Mailing Labels for Potentially Affected Persons: X Yes                                                                                                                                                                                                                                                                                                                                                      |  |
| <p>recd<br/>12/12/13</p>                                                                                                                                                                                                                                          |  | <p>Note Regarding item (E) above:<br/>Fully identify all persons, by name and address, who may be potentially affected by the issuance of this permit, such as adjoining landowners, persons with a propriety interest, and/or persons who have complained or submitted comments about your facility. Under IC 4-21.5-3-4, IDEM is required to notify potentially affected persons of its permit decision.</p> |  |
| PERMIT APPLICATION FOR CONSTRUCTION, EXPANSION, OR MODIFICATION OF<br>(Check all that apply)                                                                                                                                                                      |  | FUNDING                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| A. Municipal Collection Facility: <input type="checkbox"/> Yes                                                                                                                                                                                                    |  | SRF Funding: <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                          |  |
| B. Semipublic Collection Facility: <input type="checkbox"/> Yes                                                                                                                                                                                                   |  |                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| C. New facility: <input type="checkbox"/> Yes                                                                                                                                                                                                                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| D. Expansion or modification of existing facility: X Yes                                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| CERTIFICATION AND SIGNATURE                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| Application is hereby made for a Permit to authorize the activities described herein. I certify that I am familiar with the information contained in this application and to the best of my knowledge and belief such information is true, complete and accurate. |  |                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| Printed name of person signing<br>SCOTT LODS                                                                                                                                                                                                                      |  | Title<br>PRESIDENT, AMERICAN SUBURBAN UTILITIES, INC.                                                                                                                                                                                                                                                                                                                                                          |  |
| Signature of Applicant<br><i>Scott Lods</i>                                                                                                                                                                                                                       |  | Date application signed (month, day, year)<br>December 10, 2013                                                                                                                                                                                                                                                                                                                                                |  |
| *Please refer to IC 13-30-10 for penalties of submission of false information*                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                |  |

*American Suburban Utilities, Inc.*

Letter of Transmittal

DO# 14004

3350 W 250 N  
West Lafayette, IN 47906  
Tel. 765-463-3856  
Fax 765-463-3855

To: IDEM - Office of Water Quality MC 65-42  
Facilities Construction Section  
100 N. Senate Ave, Rm N1255  
Indianapolis, IN 46204-2251  
Re: Los Tres Grandes Sanitary Sewer  
Attn: Don Worley

Date: 8-Jan-14  
Phone: 317-232-8670  
Fax: \_\_\_\_\_  
# Pgs: 2  
Sent: 8-Jan-14 *HP*

VIA: ☐ Fed-Ex ☐ Hand Delivery ☒ USPS ☐ Fax ☐ E-Mail

The Following Items

☐ Your Use ☐ As Requested ☒ Your Approval ☐ Your Information  
☐ Review and Comment

| Number | Copies | Date     | Description                            |
|--------|--------|----------|----------------------------------------|
|        | 1      | 8-Jan-14 | Signed Original Affected Persons Sheet |
|        |        |          |                                        |
|        |        |          |                                        |
|        |        |          |                                        |
|        |        |          |                                        |
|        |        |          |                                        |

2014 JAN 10 P 3:24  
IDEM  
OFFICE OF  
WATER QUALITY

Signed \_\_\_\_\_  
Scott L. Lods, President

If enclosures are not as noted, please kindly notify us at once.

**CONFIDENTIALITY NOTICE**

The documents accompanying this transmittal contain confidential information. The information is intended only for the use of the individual(s) or entity named above. If you are not the intended recipient, you are notified that any disclosure, copying, or distribution of the transmittal information is not permissible. If you have received this transmittal in error, please immediately notify us by telephone at the number above to arrange for return of the original documents.

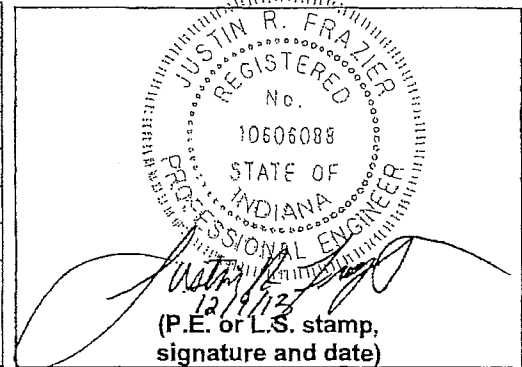
Thank you.

PART OF STATE FORM 53159 (R2 / 9-08)

**SANITARY SEWER DESIGN SUMMARY**

| Design Flow                                                                |                      |                    |              |
|----------------------------------------------------------------------------|----------------------|--------------------|--------------|
| Number of units                                                            |                      |                    |              |
|                                                                            | 1 bedroom apartments | 200 gpd/unit       | gpd          |
|                                                                            | 2 bedroom apartments | 300 gpd/unit       | gpd          |
|                                                                            | Single family homes  | 310 gpd/unit       | gpd          |
|                                                                            | Commercial lots      |                    | gpd          |
| GRAVITY SEWER LINE TO REMOVE 3 EXISTING LIFT STATIONS. NO NEW CONNECTIONS. |                      |                    | gpd          |
|                                                                            |                      |                    | gpd          |
|                                                                            |                      | Total average flow | gpd          |
| Peaking factor                                                             |                      | Peak flow          | EXISTING gpd |

| Sewer                                                                                                                                                                   |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| ft. 2,424 <sup>4,510</sup>                                                                                                                                              | 21" PVC SDR-26             |
| ft. 9,683                                                                                                                                                               | 15" PVC SDR-26 1523 + 5196 |
| ft. 7219                                                                                                                                                                |                            |
| ft.                                                                                                                                                                     |                            |
| ft. 12,087                                                                                                                                                              |                            |
| ft. 12,107                                                                                                                                                              | Total length of sewer      |
| The new sewer will be connected to an existing 21 -inch diameter sanitary sewer at APPROXIMATELY 100' EAST & 2975" SOUTH OF INTERSECTION OF COUNTY ROADS 600 N AND 50 W |                            |



| Lift Station                                                            |                                                          |     |     |    |
|-------------------------------------------------------------------------|----------------------------------------------------------|-----|-----|----|
| Type                                                                    |                                                          |     |     |    |
| Number of pumps                                                         |                                                          |     |     |    |
| Capacity of pumps                                                       |                                                          | TDH | RPM | HP |
| Back-up power source                                                    | <input type="checkbox"/> Yes <input type="checkbox"/> No |     |     |    |
| Average wet-well detention time                                         |                                                          |     |     |    |
| Audio/visual alarm with self-contained power supply or telemetry system |                                                          |     |     |    |
| Force Main                                                              |                                                          |     |     |    |
| Force main discharge elevation                                          |                                                          |     |     |    |

| Waste Treatment                          |                 |
|------------------------------------------|-----------------|
| Wastewater treatment will be provided by | County Home WWT |

| Inspection/Maintenance                             |                                   |
|----------------------------------------------------|-----------------------------------|
| Inspection during construction will be provided by | AMERICAN SUBURBAN UTILITIES, INC. |
| Maintenance after completion will be provided by   | AMERICAN SUBURBAN UTILITIES, INC. |

rec'd  
12/12/13

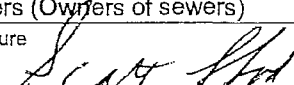
**CAPACITY CERTIFICATION/ALLOCATION LETTER***This form must be filled-out in its entirety.*

|                   |                                   |
|-------------------|-----------------------------------|
| Name of applicant | AMERICAN SUBURBAN UTILITIES, INC. |
| Name of owner     | AMERICAN SUBURBAN UTILITIES, INC. |
| Name of project   | LOS TRES GRANDES                  |

**CERTIFICATION**

I, SCOTT LODS, representing American Suburban Utilities, Inc., in my capacity  
(Name of individual) (Name of city or town)  
 as PRESIDENT have the authority to act on behalf of American Suburban Utilities, Inc.  
(Title) (Name of city or town)

certify that I have reviewed and understand the requirements of 327 IAC 3 and that the sanitary collection system proposed, with the submission of this application, plans and specifications, meets all requirements of 327 IAC 3. I certify that the daily flow generated in the area that will be collected by the project system will not cause overflowing or bypassing in the collection system other than NPDES authorized discharge points and that there is sufficient capacity in the receiving water pollution treatment/control facility to treat the additional daily flow and remain in compliance with applicable NPDES permit effluent limitations. I certify that the proposed average flow will not result in hydraulic or organic overload. I certify that the proposed collection system does not include new combined sewers or a combined sewer extension to existing combined sewers. I certify that the ability for this collection system to comply with 327 IAC 3 is not contingent on water pollution/control facility construction that has not been completed and put into operation. I certify that the project meets all local rules or laws, regulations and ordinances. The information submitted is true, accurate, and complete, to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

|                                                                                               |                                                 |
|-----------------------------------------------------------------------------------------------|-------------------------------------------------|
| Gallons per day (Total Average Flow for Project)                                              | EXISTING (NO NEW CONNECTIONS)                   |
| Wastewater treatment plant (Name of WWTP)                                                     | COUNTY HOME WWTP                                |
| Sewers (Owners of sewers)                                                                     | AMERICAN SUBURBAN UTILITIES, INC.               |
| Signature  | Date Signed (month, day, year)<br>Dec /10 /2013 |

**(Please refer to IC 13-30-10 for penalties of submission of false information.)**

rec'd  
12/12/13



**CERTIFICATION OF REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR LETTER**

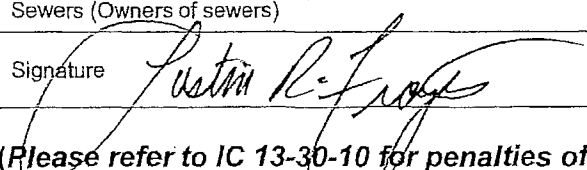
*This form must be filled-out in its entirety.*

|                   |                                   |
|-------------------|-----------------------------------|
| Name of applicant | AMERICAN SUBURBAN UTILITIES, INC. |
| Name of owner     | AMERICAN SUBURBAN UTILITIES, INC. |
| Name of project   | LOS TRES GRANDES                  |

**CERTIFICATION**

I, Justin R. Frazier, representing the project applicant, in my capacity as a registered  
(Name of individual) (Name of city or town)  
professional Engineer, 10606088 certify the  
(Engineer or Land Surveyor) (Indiana registration number)

following under penalty of law: The design of this project has been performed under my direction or supervision to assure conformance with 327 IAC 3 and the plans and specifications require the construction of said project to be performed in conformance with 327 IAC 3-6. The peak daily flow rates, in accordance with 327 IAC 3-6-11 generated from within the specific area that will be collected by the proposed collection system that is the subject of the application, plans, and specifications (when functioning as designed and properly installed), will not cause overflowing or bypassing in the same specific area serviced by the proposed collection system other than from NPDES authorized discharge points. The proposed collection system does not include new combined sewers (serving new areas) or a combined sewer extension to existing combined sewers. The sewer at the point of connection is physically in existence and operational. Based upon information provided by the owner of the Wastewater System, the ability for this collection system to comply with 327 IAC 3 is not contingent on downstream water pollution/control facility construction that has not been completed and put into operation. The design of the proposed project meets applicable local rules or laws, regulations and ordinances. The information submitted is true, accurate, and complete, to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

|                                                                                               |                                               |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------|
| Gallons per day (Total Average Flow for Project)                                              | EXISTING (NO NEW CONNECTIONS)                 |
| Wastewater treatment plant (Name of WWTP)                                                     | COUNTY HOME WWTP                              |
| Sewers (Owners of sewers)                                                                     | AMERICAN SUBURBAN UTILITIES, INC.             |
| Signature  | Date Signed (month, day, year)<br>12 / 9 / 13 |

**(Please refer to IC 13-30-10 for penalties of submission of false information.)**

recd  
12/12/13

### IDENTIFICATION OF POTENTIALLY AFFECTED PERSONS

Please list any and all persons whom you have reason to believe have a substantial or proprietary interest in this matter, or could otherwise be considered to be potentially affected under law. Failure to notify a person who is later determined to be potentially affected could result in voiding our decision on procedural grounds. To ensure conformance with Administrative Orders and Procedures Act (AOPA), please list all such parties. The letter on the opposite side of this form will further explain the requirements under the AOPA. Attach additional names and addresses on a separate sheet of paper, as needed.

|                                         |     |
|-----------------------------------------|-----|
| Name<br><b>** SEE ATTACHED SHEET **</b> |     |
| Address (number and street)             |     |
| City                                    |     |
| State                                   | ZIP |

|                             |     |
|-----------------------------|-----|
| Name                        |     |
| Address (number and street) |     |
| City                        |     |
| State                       | ZIP |

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| Name                        |     |
| Address (number and street) |     |
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| State                       | ZIP |

### CERTIFICATION

rec'd 12/12/13

I certify that to the best of my knowledge I have listed all potentially affected parties, as defined by IC 4-21.5-3-4.

|                        |                                |
|------------------------|--------------------------------|
| Proposed facility name | Printed Name                   |
| City                   | Signature                      |
| County                 | Date (month, day, year)<br>/ / |

See  
rec'd  
1/10/14

KD  
SP-1443**IDENTIFICATION OF POTENTIALLY AFFECTED PERSONS**

Please list any and all persons whom you have reason to believe have a substantial or proprietary interest in this matter, or could otherwise be considered to be potentially affected under law. Failure to notify a person who is later determined to be potentially affected could result in voiding our decision on procedural grounds. To ensure conformance with Administrative Orders and Procedures Act (AOPA), please list all such parties. The letter on the opposite side of this form will further explain the requirements under the AOPA. Attach additional names and addresses on a separate sheet of paper, as needed.

|                                         |     |
|-----------------------------------------|-----|
| Name<br><b>** SEE ATTACHED SHEET **</b> |     |
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| City                                    |     |
| State                                   | ZIP |

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| State                       | ZIP |

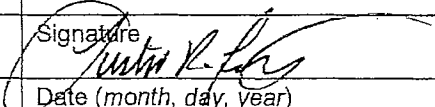
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| Address (number and street) |     |
| City                        |     |
| State                       | ZIP |

**CERTIFICATION**

recd 1/10/14

I certify that to the best of my knowledge I have listed all potentially affected parties, as defined by IC 4-21.5-3-4.

|                                                           |                                                                                                   |
|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Proposed facility name<br>Los Tres Grandes Sanitary Sewer | Printed Name<br>Justin R. Frazier                                                                 |
| City                                                      | Signature<br> |
| County<br>Tippecanoe                                      | Date (month, day, year)<br>01 / 03 / 13                                                           |

| OWNER                                        | MAILING ADDRESS                                         |
|----------------------------------------------|---------------------------------------------------------|
| TIPPECANOE COUNTY                            | 20 N 3RD ST<br>LAFAYETTE, IN 47901                      |
| TIPPECANOE COUNTY BOARD OF COMMISSIONERS     | 20 N 3RD ST<br>LAFAYETTE, IN 47901                      |
| BOANCO INC                                   | 1842 SUMMERTIME TRL #17<br>LAFAYETTE, IN 47909-7309     |
| ALFRED W BUCKLEY ETAL                        | 1842-17 SUMMERTIME TRL SU 2<br>LAFAYETTE, IN 47909-7309 |
| TIMOTHY J & LONI H GIBB                      | 5019 CONFUCIUS WAY<br>WEST LAFAYETTE, IN 47906          |
| PAUL WHITE & PAULA E LEVERAGE                | 5023 CONFUCIUS WAY<br>WEST LAFAYETTE, IN 47906          |
| RUBY P TSAO TTEE                             | 4200 N 300 W<br>WEST LAFAYETTE, IN 47906                |
| GEORGE TSAO T TTEE                           | 4200 N 300 W<br>WEST LAFAYETTE, IN 47906                |
| I CONLEY & BETTY L VAUGHN                    | 1400 W 500 N<br>WEST LAFAYETTE, IN 47906                |
| PATRICIA A CRAIG                             | 1235 W 500 N<br>WEST LAFAYETTE, IN 47906                |
| JIMMIE H & SHARON L JUSTICE CO-TTEES         | 1323 W 500 N<br>WEST LAFAYETTE, IN 47906                |
| GARY W SCHROEDER TTEE WW SCHROEDER LAND TRST | 5650 E 700 S<br>LAFAYETTE, IN 47909-9328                |
| CITY OF WEST LAFAYETTE                       | 609 W NAVAJO ST<br>WEST LAFAYETTE, IN 47906             |
| CHAFICA H ROGERS                             | 3786 W 250 S<br>CHALMERS, IN 47929-8056                 |
| MILESTONE CONTRACTORS LP                     | PO BOX 68123<br>INDIANAPOLIS, IN 46268                  |
| NOREMAC PROPERTIES LLC                       | 7735 N 75 E<br>WEST LAFAYETTE, IN 47906                 |
| CHARLES J GALEMA                             | 508 N 30TH ST<br>LAFAYETTE, IN 47904                    |
| CREE BROTHERS LLC                            | 7800 TALL TIMBER DR<br>LAFAYETTE, IN 47905              |
| SANDRA IRVIN TTEE                            | 720 W 500 N<br>WEST LAFAYETTE, IN 47906                 |
| KATHY SILA                                   | 719 W 500 N<br>WEST LAFAYETTE, IN 47906                 |
| MARION J & CYNTHIA A BONACORSI               | 4914 HAWTHORNE RIDGE DR<br>WEST LAFAYETTE, IN 47906     |
| ROMAN & LORI KEENEY                          | 811 W 500 N<br>WEST LAFAYETTE, IN 47906                 |
| DAVID R & ROBERTA D CHARTERS                 | 5015 CONFUCIUS WAY<br>WEST LAFAYETTE, IN 47906          |

rec'd  
12/12/13



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

Michael R. Pence  
Governor

Thomas W. Easterly  
Commissioner

March 25, 2015

VIA CERTIFIED MAIL

91 7190 0005 2710 0039 3357

Mr. Scott Lods  
American Suburban Utilities, Inc.  
3350 West, 250 North  
West Lafayette, Indiana 47906

Dear Mr. Lods:

Re: 327 IAC 3 Construction  
Permit Application  
Plans and Specifications for  
Sanitary Sewer  
Klondike-Cumberland  
Permit Approval No. 21294  
West Lafayette, Indiana  
Tippecanoe County

The application, plans and specifications, and supporting documents for the above-referenced project have been reviewed and processed in accordance with rules adopted under 327 IAC 3. Enclosed is the Construction Permit (Approval No. 21294), which applies to the construction of the above-referenced proposed sanitary sewer system to be located near the City of West Lafayette in Tippecanoe County. New sanitary sewer will be constructed along Klondike Road starting at the intersection with Cumberland Avenue (CR 250 North) and extending north approximately 0.7 miles. New sanitary sewer will be constructed along the west side of US 231 starting at the intersection with Cumberland Avenue and extending north approximately 0.3 miles. New sanitary sewer will also be constructed between US 231 and Klondike Road located approximately 0.3 miles north of the intersection of US 231 and Cumberland Avenue.

Please review the enclosed permit carefully and become familiar with its terms and conditions. In addition, it is imperative that the applicant, consulting architect/engineer (A/E), inspector, and contractor are aware of these terms, conditions, and reporting and testing requirements.

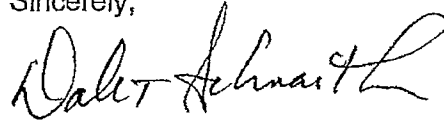


It should be noted that any person affected or aggrieved by the agency's decision in authorizing the construction of the above-referenced facility may, within fifteen (15) days from date of mailing, appeal this permit by filing a request with the Office of Environmental Adjudication for an adjudicatory hearing in accordance with IC 4-21.5-3-7 and IC 13-15-6. The procedure for appeal is outlined in more detail in Part III of the attached construction permit.

Plans and specifications were prepared by TBIRD Design Services Corporation, certified by Mr. Clem S. Kuns, P.E., and submitted for review on February 27, 2015, with additional information submitted on March 11, 2015.

Any questions concerning this permit may be addressed to Mr. Mike Miles, P.E., of our staff, at 317/232-6548. Questions concerning appeal procedures should be addressed to the Office of Environmental Adjudication, at 317/232-8591.

Sincerely,



Dale T. Schnaith, Chief  
Facility Construction and  
Engineering Support Section  
Office of Water Quality

Project No. SP-1475

Enclosures

cc: Tippecanoe County Health Department  
Tippecanoe County Commissioner  
TBIRD Design Services Corporation

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Page 1 of 6  
Permit Approval No. 21294

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
AUTHORIZATION FOR CONSTRUCTION OF  
SANITARY SEWER SYSTEM  
UNDER 327 IAC 3

DECISION OF APPROVAL

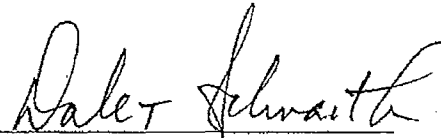
American Suburban Utilities, Inc., in accordance with the provisions of IC 13-15 and 327 IAC 3 is hereby issued a permit to construct the sanitary sewer system to be located near the City of West Lafayette in Tippecanoe County. New sanitary sewer will be constructed along Klondike Road starting at the intersection with Cumberland Avenue (CR 250 North) and extending north approximately 0.7 miles. New sanitary sewer will be constructed along the west side of US 231 starting at the intersection with Cumberland Avenue and extending north approximately 0.3 miles. New sanitary sewer will also be constructed between US 231 and Klondike Road located approximately 0.3 miles north of the intersection of US 231 and Cumberland Avenue.

The permittee is required to comply with requirements set forth in Parts I, II and III hereof. The permit is effective pursuant to IC 4-21.5-3-4(d). If a petition for review and a petition for stay of effectiveness are filed pursuant to IC 13-15-6, an Environmental Law Judge may be appointed for an adjudicatory hearing. The force and effect of any contested permit provision may be stayed at that time.

NOTICE OF EXPIRATION DATE

Authorization to initiate construction of this sanitary sewer system shall expire at midnight April 1, 2016. In order to receive authorization to initiate construction beyond this date, the permittee shall submit such information and forms as required by the Indiana Department of Environmental Management. It is requested that this information be submitted sixty (60) days prior to the expiration date to initiate construction. This permit shall be valid for a period of five (5) years from the date below for full construction completion.

Signed this 25th day of March, 2015, for the Indiana Department of Environmental Management.

  
Dale T. Schnaith, Chief  
Facility Construction and  
Engineering Support Section  
Office of Water Quality

Page 2 of 6  
Permit Approval No. 21294

### SANITARY SEWER SYSTEM DESCRIPTION

The proposed sanitary sewer project shall be located near the City of West Lafayette in Tippecanoe County. New sanitary sewer will be constructed along Klondike Road starting at the intersection with Cumberland Avenue (CR 250 North) and extending north approximately 0.7 miles. New sanitary sewer will be constructed along the west side of US 231 starting at the intersection with Cumberland Avenue and extending north approximately 0.3 miles. New sanitary sewer will also be constructed between US 231 and Klondike Road located approximately 0.3 miles north of the intersection of US 231 and Cumberland Avenue.

The new sanitary sewer will replace and relocate existing sanitary sewer in the project area in order to accommodate a road construction project. There are no new sanitary sewer connections in the proposed project and there is no expected increase in the existing sanitary sewer system flow that is in the project area.

The proposed project shall consist of the construction of:

- Approximately 759 feet of 8-inch diameter PVC (ASTM D3034 SDR-35) sanitary sewer.
- Approximately 394 feet of 8-inch diameter PVC (ASTM D3034 SDR-26) sanitary sewer.
- Approximately 658 feet of 10-inch diameter PVC SDR-35 sanitary sewer.
- Approximately 699 feet of 15-inch diameter PVC SDR-35 sanitary sewer.
- Approximately 2,174 feet of 15-inch diameter PVC (ASTM D3034 SDR-26) sanitary sewer.
- Approximately 2,116 feet of 15-inch diameter PVC (AWWA C905 DR-18) sanitary sewer.
- Approximately 354 feet of 18-inch diameter PVC (ASTM D2241 SDR-21) sanitary sewer.
- Approximately 517 feet of 18-inch diameter PVC ASTM F679 sanitary sewer.

The maximum soil cover over the PVC SDR-35 sanitary sewer and PVC ASTM F679 sanitary sewer will be 16 feet, 24 feet over the PVC SDR-26 sanitary sewer, 31 feet over the PVC SDR-21 sanitary sewer and 40 feet over the PVC DR-18 sanitary sewer.



Page 3 of 6  
Permit Approval No. 21294

The new sanitary sewer will be installed by jack and bore and encased in a steel casing pipe at the crossings along Klondike Road and Cumberland Avenue. The new sanitary sewer will have an upstream connection to an existing 15-inch diameter sanitary sewer located along Cumberland Avenue near the west side of the intersection with US 231. The new sanitary sewer will have a downstream connection on an existing 18-inch diameter sanitary sewer located along Klondike Road approximately 1,500 feet south of the intersection with US 52.

Building laterals will be connected to the new sanitary sewer soon after its construction. It is expected that the building lateral connections will make it impractical to conduct a meaningful leakage test on the new sanitary sewer as required by the State Rule 327 IAC 3-6-19 (d). An alternative to the State Technical Standards is approved per the State Rule 327 IAC 3-6-32 for a proposed video inspection of the new sanitary sewer after its construction if it is decided that a meaningful leakage test cannot be performed.

Inspection during construction of the new sanitary sewer will be provided by American Suburban Utilities, Inc. Maintenance after completion of construction will be provided by American Suburban Utilities, Inc. Wastewater treatment will be provided by American Suburban Utilities, Inc., at the Carriage Estates Semi-Public Wastewater Treatment Plant.

#### CONDITIONS AND LIMITATIONS TO THE AUTHORIZATION FOR CONSTRUCTION OF SANITARY SEWERS

During the period beginning on the effective date of this permit and extending until the expiration date, the permittee is authorized to construct the above described sanitary sewer system. Such construction shall conform to all provisions of State Rule 327 IAC 3 and the following specific provisions:

#### PART I

#### SPECIFIC CONDITIONS AND LIMITATIONS TO THE CONSTRUCTION PERMIT

Unless specific authorization is otherwise provided under the permit, the permittee shall comply with the following conditions:

1. All local permits shall be obtained before construction is begun on this project.
2. If pollution or nuisance conditions are created, immediate corrective action will be taken by the permittee.

Page 4 of 6  
Permit Approval No. 21294

3. The separation of sanitary sewers from water mains and drinking water wells must comply with 327 IAC 3-6-9.
4. All gravity sewer pipe must be leak tested using either a hydrostatic test or air test in accordance with 327 IAC 3-6-19(d). If using a hydrostatic test, the rate of exfiltration or infiltration shall not exceed 200 gallons per inch of pipe diameter per linear mile per day. Air test shall be as prescribed.
5. The results of the gravity sewer leakage test and/or force main leakage test on the completed sewer shall be submitted to this office within three months of completion of construction.
6. Deflection tests must be performed on all flexible\* pipe after the final backfill has been in place at least 30 days. No pipe shall exceed a vertical deflection of 5%. Deflection test results shall be submitted with the infiltration/exfiltration test results. (\*The following are considered nonflexible pipes: vitrified clay pipe, concrete pipe, ductile iron pipe, cast iron pipe, asbestos cement pipe.)
7. Manholes shall be air tested in accordance with ASTM C1244-93, Standard Test Method for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test. The manhole test results shall be submitted with the gravity sewer leakage test results.
8. A drop pipe must be provided for all sewers entering a manhole at an elevation of 24 inches or more above the manhole invert.

Failure to submit test results within the allotted time period or failure to meet guidelines as set forth in the above conditions could be subject to enforcement proceedings as provided by 327 IAC 3-5-3.

Page 5 of 6  
Permit Approval No. 21294

## PART II

### GENERAL CONDITIONS

1. No significant or material changes in the scope of the plans or construction of this project shall be made unless the following provisions are met:
  - a. Request for permit modification is made 60 days in advance of the proposed significant or material changes in the scope of the plans or construction;
  - b. Submit a detailed statement of such proposed changes;
  - c. Submit revised plans and specifications including a revised design summary; and
  - d. Obtain a revised construction permit from this agency.
2. This permit may be modified, suspended, or revoked for cause including, but not limited to the following:
  - a. Violation of any term or conditions of this permit;
  - b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts.
3. Nothing herein shall be construed as guaranteeing that the proposed sanitary sewer system shall meet standards, limitations or requirements of this or any other agency of state or federal government, as this agency has no direct control over the actual construction and/or operation of the proposed project.

Page 6 of 6  
Permit Approval No. 21294

### PART III

#### APPEALS PROCEDURE

Anyone wishing to challenge this agency's decision for authorizing the construction of this facility may do so, provided that a petition for administrative review is filed as required by IC 4-21.5-3-7. The petition must be submitted within fifteen (15) days of the date of mailing of this permit notification. The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by this decision, or otherwise entitled to review by law. Additionally, IC 13-15-6-2 requires that your petition include:

1. The name and address of the person making the request;
2. The interest of the person making the request;
3. Identification of any persons represented by the person making the request;
4. The reasons, with particularity, for the request;
5. The issues, with particularity, proposed for consideration at the hearing; and
6. Identification of the permit terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing permits of the type granted or denied by the Assistant Commissioner's action.
7. Pursuant to IC 4-21.5-3-1(f), any document serving as a petition for review or review and stay must be filed with the Office of Environmental Adjudication. Filing of such a document is complete on the earliest of the following dates:
  - a. The date on which the petition is delivered to the Office of Environmental Adjudication, Indiana Government Center North, 100 North Senate Avenue, Room 501, Indianapolis, Indiana 46204;
  - b. The date of the postmark on the envelope containing the petition, if the petition is mailed by United States mail; or
  - c. The date on which the petition is deposited with a private carrier, as shown by a receipt issued by the carrier, if the petition is sent by private carrier.

PROJECT NO.  
SP-1475

INTRA-OFFICE MEMO

FROM: 327 IAC Construction Permit Coordinator  
Engineering Plan Review Section  
Office of Water Quality

TO: MM

SUBJECT: Project: Klondike-Cumberland  
Location: West Lafayette Tippecanoe County  
# Units: existing flow  
Design Flow: Existing flow  
Received On: 2/27/15  
Connection To: 18-inch  
Wastewater Treatment By: American Suburban Utilities, Inc.  
Maintenance Provided By: American Suburban Utilities, Inc.

Capacity Certification/Allocation-----☒

New one needed if more than one  
year old

Sanitary Sewer Design Summary-----☒

Should match the capacity letter

Signed Application-----☒

Signed by applicant for SRF projects  
(Applicant's Engineer can sign in most  
cases)

Plans and Specifications-----☒

Each page must be signed or sealed  
by an Indiana P.E. or L.S. (if no lift  
station work is being done) Plan view,  
Profile view, Details, Specifications  
(ASTM, SDR, Bedding, Separation, etc.)

Potentially Affected Person List-----☒

Names and addresses on signed and  
dated form , mailing list and mailing  
labels (with 65-42FC code)

Certification Letter of P.E. or L.S.-----☒

The supervising P.E. or L.S.



**APPLICATION FOR SANITARY SEWER  
CONSTRUCTION PERMIT PER 327 IAC 3**  
STATE FORM 63159 (R2 / 9-08)

Indiana Department of Environmental Management  
Office of Water Quality – Mail Code 65-42  
Facilities Construction Section  
100 North Senate Avenue, IGCN 1255  
Indianapolis, IN 46204-2251

**INSTRUCTIONS:**

1. This form must be filled out completely.
2. Additional pages (attachments following this form) are part of this application form and must be filled out completely.
3. Submission of plans and specifications are part of the application.
4. Submit the application form, additional pages, plans and specifications to the above address.
5. If you have any questions regarding this application, call IDEM's Office of Water Quality at (317) 232-8670.

| APPLICANT                                                                                                                                                                                                                                                         |  | APPLICANT'S ENGINEER OR LAND SURVEYOR                                                                                                                                                                                                                                                                                                                                                                          |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Name<br>Scott Lods                                                                                                                                                                                                                                                |  | Name<br>Clem S. Kuns, PE, LS                                                                                                                                                                                                                                                                                                                                                                                   |  |
| Company Name<br>American Suburban Utilities, Inc.                                                                                                                                                                                                                 |  | Company Name<br>TBIRD Design Services Corp.                                                                                                                                                                                                                                                                                                                                                                    |  |
| Address<br>3350 West, 250 North                                                                                                                                                                                                                                   |  | Address<br>105 N 10 <sup>th</sup> Street                                                                                                                                                                                                                                                                                                                                                                       |  |
| Address<br>West Lafayette, IN 47906                                                                                                                                                                                                                               |  | Address<br>Lafayette, IN 47901                                                                                                                                                                                                                                                                                                                                                                                 |  |
| Telephone number<br>765-463-4449                                                                                                                                                                                                                                  |  | Telephone number<br>765-742-1900                                                                                                                                                                                                                                                                                                                                                                               |  |
| NAME AND LOCATION OF PROPOSED FACILITY                                                                                                                                                                                                                            |  | ATTACHMENT CHECKLIST                                                                                                                                                                                                                                                                                                                                                                                           |  |
| Name (Project Name)<br>Klondike-Cumberland Sanitary Sewer Project                                                                                                                                                                                                 |  | A. Sanitary Sewer Design Summary Form: <input checked="" type="checkbox"/> Yes                                                                                                                                                                                                                                                                                                                                 |  |
| Location (Referenced to two existing streets)<br>Klondike Road and Cumberland Avenue                                                                                                                                                                              |  | B. Capacity Certification/Allocation Letter: <input checked="" type="checkbox"/> Yes                                                                                                                                                                                                                                                                                                                           |  |
| Location<br>0.7 miles along Klondike Rd beginning at Cumberland Ave and                                                                                                                                                                                           |  | C. Certification of Registered Engineer or Land Surveyor Letter: <input checked="" type="checkbox"/> Yes                                                                                                                                                                                                                                                                                                       |  |
| Location<br>approx 0.7 miles along US231 beginning at Cumberland Ave                                                                                                                                                                                              |  | D. Plans and Specifications: <input checked="" type="checkbox"/> Yes                                                                                                                                                                                                                                                                                                                                           |  |
| City<br>West Lafayette, IN                                                                                                                                                                                                                                        |  | E. Identification of Potentially Affected Persons (see note below): <input checked="" type="checkbox"/> Yes                                                                                                                                                                                                                                                                                                    |  |
| County<br>Tippecanoe                                                                                                                                                                                                                                              |  | F. Mailing Labels for Potentially Affected Persons: <input checked="" type="checkbox"/> Yes                                                                                                                                                                                                                                                                                                                    |  |
| <p>recd<br/>2/27/15</p>                                                                                                                                                                                                                                           |  | <p>Note Regarding Item (E) above:<br/>Fully identify all persons, by name and address, who may be potentially affected by the issuance of this permit, such as adjoining landowners, persons with a propriety interest, and/or persons who have complained or submitted comments about your facility. Under IC 4-21.5-3-4, IDEM is required to notify potentially affected persons of its permit decision.</p> |  |
| PERMIT APPLICATION FOR CONSTRUCTION, EXPANSION, OR MODIFICATION OF<br>(Check all that apply)                                                                                                                                                                      |  | FUNDING                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| A. Municipal Collection Facility: <input type="checkbox"/> Yes                                                                                                                                                                                                    |  | SRF Funding: <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                          |  |
| B. Semipublic Collection Facility: <input checked="" type="checkbox"/> Yes                                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| C. New facility: <input type="checkbox"/> Yes                                                                                                                                                                                                                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| D. Expansion or modification of existing facility: <input checked="" type="checkbox"/> Yes                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| CERTIFICATION AND SIGNATURE                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| Application is hereby made for a Permit to authorize the activities described herein. I certify that I am familiar with the information contained in this application and to the best of my knowledge and belief such information is true, complete and accurate. |  |                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| Printed name of person signing<br>Scott Lods                                                                                                                                                                                                                      |  | Title<br>President, American Suburban Utilities, Inc.                                                                                                                                                                                                                                                                                                                                                          |  |
| Signature of Applicant<br><i>Scott Lods</i>                                                                                                                                                                                                                       |  | Date application signed (month, day, year)<br>FEB 26 2015                                                                                                                                                                                                                                                                                                                                                      |  |
| *Please refer to IC 13-30-10 for penalties of submission of false information*                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                |  |

PART OF STATE FORM 53159 (R2 / 9-08)

Dear Applicant:

To complete your construction application, you must submit **all** of the necessary items. If your application materials are incomplete, you will be sent a deficiency notice, and your application will be retained for 60 days. If the information is not received within the 60 day period your application will be denied due to incompleteness. You can get a copy of this application package on the Internet at: <http://www.in.gov/idem/4875.htm> or <http://www.in.gov/idem/5157.htm#waterforms>. Please complete the following steps (only one copy of the requested documents needs to be submitted):

- Request that the utility to which you will be connecting your gravity sewer or force main complete the attached Capacity Certification/Allocation Letter.
- A completed Certification of Registered Professional Engineer or Land Surveyor Letter must be completed by the professional engineer or land surveyor who designed and stamped the plans. A copy of this letter is attached.
- Complete all the information on the sewer design summary and certify it with a professional engineer's stamp (or land surveyor's stamp for gravity sewer projects), signature and date.
- Sign and date the application form and fill it out completely. Municipal projects must be signed by a city or town official. Others, such as private projects, can be signed by the owner or a representative.
- Submit one set of plans with profiles and bedding details. Every page must be stamped and signed by a professional engineer (or land surveyor for gravity sewer projects).
- List all affected parties. This list should include: officials of affected counties, cities or towns; adjacent property owners; and all other potentially affected parties, their names and mailing addresses. A completed set of mailing labels with the mailing code of 65-42FC listed above each party on each label is required.
- Please be advised that if your project will disturb one (1) or more acres of land area, coverage under 327 IAC 15-5 (Rule 5) is required. Rule 5 is the General Permit for Storm Water Runoff Associated with Construction Activity. You can review the Rule 5 web site for information at: <http://www.in.gov/idem/4902.htm> and/or contact the Rule 5 Permits Coordinator at 317/233-1864 for more information.

Please send construction applications to:

Indiana Department of Environmental Management  
Office of Water Quality  
Mail Code 65-42  
100 North Senate Avenue  
IGCN 1255  
Indianapolis, IN 46204-2251  
Attention: Don Worley

Telephone: 317/232-5579

**327 IAC 3.5.5 Wastewater Construction Permit Fees**

(There are currently no fees required for Sewer Projects, either private or public).

American Suburban Utilities, Inc.

3350 W. 250 N.  
West Lafayette, IN 47906  
Tel. 765-463-3856  
Fax 765-463-3855

**Letter of Transmittal**

**DO #15025**

To: IDEM - Office of Water Quality Date: 26-Feb-2015  
Mail Code 65-42 Phone: 1-800-451-6027  
100 North Senate Avenue Fax: 1-317-232-8406  
Indianapolis, IN 46204-2251 Sent: 26-Feb-2015  
Re: Klondike/Cumberland Sanitary Sewer Int: JAH  
File: \_\_\_\_\_  
Attn: Facilities Construction Section

VIA:    Courier    Hand Delivery    ☒ Fed Ex    Fax    Email  
THE FOLLOWING ITEMS:

   ☒ Plans    Copy of Invoice    Specifications    Change Order  
   ☒ Permit    ☒ Mailing Labels  
   For Your Information    For Your Use    For Review and Comment  
   ☒ For Your Approval    As Requested    For Bid Due \_\_\_\_\_, 20\_\_\_\_

| Copies | Date      | No. | Description                                                            |
|--------|-----------|-----|------------------------------------------------------------------------|
| 1      | 25-Feb-15 |     | Application for Sanitary Sewer Construction Permit                     |
| 1      |           |     | List of Potentially Affected Persons including Mailing Labels (2 sets) |
| 1      |           |     | One (1) Full Size Set of Certified Construction Plans                  |
|        |           |     |                                                                        |

REMARKS: \_\_\_\_\_

Signed \_\_\_\_\_

John Huggins, Office Assistance

If enclosures are not as noted, please kindly notify us at once.

CONFIDENTIALITY NOTICE

The documents accompanying this transmittal contain confidential information. The information is intended only for the use of the individual(s) or entity named above. If you are not the intended recipient, you are notified that any disclosure, copying, or distribution of the transmittal information is not permissible. If you have received this transmittal in error, please immediately notify us by telephone at the number above to arrange for return of the original documents. Thank you.



**MILES, MIKE**

---

**From:** Clem S. Kuns <clemk@tbirdesign.com>  
**Sent:** Wednesday, March 11, 2015 6:17 PM  
**To:** MILES, MIKE  
**Subject:** RE: Klondike Cumberland Sanitary Sewer Project

Hi Mike,

Corresponding to your questions below, I offer the following responses:

1. Yes. The portions of the existing sewer that is within the vertical excavation limits of the proposed road widening will be removed. All manhole structures will be filled below this excavation line.
2. Yes, laterals will be connected as the new main "passed through". If necessary, I guess the laterals could be plugged and the main tested
3. There currently is a lift station on the south side of Cumberland Avenue that handles flow that would otherwise arrive in existing STR 6003. When the proposed project is finished, the lift station will be decommissioned and the flow will pass into STR EXIST 6003, down the new 15" main and into the same WWTP it currently discharges to. At the current time, STR 6003 is just sitting there waiting on a new main to be installed so it can pass flow instead of the upstream Lift Station.

Hope this helps.

Thanks!

**Clem S. Kuns, PE, LS**

TBIRD DESIGN SERVICES CORP.  
105 N 10th Street  
Lafayette, IN 47901  
765.742.1900 - voice  
765.714.8562 - cell  
[www.tbirddesign.com](http://www.tbirddesign.com)

**From:** MILES, MIKE [mailto:MMILES@idem.IN.gov]  
**Sent:** Wednesday, March 11, 2015 4:09 PM  
**To:** Clem S. Kuns  
**Subject:** Klondike Cumberland Sanitary Sewer Project

Clem,

I am reviewing the sanitary sewer plans for the Klondike Cumberland Sanitary Sewer Project (IDEM No. SP-1475) located near West Lafayette and I have some questions.

Question No. 1: The plan sheet Nos. C201 – C208 show existing parallel sanitary sewer located along Klondike Road near the new sanitary sewer. Will the existing sanitary sewer located along Klondike Road be sealed and abandoned after the new sanitary sewer is constructed? Please clarify for my information.

Question No. 2: Will the building laterals need to be connected to the new sanitary sewer located along Klondike Road soon after its construction? If yes will the building laterals make it impossible to conduct a meaningful air pressure/leakage test? Please clarify for my information.

Question No. 3: The plan sheet No. C223 shows an existing manhole No. 6003 connected to the new 15-inch diameter PVC SDR-21 sanitary sewer. The existing manhole No. 6003 appears to be a terminal upstream manhole on the existing 15-inch diameter sanitary sewer. If the manhole No. 6003 is an existing upstream manhole will there be sanitary sewer flow into the new 15-inch diameter sanitary sewer? Please clarify for my information.

Mike Miles, P.E.  
Project Engineer  
IDEM OWQ Facility Construction Section  
317 / 232-6548

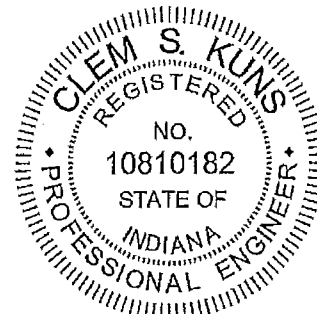
PART OF STATE FORM 53159 (R2 / 9-08)

**SANITARY SEWER DESIGN SUMMARY**

| Design Flow     |                      |                    |                   |
|-----------------|----------------------|--------------------|-------------------|
| Number of units |                      |                    |                   |
|                 | 1 bedroom apartments | 200 gpd/unit       | gpd               |
|                 | 2 bedroom apartments | 300 gpd/unit       | gpd               |
|                 | Single family homes  | 310 gpd/unit       | gpd               |
|                 | Commercial lots      |                    | gpd               |
|                 |                      |                    | gpd               |
|                 |                      |                    | gpd               |
|                 |                      | Total average flow | Existing flow gpd |
| Peaking factor  |                      | Peak flow          | Existing flow gpd |

| Sewer     |                                 |
|-----------|---------------------------------|
| 759 ft.   | 8" PVC SDR-35                   |
| 658 ft.   | 10" PVC SDR-35                  |
| 699 ft.   | 15" PVC SDR-35                  |
| 394 ft.   | 8" PVC SDR-26                   |
| 2174 ft.  | 15" PVC SDR-26                  |
| 517 ft.   | 18" PVC SDR-26 PVC ASTM F699 mm |
| 2116 ft.  | 15" PVC SDR-21                  |
| 354 ft.   | 18" PVC SDR-21 /                |
| 1658 ft.  | 15" PVC AWWA C-900 6.905 mm     |
| 9,329 ft. | Total length of sewer           |

The new sewer will be connected to an existing 18-inch diameter sanitary sewer located 1,500-ft south of the intersection of Klondike Road and US 52 on the west side of Klondike Road.



*Clem S. Kums*

02/25/2015

| Lift Station                                                            |                                                          |     |     |    |
|-------------------------------------------------------------------------|----------------------------------------------------------|-----|-----|----|
| Type                                                                    | N/A (wet/dry, submersible, wet-well mounted, etc.)       |     |     |    |
| Number of pumps                                                         |                                                          |     |     |    |
| Capacity of pumps                                                       | gpm                                                      | TDH | RPM | HP |
| Back-up power source                                                    | <input type="checkbox"/> Yes <input type="checkbox"/> No |     |     |    |
| Average wet-well detention time                                         |                                                          |     |     |    |
| Audio/visual alarm with self-contained power supply or telemetry system |                                                          |     |     |    |
| Force Main                                                              | feet of -inch (type)                                     |     |     |    |
| Force main discharge elevation                                          |                                                          |     |     |    |

| Waste Treatment                          |                                   |
|------------------------------------------|-----------------------------------|
| Wastewater treatment will be provided by | American Suburban Utilities, Inc. |

| Inspection/Maintenance                             |                                   |
|----------------------------------------------------|-----------------------------------|
| Inspection during construction will be provided by | American Suburban Utilities, Inc. |
| Maintenance after completion will be provided by   | American Suburban Utilities, Inc. |

*recd  
2/27/15*

PART OF STATE FORM 53159 (R2 / 9-08)

**CAPACITY CERTIFICATION/ALLOCATION LETTER**

*This form must be filled-out in its entirety.*

|                   |                                            |
|-------------------|--------------------------------------------|
| Name of applicant | American Suburban Utilities, Inc.          |
| Name of owner     | American Suburban Utilities, Inc.          |
| Name of project   | Klondike-Cumberland Sanitary Sewer Project |

**CERTIFICATION**

I, Scott Lods, representing American Suburban Utilities, Inc., in my capacity  
(Name of Individual) (Name of city or town)  
as President have the authority to act on behalf of American Suburban Utilities, Inc.  
(Title) (Name of city or town)

certify that I have reviewed and understand the requirements of 327 IAC 3 and that the sanitary collection system proposed, with the submission of this application, plans and specifications, meets all requirements of 327 IAC 3. I certify that the daily flow generated in the area that will be collected by the project system will not cause overflowing or bypassing in the collection system other than NPDES authorized discharge points and that there is sufficient capacity in the receiving water pollution treatment/control facility to treat the additional daily flow and remain in compliance with applicable NPDES permit effluent limitations. I certify that the proposed average flow will not result in hydraulic or organic overload. I certify that the proposed collection system does not include new combined sewers or a combined sewer extension to existing combined sewers. I certify that the ability for this collection system to comply with 327 IAC 3 is not contingent on water pollution/control facility construction that has not been completed and put into operation. I certify that the project meets all local rules or laws, regulations and ordinances. The information submitted is true, accurate, and complete, to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

|                                                  |                                                 |
|--------------------------------------------------|-------------------------------------------------|
| Gallons per day (Total Average Flow for Project) | Existing (no new connections)                   |
| Wastewater treatment plant (Name of WWTP)        | Carriage Estates WWTP                           |
| Sewers (Owners of sewers)                        | American Suburban Utilities, Inc.               |
| Signature <u>Scott Lods</u>                      | Date Signed (month, day, year)<br>02.12.6.12015 |

**(Please refer to IC 13-30-10 for penalties of submission of false information.**

recd  
2/27/15

PART OF STATE FORM 53159 (R2 / 9-08)

**CERTIFICATION OF REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR LETTER**

*This form must be filled-out in its entirety.*

|                   |                                            |
|-------------------|--------------------------------------------|
| Name of applicant | American Suburban Utilities, Inc.          |
| Name of owner     | American Suburban Utilities, Inc.          |
| Name of project   | Klondike-Cumberland Sanitary Sewer Project |

**CERTIFICATION**

I, Clem S. Kuns, PE, LS, representing the project applicant, in my capacity as a registered  
(Name of individual)

professional Engineer, 10810182 certify the  
(Engineer or Land Surveyor) (Indiana registration number)

following under penalty of law: The design of this project has been performed under my direction or supervision to assure conformance with 327 IAC 3 and the plans and specifications require the construction of said project to be performed in conformance with 327 IAC 3-6. The peak daily flow rates, in accordance with 327 IAC 3-6-11 generated from within the specific area that will be collected by the proposed collection system that is the subject of the application, plans, and specifications (when functioning as designed and properly installed), will not cause overflowing or bypassing in the same specific area serviced by the proposed collection system other than from NPDES authorized discharge points. The proposed collection system does not include new combined sewers (serving new areas) or a combined sewer extension to existing combined sewers. The sewer at the point of connection is physically in existence and operational. Based upon information provided by the owner of the Wastewater System, the ability for this collection system to comply with 327 IAC 3 is not contingent on downstream water pollution/control facility construction that has not been completed and put into operation. The design of the proposed project meets applicable local rules or laws, regulations and ordinances. The information submitted is true, accurate, and complete, to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

|                                                  |                                                  |
|--------------------------------------------------|--------------------------------------------------|
| Gallons per day (Total Average Flow for Project) | Existing (no new connections)                    |
| Wastewater treatment plant (Name of WWTP)        | Carriage Estates WWTP                            |
| Sewers (Owners of sewers)                        | American Suburban Utilities, Inc.                |
| Signature <u>Clem S. Kuns</u>                    | Date Signed (month, day, year)<br>02 / 26 / 2015 |

**(Please refer to IC 13-30-10 for penalties of submission of false information.)**



rec'd  
2/27/15

PART OF STATE FORM 53159 (R2 / 9-08)

**SANITARY SEWER SUBMISSION CHECKLIST**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <b>1. Application</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Check here</b>                   |
| A. Applicant's name and address                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> |
| B. Applicant's Engineer: company name, engineer's name, address, telephone                                                                                                                                                                                                                                                                                                                                                                                                                               | <input checked="" type="checkbox"/> |
| C. Name and location of proposed sanitary sewer                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> |
| D. Type of collection facility the project will connect to (municipal or semipublic)                                                                                                                                                                                                                                                                                                                                                                                                                     | <input checked="" type="checkbox"/> |
| E. Signature of applicant or authorized agent including date signed                                                                                                                                                                                                                                                                                                                                                                                                                                      | <input checked="" type="checkbox"/> |
| <b>2. Sanitary Sewer Design Summary</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Check here</b>                   |
| A. Design flow                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input checked="" type="checkbox"/> |
| 1. Multiply number of units by recommended average flow for that type of unit. Refer to 327 IAC 3-6-11 design flow rate requirements for collection systems and water pollution treatment/control facilities. This is a section of the Article 3 Administrative Code and is available on the internet at <a href="http://www.in.gov/legislative/iac/T03270/A00030.PDF">www.in.gov/legislative/iac/T03270/A00030.PDF</a> . You would need to click under Water and look for Title 327 IAC 3 or Article 3. |                                     |
| 2. Total all average flow and enter total average flow                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     |
| 3. Enter peaking factor. If peaking factor and factor is unknown, a factor of 4 is usually sufficient, however, an exact factor may be calculated from the following equation:<br><br>$\text{Peaking factor} = \frac{18 + (\text{Square root of } P)}{4 + (\text{Square root of } P)}$ Where P is the population in thousands:                                                                                                                                                                           |                                     |
| 4. Multiply total average flow by peaking factor and enter product as peak flow                                                                                                                                                                                                                                                                                                                                                                                                                          |                                     |
| B. Gravity sewer length and type. Please include the length, diameter, and type of sewer pipe with applicable SDR and ASTM specifications, and type of bedding.                                                                                                                                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> |
| C. Certifier's seal. Sanitary Sewer Design Summary should be sealed and signed by a registered professional engineer or a land surveyor if no lift station is involved.                                                                                                                                                                                                                                                                                                                                  | <input checked="" type="checkbox"/> |
| D. Connection Point                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <input checked="" type="checkbox"/> |
| 1. Diameter of existing sewer at connection point (unless connection point is at a lift station)                                                                                                                                                                                                                                                                                                                                                                                                         |                                     |
| 2. Location of connection point relative to an intersection of two (2) streets, i.e. so many feet west and so so many feet north of the intersection of street A and street B                                                                                                                                                                                                                                                                                                                            |                                     |
| E. Lift station: enter all proposed lift station information, or enter N/A if no lift station is involved. (If an existing lift station is being directly affected, enter existing lift station information and specify that it is an existing lift station and include its current load).                                                                                                                                                                                                               | <input checked="" type="checkbox"/> |
| 1. Number and capacity of pumps.                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     |
| 2. Provide design calculations for TDH and wet-well detention time.                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |
| 3. Provide a graph of the pump curves.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     |
| 4. Specify highest elevation in the force main.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                     |
| 5. Specify force main length, diameter and material (ASTM and SDR), and bedding.                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     |
| 6. Specify an audio and visual alarm with self contained power supply and telemetry.                                                                                                                                                                                                                                                                                                                                                                                                                     |                                     |
| 7. Specify nature of back-up power source for lift station, if any.                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |
| F. Waste treatment: enter the name of semipublic or municipal treatment facility which the project will be connecting to: if there is more than one treatment facility in the municipality or sanitary district, please specify which one.                                                                                                                                                                                                                                                               | <input checked="" type="checkbox"/> |
| G. Inspection/Maintenance: please specify name of company, individual or party responsible for inspection during the construction of the project and maintenance of the project after construction is complete.                                                                                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> |
| <b>3. Capacity certification/allocation letter</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Check here</b>                   |
| Provide the utility that is treating the wastewater the attached capacity certification/allocation letter. This letter must be filled out in its entirety.                                                                                                                                                                                                                                                                                                                                               | <input checked="" type="checkbox"/> |
| <b>4. Plans and specifications</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Check here</b>                   |
| A. Every page of the plans should be signed and sealed, as well as the cover page for any specifications.                                                                                                                                                                                                                                                                                                                                                                                                | <input checked="" type="checkbox"/> |
| 1. Professional engineers who are registered within the state of Indiana are eligible to certify plans and specifications for all types of projects.                                                                                                                                                                                                                                                                                                                                                     |                                     |
| 2. A land surveyor who is registered within the state of Indiana may certify plans and specifications for gravity type sanitary sewers <u>only</u> , and may not certify plans and specifications involving lift stations and force mains.                                                                                                                                                                                                                                                               |                                     |

PART OF STATE FORM 53159 (R2 / 9-08)

**IDENTIFICATION OF POTENTIALLY AFFECTED PERSONS**

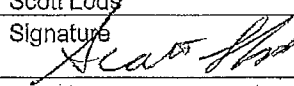
Please list any and all persons whom you have reason to believe have a substantial or proprietary interest in this matter, or could otherwise be considered to be potentially affected under law. Failure to notify a person who is later determined to be potentially affected could result in voiding our decision on procedural grounds. To ensure conformance with Administrative Orders and Procedures Act (AOPA), please list all such parties. The letter on the opposite side of this form will further explain the requirements under the AOPA. Attach additional names and addresses on a separate sheet of paper, as needed.

See attached mailing labels

rec'd  
2/27/15

**CERTIFICATION**

I certify that to the best of my knowledge I have listed all potentially affected parties, as defined by IC 4-21.5-3-4.

|                                            |                                                                                                   |
|--------------------------------------------|---------------------------------------------------------------------------------------------------|
| Proposed facility name                     | Printed Name                                                                                      |
| Klondike-Cumberland Sanitary Sewer Project | Scott Lods                                                                                        |
| City<br>West Lafayette, IN                 | Signature<br> |
| County<br>Tippecanoe                       | Date (month, day, year)<br>FEB 126 1 2015                                                         |

PART OF STATE FORM 53159 (R2 / 9-08)

|                                                                                                                                                                                                                                                                                                 |                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <b>4. Plans and specifications (continued)</b>                                                                                                                                                                                                                                                  | <b>Check here</b>                   |
| B. The following items are usually necessary for proper technical review of sanitary sewers and lift stations:                                                                                                                                                                                  | <input checked="" type="checkbox"/> |
| 1. Plan view of the sewers including minimum ten foot horizontal separations of sewer and water mains, and connection point of the proposed sanitary sewer.                                                                                                                                     |                                     |
| 2. Profile view of the sewers including: slope, invert elevations, existing grade, proposed grade, distances from manhole to manhole, existence of special features, and a minimum of 18-inch vertical separation of sewer and water mains.                                                     |                                     |
| 3. Where applicable, details of all appurtenances including manholes, drop manholes, inverted siphons, etc.                                                                                                                                                                                     |                                     |
| 4. Bedding details for installation of Sanitary Sewer/Force Main:                                                                                                                                                                                                                               |                                     |
| a. Rigid pipe: should be class A, B or C as described in ASTM C 12.                                                                                                                                                                                                                             |                                     |
| b. Flexible pipe: should be class I, II, or III as described in ASTM D 2321                                                                                                                                                                                                                     |                                     |
| 5. Minimum three foot cover depth above the crown of the sanitary sewer force main.                                                                                                                                                                                                             |                                     |
| 6. Automatic Air Relief valves to be placed at all relative high points in the force main to prevent air locking.                                                                                                                                                                               |                                     |
| 7. Mechanical joints should be specified for all aerial, river or lake crossings.                                                                                                                                                                                                               |                                     |
| * Note: construction within a floodway (river, lake, etc.) must receive approval from Indiana Department of Natural Resources, Division of Water.                                                                                                                                               |                                     |
| <b>5. A list of names and addresses of all persons or parties who may be potentially affected by the issuance of this project. Please be aware that failure to properly identify and notify these people could have the result of voiding any decision made regarding this permit.</b>          | <b>Check here</b>                   |
| A. The applicant must take full responsibility for proper identification of all potentially affected persons or parties.                                                                                                                                                                        | <input checked="" type="checkbox"/> |
| B. The following are the minimum recommendations made by this office made as to who should be included in this list:                                                                                                                                                                            | <input checked="" type="checkbox"/> |
| 1. All landowners adjacent to the property where the proposed construction is to occur.                                                                                                                                                                                                         |                                     |
| 2. All persons with a substantial and direct proprietary interest in the issuance of this permit, such as, nearby businesses that could have their business in some way affected by the issuance of this Construction Permit.                                                                   |                                     |
| 3. Anyone who is known to have complained or otherwise expressed an interest in this particular project or projects in this specific area.                                                                                                                                                      |                                     |
| 4. Anyone else whom the applicant may feel that might be potentially affected by the issuance of this permit.                                                                                                                                                                                   |                                     |
| <b>6. The Application form must be signed and dated by the applicant or his duly authorized agent.</b>                                                                                                                                                                                          |                                     |
| Please note that this checklist is only designed to expedite the review process by assisting the applicant in submission for sanitary sewer construction permits, and in no way is intended to replace the technical review process, nor is it a substitute for the actual Construction Permit. |                                     |



65-42FC

ANTHONY W & JILL S HARDEBECK  
311 KLONDIKE RD  
WEST LAFAYETTE, IN 47906

65-42FC

COUNTY OF TIPPECANOE  
20 N 3RD ST  
LAFAYETTE, IN 47901

65-42FC

F LYNN CASON JR TTEE  
2541 MCCORMICK RD  
WEST LAFAYETTE, IN 47906

65-42FC

GEORGE M & CAROL LORAIN KING  
4125 N 300 W  
WEST LAFAYETTE, IN 47906

65-42FC

JOHN & MARILYN WEILBAKER  
3131 KLONDIKE ROAD  
WEST LAFAYETTE, IN 47906

65-42FC

KLONDIKE VENTURES LLC  
C/O JACK BRAUER  
7708 AUWENASA LN  
CINCINNATI, OH 45243

65-42FC

NANCY BURKE  
255 WAKEFIELD WAY  
ZIONSVILLE, IN 46077

65-42FC

RIVERSIDE COVENANT CHURCH INC  
1850 WOODLAND AVE  
WEST LAFAYETTE, IN 47906

65-42FC

SANTEFORT VAN DER NOORD ANDREWS LLC  
2719 KLONDIKE RD  
WEST LAFAYETTE, IN 47906

65-42FC

THOMAS SANTEFORT & HARRY  
VANDERNOORD ATTN: POINT WEST  
2719 KLONDIKE RD  
WEST LAFAYETTE, IN 47906

65-42FC

CITY OF WEST LAFAYETTE  
ATTN: PUBLIC WORKS DIRECTOR  
222 N CHAUNCEY AVE, RM 102  
WEST LAFAYETTE, IN 47906

65-42FC

EVARO D KRAUSE TTEE & KRAUSE-  
FRANZEN FARMS INC  
1414 RAVANIA RD  
WEST LAFAYETTE, IN 47906

65-42FC

FOUR M LLC  
% MIKE BUCKLES  
220 S 4TH ST  
LAFAYETTE, IN 47901

65-42FC

JEFFREY C & RHONDA D FLORIAN  
2511 KLONDIKE RD  
WEST LAFAYETTE, IN 47906

65-42FC

JOHN PATRICK SILVER  
2666 KLONDIKE RD  
WEST LAFAYETTE, IN 47906

65-42FC

LAFAYETTE VENETIAN BLIND INC  
PO BOX 2838  
WEST LAFAYETTE, IN 47996-2838

65-42FC

OVERMAN RENTALS LLC  
3001 PEMBERLY CT  
WEST LAFAYETTE, IN 47906

65-42FC

ROBERT E & SHEN PAULINE V WILD  
3580 DIVISION RD  
WEST LAFAYETTE, IN 47906

65-42FC

SANTEFORT VAN DER NOORD LLC  
2719 KLONDIKE RD  
WEST LAFAYETTE, IN 47906

65-42FC

TIPPECANOE COUNTY BOARD OF  
COMMISSIONERS  
20 N 3RD ST  
LAFAYETTE, IN 47901

65-42FC

COPPER BEECH TOWNHOME  
COMMUNITIES EIGHT LLC  
2590 PARK CENTER BLVD STE 201  
STATE COLLEGE, PA 16801

65-42FC

F LYNN CASON JR TTEE  
2619 PEACE DR  
WEST LAFAYETTE, IN 47906

65-42FC

FRANCISCO J & LUZ E CASAS  
273 S FURLONG DR  
LAFAYETTE, IN 47905

65-42FC

JOE T RICHARDSON  
3555 MCCARTY LN  
LAFAYETTE, IN 47905

65-42FC

JOHN R & MARILYN A WEILBAKER  
3131 KLONDIKE ROAD  
WEST LAFAYETTE, IN 47906

65-42FC

MIDWEST RENTALS INC  
PO BOX 445  
LAFAYETTE, IN 47902-0445

65-42FC

RICHARD E SR & SUSAN H LINSON TTEE  
123 VALLEY VIEW CT  
WEST LAFAYETTE, IN 47906

65-42FC

ROBERT S & JOYCE E PEDIGO  
4511 W 600 N  
WEST LAFAYETTE, IN 47906

65-42FC

STATE OF INDIANA  
C/O INDOT RENEE NEUKAM  
41 W 300 N  
CRAWFORDVILLE, IN 47933

65-42FC

WABASH CIVIL TOWNSHIP  
% JULIE BYERS TTEE  
2899 KLONDIKE RD  
WEST LAFAYETTE, IN 47906

re cd  
2/21/15

65-42FC  
WABASH SCHOOL TOWNSHIP  
US 52 W  
EST LAFAYETTE, IN 47906

65-42FC  
WEST LAFAYETTE WATER COMPANY INC  
%AMERICAN WATER  
PO BOX 5627  
CHERRY HILL, NJ 08034

Mailing Labels  
one  
set  
only  
now

65-42FC  
WABASH SCHOOL TOWNSHIP  
US 52 W  
WEST LAFAYETTE, IN 47906

65-42FC  
WEST LAFAYETTE WATER COMPANY INC  
%AMERICAN WATER  
PO BOX 5627  
CHERRY HILL, NJ 08034

Mailing Labels  
Set #2

recd  
2/27/15

## Shipment Request Form PBMS State of Indiana



2900000646127

Agency IDEM

## From:

Name: Valentina Watkins

Department: quality water

Phone: 317-232-8675

ECertified: True

EReturn Receipt: False

## To:

Ship To 1: Mr. Scott Lods

Ship To 2: American Suburban Utilities, Inc.

Address: 3350 W 250 N

West Lafayette, IN 47906-5147

Country: US

## Special Instructions:

3/25/15  
PA# 21294

Reference:

Requested Date: 3/25/2015 7:19:40 AM

## To print this form:

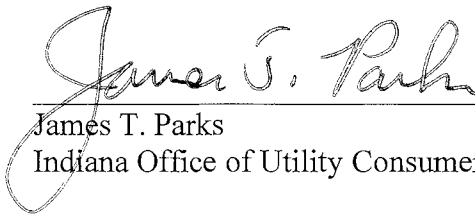
- 1) Click the Print button. (Print two copies, one to attach to your package and one to keep for your records.)
- 2) Place the form in a waybill pouch or attach it to your shipment so that the barcode portion of the page can be read and scanned.
- 3) If ECertified cover letter was selected, place letter contents along with eCertified cover letter in special certified envelope so that Certified Bar code shows through window.

Form (1 of 1)

# **AFFIRMATION**

I affirm, under the penalties for perjury, that the foregoing representations are true.

  
James T. Parks  
Indiana Office of Utility Consumer Counselor

January 13, 2016  
Date

Cause No. 44676  
American Suburban Utilities, Inc.

**CERTIFICATE OF SERVICE**

This is to certify that a copy of the foregoing *OUCC Testimony of James T. Parks: Public's Exhibit No. 2* has been served upon the following counsel of record in the captioned proceeding by electronic service on January 13, 2016.

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\_\_\_\_\_  
Daniel M. Le Vay, Atty. No. 22184-49  
Deputy Consumer Counselor

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