CWA COMPLIANCE EVALUATION INSPECTION REPORT
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 5

Facility: Defiance Water Pollution Control
26273 State Route 281 East
Defiance, Ohio 43512

NPDES Permit Number: OH0024899

Purpose: To evaluate compliance with applicable regulations under the National Pollutant Discharge Elimination System (NPDES) permit program and the Clean Water Act (CWA).

Date of Inspection: November 30, 2022

EPA Region 5 Water Enforcement Compliance Assurance Representatives:

- Keith Middleton, Environmental Engineer, middleton.keith@epa.gov, 312-886-6465
- Megan Zale, Environmental Engineer/Scientist, zale.megan@epa.gov, 440-250-1711

City of Defiance Representatives:

- Mark Lehnert, WWTP Superintendent, mlehnert@cityofdefiance.com, 419-782-0841
- Kevin Connor, Assistant WWTP Superintendent, kconnor@cityofdefiance.com, 419-782-0841
- Sean O'Donnell, Law Director, sodonnell@cityofdefiance.com, 419-794-2101

Report Prepared by: Keith Middleton, Environmental Engineer

Inspector Signature: KEITH MIDDLETON Digitally signed by KEITH MIDDLETON Date: 2023.01.20 11:33:28 -06'00'

Approver Name and Title: Ryan Bahr, Section 2 Supervisor, Water Enforcement and Compliance Assurance Branch

Approver Signature: Ryan Bahr Digitally signed by Ryan Bahr Date: 2023.01.20 14:57:47 -06'00'

INTRODUCTION

On November 30, 2022, representatives from the U.S. Environmental Protection Agency, Region 5 conducted a Compliance Evaluation Inspection regarding the Defiance Water Pollution Control Wastewater Treatment Plant (referred to as the "Defiance Wastewater Treatment Plant" in this report) in Defiance, Ohio. The purpose of this inspection was to evaluate this wastewater treatment plant's (WWTP's) compliance with the CWA and its current NPDES permit. This inspection occurred on November 30, 2022 and consisted of an opening conference, discussions concerning the operation of the Defiance WWTP, dialogue regarding the Defiance WWTP's NPDES permit compliance, a WWTP walk-through, a review of pertinent compliance documents, and a closing conference. Any concerns that EPA identified during the inspection or during the subsequent review of the Defiance WWTP is listed in the section entitled "Areas of Concern" starting on page 19 of this report.

BACKGROUND

The Defiance WWTP is owned and operated by the City of Defiance ("City" or "Defiance"). Specifically, the Defiance Water Pollution Control Division oversees the WWTP and the sewer collection system. Mark Lehnert has been the principal wastewater treatment operator of the Defiance WWTP since 2008. Mr. Lehnert has obtained his wastewater operator certificate from the State of Ohio. Kevin Connor also has obtained his wastewater operator certificate from the State of Ohio and assists Mr. Lehnert with the day-to-day decision making at the Defiance WWTP.

There are 14 other employees employed within the Defiance Water Pollution Control Division. This includes a secretary, a chemist (Brittney Mack), a chief WWTP operator (Kelsey Heck), 3 other WWTP operators, 4 WWTP maintenance employees, and 4 sewer collection system employees. In addition, there is a city plumbing inspector that will perform some fats, oils, and grease inspections on behalf of the WWTP. Mr. Lehnert is typically at the WWTP from 7:00 am to 4:00 pm from Monday through Friday. During normal circumstances, the WWTP operators work at the WWTP from 7:00 am to 3:00 pm. The WWTP is also staffed on Saturdays and Sundays for approximately 4 hours each day. Both the WWTP operators and the sewer collection system maintenance employees will have staff meetings around 7:00 am (Monday through Friday) to discuss each of the individual tasks for that day. The WWTP employees also perform maintenance of the WWTP property, such as mowing grass.

WWTP History

According to Mr. Lehnert, the Defiance WWTP was originally constructed in its current location in 1952. At that time, the Defiance WWTP was built to include primary treatment tanks, chlorination, and anaerobic sludge digestors. In 1964, two activated sludge aerations basins and two final clarifiers were added for the WWTP to have secondary treatment capability. In the late 1990s/early 2000s, upgrades were added to the WWTP that included an additional primary

treatment tank, two roughing towers, a third activated sludge aeration basin, and a final clarifier. In approximately June 2020, the WWTP brought its newly constructed ultraviolet (UV) treatment online, replacing the existing chlorination disinfection system.

Sewer Collection System Background

The City of Defiance sewer collection system includes both sanitary and combined sewer systems with approximately 130 miles of sewerage. About 65% of the collection system is separate sanitary sewer, with the other 35% of the collection system being combined sewer. The combined collection system has 23 permitted CSO outfalls. There are 24 lift stations in the Defiance WWTP tributary area, which collects wastewater from the City of Defiance, unincorporated portions of Defiance County, and the Village of Ayersville. Ayersville has a sanitary sewer that is tributary to the Defiance WWTP and has an agreement with the City of Defiance to treat its wastewater. The WWTP serves a total population of 18,500 people with approximately 5,200 sewer connections.

WWTP DESCRIPTION

The WWTP is designed to treat an average design flow of 6 million gallons per day (MGD). Mr. Lehnert told EPA during the inspection that the Defiance WWTP treats between 2.7 to 3 MGD on average during dry weather. Mr. Lehnert said that the WWTP is operated during wet weather to treat full secondary treatment up to 8 MGD. If the WWTP begins to exceed 8 MGD, the WWTP has been configured to begin bypassing the aeration basins and final clarifiers. The bypassed flow is conveyed directly to the UV disinfection treatment before discharge to the Maumee River. This bypass is identified in the NPDES permit as Outfall 050 and requires the WWTP to document when it is utilized. If the primary treatment basin capacity is exceeded, the primary treatment, downstream of the preliminary treatment, can be bypassed along with the roughing towers, the aeration basins, and the final clarifiers. This bypass is identified in the NPDES permit as Outfall 051, and, like Outfall 050, requires the WWTP to document when it is utilized.

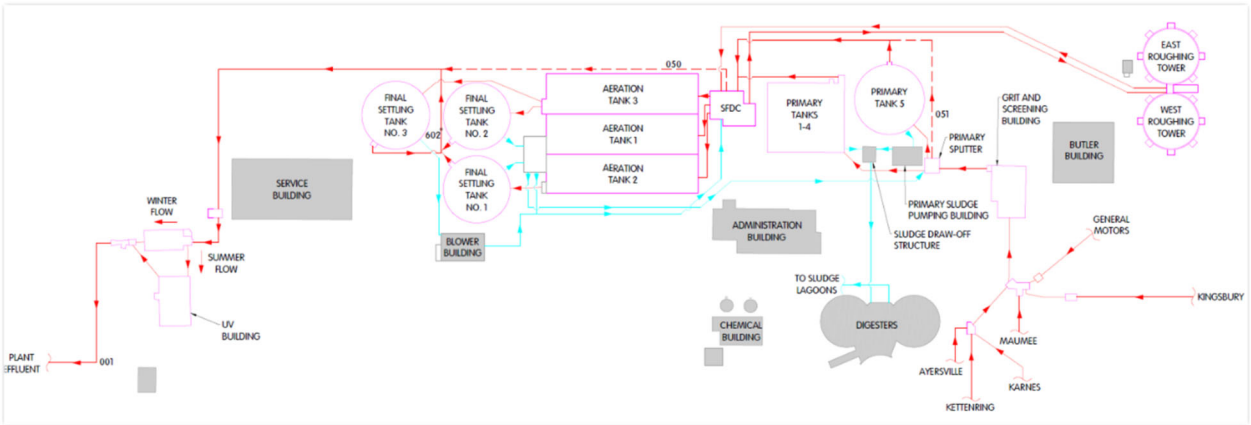


Exhibit 1: Defiance WWTP Schematic Source: Defiance Pollution Control Website (2019)

WWTP Influent

There are six lift stations that pump flow into the Defiance WWTP and make up the WWTP influent. The Kingsbury lift station is the main lift station, which pumps 70% of the City of Defiance's wastewater flow. The Karnes lift station serves the south side of the City of Defiance. The Kettering lift station pumps wastewater from both the City of Defiance and incorporated Defiance County. The General Motors (GM) lift station pumps flow from the GM plant located near the WWTP. The Maumee lift station, the only lift station located on site northwest of the WWTP, pumps wastewater from the east side of the City of Defiance. The Village of Ayersville has its own dedicated lift station that services its community. The City of Defiance maintains these and the other collection system lift stations, except the GM and Ayersville lift stations. The influent for the WWTP is measured by calculating the pumping rates of the five lift stations listed above. The Defiance WWTP representatives told EPA during the inspection that the maximum flow that could be pumped to the WWTP was 15.5 MGD. There is no equalization storage at the Defiance WWTP prior to the WWTP's preliminary treatment.

Preliminary Treatment

The WWTP utilizes an aerated grit removal chamber and a mechanical screening system for preliminary treatment. The aerated grit chamber consists of two buried conical shaped tanks located before the mechanical screen. The aerated grit chamber has a crane cleaning system that is no longer utilized to clean out the grit from the aerated grit chamber, due to the complexity and ineffectiveness of the system. Instead, the City's vactor truck pumps out grit clambers approximately four times per year. The material collected by the vactor truck is dried on the WWTP's sludge drying bed and then taken to the Defiance County Landfill, located on the southwest side of the City of Defiance. The mechanical screen system is plastic, was made by the Parkson Corporation, and installed at the WWTP in the late 1980s. The screen openings on the mechanical screening system are 5/8 inches. There is also a secondary bar rack used to screen flow during wet weather when the mechanical screening system capacity is met. The captured sanitary debris from the mechanical screen system is collected automatically by a dumpster behind the screening system. This dumpster is taken when full by a waste hauler to the Defiance County Landfill.

Primary Treatment

After the preliminary treatment, the wastewater is pumped to five primary clarifiers (or primary tanks). Four of these primary clarifiers (primary tanks #1-#4) are square tanks that were installed at the WWTP in 1952. A circular primary clarifier (primary tank #5) was installed in 2000. At the Defiance WWTP, the waste-activated sludge (WAS) is pumped from the secondary clarifiers to a specific primary tank. This tank can be set by the WWTP's supervisory control and data acquisition (SCADA) system. This WAS sludge and the sludge collected in the primary tanks is then pumped from the specific primary tank, as needed, to the anaerobic digestor. Any rags or grease collected in the skimming arm is dried out within the sludge drying beds before it is

disposed of at the Defiance County Landfill. Mr. Lehnert indicated to EPA that a primary clarifier will be taken offline in the summer for maintenance and cleaning. A primary tank that is offline will be put back online during wet weather events. Mr. Lehnert told EPA that process control samples will be taken from the primary tanks' effluent for total suspended solids (TSS), five-day carbonaceous biochemical oxygen demand ($CBOD_5$), and chemical oxygen demand approximately 3 times a week. Ammonia-Nitrogen control samples are taken 5-days a week, Monday through Friday. WWTP influent samples for Ammonia-Nitrogen at Outfall 601 are taken 5-days a week, Monday through Friday, and compared with the primary tanks' effluent results to see if Ammonia-Nitrogen is increasing within the primary treatment.

Settled Flow Diversion Chamber

Effluent from the primary tanks then flows to the settled flow diversion chamber (SFDC). The SFDC has a series of channels, weirs, and splitter boxes that can control flow into the Outfall 050 bypass, the roughing towers, and the aeration tanks. Sodium aluminate, for Phosphorus treatment, and the return active sludge (RAS) is added within the SFDC, just prior to the aeration tanks.

Roughing Towers

The roughing towers are located at the southwest portion of the Defiance WWTP. The roughing towers include media within the towers that allows a build-up of biological growth that treats wastewater falling through at the top. The purpose of the roughing towers is to treat wastewater with high biochemical oxygen demand. Mr. Lehnert indicated to EPA that the roughing towers were taken out of service in 2008, due to the loss of the industry that contributed high biochemical oxygen demand wastewater to the WWTP that required the roughing towers.

Aeration Tanks

After the roughing towers, the wastewater flows back to the SFDC and then to the aeration basins (or aeration tanks). The Defiance WWTP has three aeration tanks that are similar, although one tank is newer than the other two. The aeration tanks are set up in a configuration for conventional activated sludge treatment, with wastewater flowing from one end to the other. Mr. Lehnert told EPA that the wastewater retention time in the tanks is approximately 12 hours. Fine bubble diffusors are utilized to provide aeration within the tanks. One of the aeration tanks is taken offline each summer for cleaning and maintenance. Mr. Lehnert informed EPA during the inspection that the aeration tanks at the Defiance WWTP constrain the WWTP to its 6 MGD design flow. Process controls conducted at the aeration tank include a dissolved oxygen (D.O.) meter in each of the aeration basins, weekly sludge microscopic analysis, alkalinity samples, and the calculation of mixed liquor suspended solids (MLSS), mixed liquor volatile suspended solids (MLVSS), mean cell residence time (MCRT), and sludge volume index. Mr. Lehnert and Mr. Connor meet at approximately 1 pm on a daily basis to discuss the most current results and any changes needed to the WWTP based on the results.

Also, during this inspection, EPA learned that the Defiance WWTP adds rabbit food to its aeration tanks as a supplemental carbon source, due to low influent biochemical demand. The Defiance WWTP accepts sewage from septic waste haulers, and it receives approximately 2 to 3 loads per day. On the occasion that the Defiance WWTP only receives one daily septic waste load, WWTP operators will add one scoop of rabbit food to each aeration tank in operation on that day. If the Defiance WWTP receives no daily septic waste, the WWTP operators add two scoops of rabbit food to each aeration tank in operation on that day.

Final Clarifiers

Next, the wastewater flows by gravity from the aeration tanks to one of three final clarifiers. Mr. Lehnert told EPA during the inspection that typically one of the aeration tanks is assigned one of the clarifiers and all the flow from that specific aeration tank will flow into that specific clarifier. Two of the clarifiers were constructed in the 1960s and are identical, both being 9-feet deep. The other clarifier was constructed in the late 1990s/2000s and is 12-foot deep, with "tow-bro" RAS removal, instead of tube sludge removal like the other two clarifiers. All three clarifiers have a diameter of approximately 65 feet. The total clarifer capacity is approximately 10.2 MGD. Defiance WWTP operators will perform a daily settleometer test. The skimmer in the final clarifiers will capture grease and other floatables. This captured debris flows to the Maumee lift station. The Defiance WWTP operators remove floatables from the Maumee wet well 2 to 3 times a year by vactor truck.

Ultraviolet Disinfection

The clarifier effluent then flows by gravity through the old chlorine contact tank and into the ultraviolet (UV) disinfection system. The UV disinfection system is operated during the State of Ohio recreational season (from May 1st to October 31st). The UV disinfection system has 2 channels that each have a capacity of 7 MGD (with a total UV disinfection capacity of 14 MGD); each channel has approximately 468 bulbs. An ultraviolet turbidity (UVT) meter within the system can turn off and on bulbs depending on the UVT meters reading. Mr. Connor indicated that the Defiance WWTP will switch channels every 14 days under normal WWTP operation. The UV bulbs last approximately 15,000 to 20,000 hours; the WWTP keeps an inventory of replacements bulbs. This UV treatment system does not have direct contact between the UV bulbs and the wastewater, instead wastewater will flow into circular tubes that are separated from the UV bulbs.

WWTP Effluent Receiving Waterbody

After the UV disinfection system, the treated wastewater flows through a Parshall flume that is used to measure the final WWTP effluent flow. The transductor that calculates the height through the flume is calibrated each year. Outfall 001 in the NPDES permit is also at this location. The treated WWTP effluent then discharges to the Maumee River by gravity. This pipe may be submerged at high river stage, but the WWTP has never been flooded by river water. The Maumee River eventually flows into Lake Erie at Toledo, Ohio. The Maumee River

is impaired for the following pollutants: Pathogens (*Escherichia coli)*, Ammonia-Nitrogen, Phosphorus, and Polychlorinated Biphenyls (PCBs). !

Activated Sludge Processing

This WWTP also includes RAS piping that connects RAS sludge from the final clarifier to the aeration basin and WAS from the final clarifier to the primary clarifiers and then to the anaerobic sludge digestors. The Defiance WWTP utilizes two anaerobic sludge digestors that were built in the 1950s and are 50-feet in diameter. Mr. Lehnert told EPA during the inspection that the tanks are operated in parallel and there is no water decanted within the digestors. After approximately 60 days within the digestors, the sludge is sent to four sludge holding lagoons, located on the north side of the WWTP. Sludge is held in the lagoons until it can be land applied. Each sludge lagoon can hold about 900,000 gallons of sludge. Defiance WWTP representatives indicated during the inspection that the WWTP would land apply sludge volume equal to approximately 4-5 sludge lagoons each year. Decant from the sludge lagoon flows by gravity to the Maumee pump station and then back to the Defiance WWTP for treatment.

NPDES Permit

Since the WWTP is located in Ohio, the State of Ohio is the delegated NPDES permitting authority for this facility. The Ohio Environmental Protection Agency (Ohio EPA) issued the Defiance WWTP's current NPDES permit (Permit No. OH0024899) on May 14, 2015. This NPDES permit became effective on June 1, 2015 and the permit expires on May 31, 2020. The permit is currently administratively extended. The Defiance Water Pollution Control is listed as the permittee. The NPDES permit identifies one wastewater discharge location (Outfall 001) for the Defiance WWTP, discharging to the Maumee River. Outfall 001 has the effluent limitations for the following pollutant parameters: D.O., *Escherichia coli (E. coli)*, total residual chlorine (TRC), and pH, and requires sampling/reporting for 14 other pollutant parameters. The Defiance WWTP also has three internal outfalls: Outfalls 602, 050, and 051. Outfall 602 is located upstream of the UV disinfection facility where the effluent from the clarifiers combines. Outfall 602 has effluent limitations for TSS, Oil and Grease, Ammonia-Nitrogen, Total Phosphorus, Total Low-Level Mercury, and $CBOD_5$, and requires sampling/reporting for 13 other pollutant parameters. Outfalls 050 and 051 are considered bypass outfalls. Outfall 050 is the bypass of the secondary treatment, which is permitted to occur when the flow to the WWTP is above 6.53 MGD. Outfall 051 is a bypass of both the primary and secondary treatment. Use of both Outfall 050 and 051 is prohibited by the NPDES permit except under emergency conditions as authorized by federal regulation at 40 CFR Part 122.41(m) and Part III, Item 11, General Conditions, of the permit. Mr. Lehnert indicated to EPA during the inspection that Outfall 051 is gate that has not been used in the last five years and is currently not wired to be utilized. Therefore, EPA learned that the use of Outfall 051 would have to be done manually without the assistance of the WWTP's SCADA system. The permit requires the amount of discharge and the time utilized to be reported for any bypass from either of these two outfalls, as well as requiring sampling for TSS and $CBOD_5$ during the discharge. The NPDES permit also includes:

- Outfall 002 includes monitoring requirements for combined sewer overflows (CSOs) located within the City of Defiance.
- Outfall 007 has more specific monitoring/sampling requirements for 5 CSOs, including a requirement to sample the CSOs for TSS and $CBOD_5$ twice a year during CSO events.
- Outfall 300 includes the requirements for sanitary sewer overflow (SSO) monitoring and reporting to the Ohio EPA.
- Outfall 581 includes the sludge monitoring requirements and disposal requirements if the sludge is land applied.
- Outfall 586 contains the sludge monitoring requirements and disposal requirements if the sludge is sent to a landfill.
- Outfall 601 includes the influent wastewater monitoring requirements.
- Outfalls 801 and 901 include the in-stream monitoring requirements in the Maumee River, both upstream and downstream of the WWTP's Outfall 001 discharge.
- Part 1.C of the NPDES permit required the Defiance WWTP to develop and submit to the Ohio EPA a Dissolved Metal Translator Study. EPA learned from the Defiance WWTP representatives during the inspection that this was due to potential metal effluent limitations that were going to be added to the WWTP NPDES permit. EPA's understanding from the inspection is that this report has been developed and submitted to Ohio EPA.
- Part II of the NPDES permit includes other permit requirements related to: WWTP operator requirements, WWTP staffing requirements, pretreatment, additional SSO reporting, CSO information/requirements (including the 9 minimum controls) and additional sewage sludge requirements

A copy of the NPDES permit applicable to this WWTP is included in this inspection report as Attachment B.

Other Background Information

- According to the EPA ECHO website, the last Ohio EPA inspection of the Defiance WWTP occurred on October 22, 2018. The Ohio EPA also conducted a pretreatment inspection in 2021 and a CSO inspection in 2022.
- The City of Defiance is in current discussions with the Ohio EPA on a plan to address its CSO discharges.
- The City of Defiance submitted an NPDES permit application in 2020 to Ohio EPA; since then, the Defiance WWTP representatives indicated to EPA that they have not heard back from Ohio EPA on the status of its NPDES permit.

SITE INSPECTION

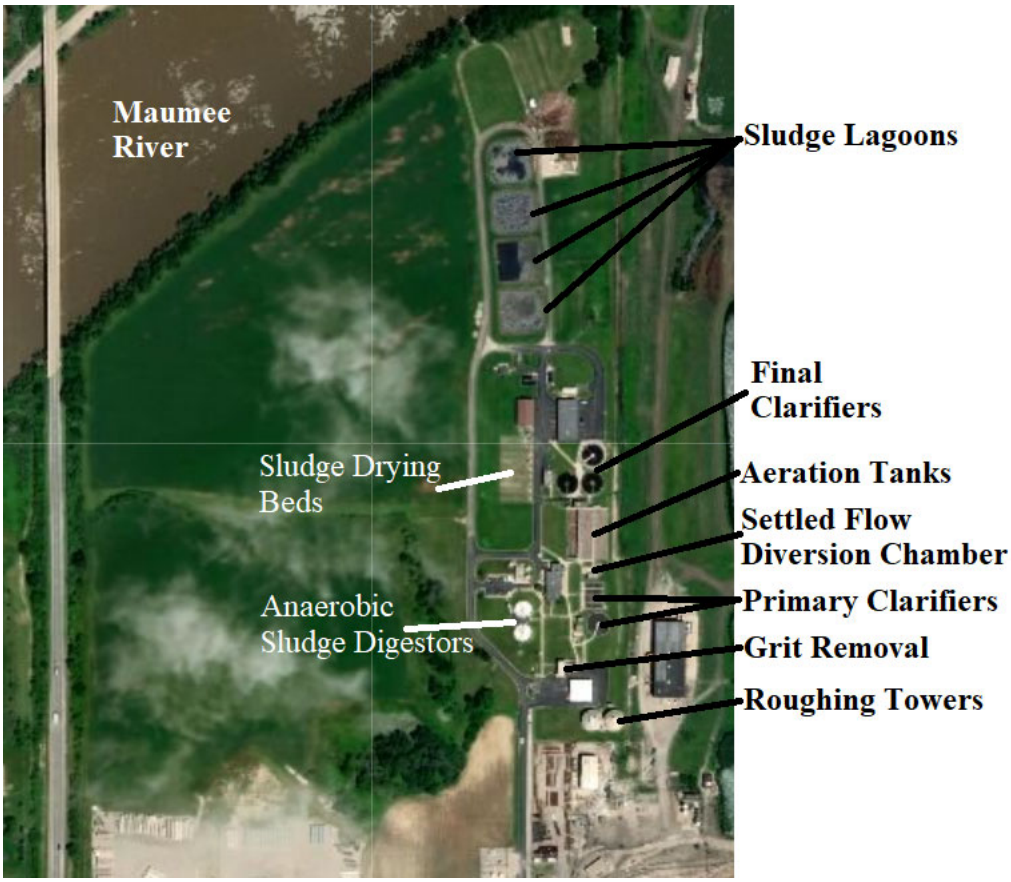


Exhibit 2: Defiance WWTP Source: EPA WATERS Geo Viewer (2018)

Initial Inspection Opening Discussion

The EPA team, consisting of Mr. Middleton and Ms. Zale, arrived at the Defiance WWTP at 8:30 am on Wednesday, November 30, 2022. The weather was cloudy and windy with a temperature of approximately 35° Fahrenheit. EPA parked near the Defiance WWTP administrative building and proceeded to enter the administrative building. EPA was met inside by Mr. Lehnert, Mr. Conner, and Mr. O'Donnell in the hallway of the administrative building and then proceeded to a nearby conference room. EPA then presented inspector credentials to the three Defiance WWTP representatives and introduced themselves. Mr. Middleton then began the opening conference. Mr. Middleton explained to the Defiance WWTP representatives that the facility could claim that information obtained during this inspection (including photographs and information received from the WWTP) was confidential business information if the photographs/information contained trade secrets, etc. During the inspection, Defiance WWTP representatives did not identify any information provided to EPA or pictures taken by EPA as confidential business information. Then, after explaining the purpose of the inspection, EPA and the Defiance WWTP Representatives agreed to have a detailed discussion concerning the Defiance WWTP first and do a walk-through of the WWTP.

DETAILED DEFIANCE WWTP DISCUSSION

EPA initially asked the Defiance WWTP representatives about the history and background of WWTP. The responses to these questions are summarized in the WWTP Background section above.

WWTP NPDES Permit Compliance Discussion

E. coli	*E. coli*	Total Phosph.	Total Phosph.	Ammonia -Nitogen	Ammonia -Nitogen
Monthly Geo-Mean	Weekly Geo-Mean	Monthly Avg.	Weekly Max	Monthly Avg.	Weekly Max
3	7	3	7	16	18
$CBOD_5$	$CBOD_5$	D.O	TRC	TSS	
Monthly Avg.	Weekly Max	Daily Min	Daily Max	Daily Max	
1	2	7	3	1	

Exhibit 3: Defiance WWTP Last Five Years of NPDES Permit Exceedances Source: EPA's ECHO Database

Defiance WWTP Filamentous Event

EPA then began a discussion regarding the WWTP's NPDES permit compliance by asking the WWTP representatives about a recent WWTP upset. Mr. Lehnert informed EPA that a filamentous bulking event occurred at the Defiance WWTP from approximately July 2022 to late October 2022. During this time, the Defiance WWTP had 10 Ammonia-Nitrogen NPDES permit effluent limit exceedances, 3 $CBOD_5$ NPDES permit effluent limit exceedances, 3 D.O. NPDES permit effluent limit exceedances, 2 Phosphorus NPDES permit effluent limit exceedances, 1 TSS NPDES permit effluent limit exceedance, and 2 *E. coli* NPDES permit effluent limit exceedance. Defiance WWTP representatives indicated to EPA that they knew they were having issues with the operation of the WWTP during this event and they reached out to Ohio EPA for assistance. Ohio EPA visited the WWTP in July 2022 and identified the issue as filamentous bulking. Mr. Lehnert also told EPA that the filamentous bacteria was analyzed microscopically and determine that the sample was consistent with filamentous bacteria that would typically develop if there were septic conditions within the wastewater and not other conditions, such as toxic wastewater loading. Defiance WWTP representatives were still unsure what the exact cause of the filamentous at the WWTP was; Mr. Lehnert indicated to EPA that it could have been long wastewater detention times in the sewer collection system during dry weather and/or the Defiance WWTP having too much treatment capacity during long periods of dry weather wastewater loading. Mr. Lehnert recalled during the inspection that a filamentous bulking event had also occurred approximately 5-6 years ago at the Defiance WWTP.

According to the EPA ECHO website, the Defiance WWTP reported numerous Ammonia-Nitrogen exceedances in June 2017.

In order to address the filamentous issues and to address the NPDES permit effluent limit exceedances occuring at this time at the WWTP, Mr. Lehnert said that the WWTP tried adding nitrobac (a blend of nitrifying bacteria) to the aeration tanks in both dry and liquid form. When the addition of the nitrobac did not improve wastewater treatment performance, the WWTP began adding 6-12 pounds of lime to the final clarifiers every day. The Defiance WWTP also began monitoring alkalinity daily within the aeration tanks per Ohio EPA suggestion. Currently, Mr. Lehnert said the alkalinity target concentration in the WWTP's aeration basins was 200 mg/L; if the concentration fell below 100 mg/L, the WWTP operators would increase the addition of sodium aluminate until the target concentration of 200 mg/L was met. In the last week of October, the WWTP operators began to notice improvement in the WWTP's performance and the filamentous bacteria began to dissipate.

Mr. Conner told EPA that he undertook an investigation during the filamentous bulking incident into the industrial users that contribute wastewater to the Defiance WWTP. Through that investigation, Mr. Conner did not identify any slug loads or any other wastewater discharges from industrial users that would cause the filamentous issue at the WWTP. During this portion of the inspection, EPA discussed the Defiance WWTP pretreatment program with the Defiance WWTP representatives. EPA learned that there are 10 significant industrial users (SIUs), with nine industrial users included on the Defiance WWTP TSS and chemical oxygen demand (COD) surcharge list (a monetary surcharge can be applied to these facilities based on high TSS or COD sampling). Please note that EPA inspectors did not conduct a full-scale pretreatment compliance inspection or audit of the Defiance WWTP pretreatment program; instead, information was obtained for the purposes of understanding the filamentous bulking issues at the WWTP in 2022.

Other Ammonia-Nitrogen Exceedances

EPA asked the WWTP representatives about the other Ammonia-Nitrogen NPDES permit effluent limit exceedances that had occurred in the last five years. Defiance WWTP representatives noted that these were typically concentration exceedances and not loading exceedances and that they were still working through what some of the causes could be. Mr. Lehnert mentioned to EPA that there had been significant improvements to the Defiance sewer collection system which would lower the wastewater flow to the WWTP and these could cause issues for Ammonia-Nitrogen treatment during dry weather conditions.

Other NPDES Permit Effluent Exceedances

EPA also asked the Defiance WWTP representatives about other exceedances that had occurred in the past five years at the WWTP. Regarding the Phosphorus NPDES permit effluent limit exceedances that occurred in August 2021, Mr. Lehnert was not sure why the exceedances had occurred. If Phosphorus treatment issues are identified, the Defiance WWTP operators will increase the sodium aluminate feed. During the inspection, EPA learned that the majority of the

E. coli NPDES permit effluent limit exceedances in the last five years had occurred before the implementation of the UV disinfection system at the WWTP in June 2020.

Compliance Sampling and Sample Analysis

During the inspection, Mr. Lehnert told EPA that the Defiance WWTP typically conducts NPDES permit compliance sampling on Wednesday, Thursday, and Friday, although there is no set schedule. The WWTP operators are assigned to different sections of the WWTP within a rotation at the beginning of the workday. If there is compliance sampling necessary in that section of the WWTP, the assigned WWTP operator will gather the compliance sample(s). The compliance sampling schedule is communicated to the WWTP operators during a daily morning meeting. D.O., pH, and TRC compliance sampling require multiple grab samples daily. Mr. Lehnert indicated to EPA that when multiple samples are required, the sampler will take three samples, 2 hours apart. Mr. Lehnert estimated that a WWTP operator will take the samples about 90% of the time, with the WWTP laboratory chemist, Ms. Mack, performing the sampling the other 10%. Ms. Heck fills out the DMR; Mr. Conner will review the DMR; and Mr. Lehnert will review and then submit the DMR to the Ohio EPA electronically.

The laboratory at the Defiance WWTP performs the compliance sample analysis except for toxicity, total metals, total dissolved solids, and total Phosphorus. Alloway laboratory in Lima, Ohio will perform the analysis for these required NPDES compliance parameters. Mr. Lehnert said that the Alloway laboratory is about 45 minutes away and will pick up the samples on Tuesdays. EPA obtained a chain of custody for a total Phosphorus sample conducted on November 14, 2022. This example indicated that the total Phosphorus sample was picked up by Alloway approximately 28 hours after obtaining the compliance sample. Ms. Mack will conduct the compliance sample analysis done at the Defiance WWTP laboratory. If Ms. Mack is unavailable, Ms. Heck or Mr. Conner will perform the analysis.

EPA and Defiance WWTP representatives then discussed missing DMR reporting, as indicated by the EPA ECHO website. Regarding the missing TRC compliance sampling results (labeled in the EPA ECHO as an invalid test) from May 2021 to August 2022, Defiance WWTP representatives thought that these sample results were labeled as unreported because the Defiance WWTP reported no discharge on its DMRs for this parameter, due to the use of UV disinfection instead of chlorine. The EPA ECHO website also indicated that $CBOD_5$ compliance sampling results for the monthly and weekly testing were missing for June 2021. Defiance WWTP representatives indicated to EPA that the $CBOD_5$ holding time may have been exceeded and therefore the results of this month were not reported (this was indicated on the DMR). In addition, Defiance WWTP representatives were unsure why the Outfall 801 *E. coli* upstream sampling results were missing from the May 2022 and July 2022 DMRs.

Sewer Collection System and Sanitary Sewer Overflows

Next the Defiance WWTP representatives and EPA discussed the sewer collection system tributary to the WWTP. Some of this information is summarized previously in this report.

The Defiance sewer collection system maintenance staff utilizes an in-house vactor truck and camera truck to do sewer cleaning/maintenance. Sewer maintenance staff also has access to both paper sewer maps and Geographical Information System (GIS) electronic maps. The GIS maps are updated regularly to show when cleaning or other maintenance activities have been performed on sewerage. Mr. Lehnert informed EPA that the Defiance sewer collection system maintenance staff has a goal to clean the entire City-owned sewer system on a three-year frequency. EPA also learned during the inspection that the Defiance WWTP does not have a Capacity, Management, Operation, and Maintenance (CMOM) program, but does follow the nine minimum controls for combined sewer maintenance. Mr. Lehnert explained to EPA that the Defiance WWTP has an Asset Management Plan in place that includes the collection system, WWTP, and all equipment.

Mr. Lehnert told EPA that there were very few sanitary sewer overflows (SSOs) in the City of Defiance's sewer collection system in the last five years. According to the SSO Annual Reports and follow-up email correspondence, Defiance reported the following occurances of SSOs and water-in-basements (basement backups) on an annual basis:

Year	Occurances of SSOs	Occurances of Basement Backups (Caused by issue in City-Owned Sewerage)
2018	7[1]	1
2019	3	0
2020	3[2]	3
2021	0	1
2022	0	0
5-Year Total	**13**	**5**

EPA then discussed how the Defiance WWTP sewer collection system staff responds to a basement backup. Two of the staff members assigned will investigate each reported basement backup and check if there are any blockages/sewer issues in the relevant upstream/downstream city-owned sewerage. The Defiance WWTP representatives also said that they have not received any odor complaints attributed to the WWTP or sewer collection system from the public.

The City of Defiance also has a sewer ordinance in place for the sewer collection system. This sewer ordinance includes a fats, oils, and grease (FOG) program; Mr. Lehnert told EPA that the sewer collection maintenance staff cleans hot spots, such as sewerage near restaurants, on a more

[1] 5 of these SSOs occurred due to hydrant flushing
[2] 1 of these SSOs occurred due to hydrant flushing

frequent basis and will use the vactor truck to remove any grease build up approximately once every 2 months.

Other Information Discussed During This Portion of the Inspection:

- EPA learned from Mr. Lehnert that Defiance Water Pollution Control Division with the City of Defiance has a budget of $10-12 million and is supported by user fees.
- Sewer collection system and WWTP maintenance records are kept electronically with the SCADA system. Mr. Lehnert believed that this SCADA setup was about 10 years old.
- The Outfall 050 bypass had been utilized by the WWTP on Sunday, November 27th after it rained approximately 1.5 inches.
- A checklist is located in each area of the WWTP that describes what each operator should be doing on a daily basis. These checklists are initialed and dated each day by the assigned WWTP operators.

EPA concluded the detailed WWTP discussion at 12:55 pm and left the WWTP for lunch.

WWTP WALK-THROUGH

At approximately 1:35 pm, EPA returned from lunch and Mr. Lehnert, Mr. Connor, Mr. Middleton, and Ms. Zale began a walk-through of the Defiance WWTP, starting with the preliminary treatment. When EPA arrived at the aerated grit removal system, EPA observed a septic tank truck discharging into the south aerating grit removal basin. Photograph 3 in Attachment A shows the aerated grit removal system that removes grit from the influent wastewater. Mr. Lehnert told EPA that Defiance WWTP staff cleans the north basin every 6 months and the south basin every 3 months with a vactor truck, due to the south basin being used as the discharge point for septic tanker trucks. EPA and Defiance WWTP representatives then entered the mechanical screening building to observe the mechanical screen (Photograph 1 in Attachment A). In the mechanical screening building, Mr. Lehnert showed EPA the dumpster that the mechanical screen system empties collected sanitary debris into after screening (Photograph 2 in Attachment A) and the overflow channel to the second screen (Photograph 4 in Attachment A).

After viewing the mechanical screening system, EPA walked through the building to the north portion of the building to observe the influent composite sampler. The influent composite sampler was a Global Water WS700 sample; the original composite sampler had been replaced approximately 1-2 years ago according to Defiance WWTP representatives (Photograph 1 in Attachment A). The influent composite sampler is a type of sampler that can only take timed samples; Defiance WWTP representatives said that the influent composite sampler was set up to take a 100 mL sample every 15 minutes. The sampling point is located just past the mechanical screening system. EPA observed that the influent composite sampler was attached to a refrigerator where the samples were stored. A thermometer was inside the refrigerator, indicating that the temperature was approximately 40 degrees F. Defiance WWTP

representatives told EPA that this and the other thermometer used at the WWTP were calibrated annually.

Next, EPA and Defiance WWTP representatives walked outside to the north to the primary clarifiers. EPA first observed the circular primary tank or primary tank #5 (Photograph 6 in Attachment A) and the waste activated sludge from the final clarifiers entering the circular primary clarifier (Photograph 6 in Attachment A). Mr. Lehnert told EPA that the sludge depth in the secondary clarifiers is controlled automatically by the settings in the Defiance WWTP's SCADA system; however, sludge can be manually pumped to the primary tanks as needed. EPA and Defiance WWTP representatives then walked to the square primary tanks or primary tanks #1 through #4 (Photograph 8 in Attachment A). EPA learned from Mr. Lehnert that primary tank #1 was offline due to a mechanical issue. This primary tank had been down since August 2022 and had not been put back online because the Defiance WWTP was waiting for a part to fix the tank. Besides the inoperable primary tank #1, EPA observed no other abnormalities regarding the operation of the primary tanks.

EPA and Defiance WWTP representatives then continued walking south to the SFDC. Before reaching the SFDC (Photograph 28 in Attachment A), EPA observed in the distance the Defiance WWTP's Roughing Towers (Photograph 10 in Attachment A). As previously mentioned, the Roughing Towers have been out of service since 2008. EPA observed the different components of the SFDC, including the weir configuration that at a certain height will create a discharge through Outfall 050 (Photograph 27 in Attachment A), sodium aluminate, and return activated sludge addition location (Photograph 11 in Attachment A). EPA and Defiance WWTP staff then entered a building near the SFDC. Inside this building, EPA observed the rabbit food (used for carbon supplementation for aeration tanks) storage location (Photograph 13 in Attachment A). On this day, Mr. Conner indicated to EPA that the WWTP had received enough loading from septic haulers and did not need any rabbit food added to the aeration basins.

Then EPA and Defiance WWTP representatives walked north to the aeration basins. The Defiance WWTP utilizes three similar rectangular aeration basins. Photograph 15 in Attachment A shows the middle aeration tank (aeration tank #2). Mr. Lehnert explained to EPA that there are more fine bubble diffusors located on the front end of the aeration tanks, which creates more aeration in this portion of the aeration tank than in the middle or the end of the aeration basin. EPA observed this visually at the aeration tanks, with evidence of more aeration bubbles on the south end of the aeration tanks than the north end. The WWTP has D.O. meters at the end of the aeration tanks on the north end of the tanks; aeration tank #1 D.O. meter had a reading of 5.0 mg/L at the time of the inspection, aeration tank #2 D.O. meter had a reading of 3.5 mg/L at the time of the inspection, and aeration tank #3 D.O. meter had a reading of 2.1 mg/L at the time of the inspection.

After observing the aeration tanks, EPA and Defiance WWTP representatives then walked through a building in between the aeration tanks and the final clarifiers. In this building EPA

observed the composite sampler used to take composite samples at Outfall 602 (Photograph 17 in Attachment A). The composite sampler used was an American Sigma I600. Defiance WWTP representatives explained to EPA that this composite sampler was set up to take timed samples. Defiance WWTP representatives also indicated to EPA that that this composite sampler was set up to take 8, 25 mL samples every 30 minutes. Therefore, a regular compliance sample event would take a total of 3.5 hours to complete. EPA also observed that the temperature of the refrigerated portion of the composite sampler was approximately 44 degrees Fahrenheit.

EPA and Defiance WWTP representatives then walked out of the building to the final clarifiers. At the final clarifiers, EPA observed corn stalks floating in each of the three clarifiers; Defiance WWTP representatives acknowledged that the corn stalks had blown over from a nearby farm field, via the wind. EPA also observed a slight sheen in the final clarifier #1. Photographs 19 and 20 in Attachment A do not capture this sheen, due to glare from the sun. EPA did not observe a sheen in the discharge trough from final clarifier #1. Defiance WWTP representatives then showed EPA the Outfall 602 sampling point (Photograph 21 in Attachment A).

Next EPA and Defiance WWTP representatives walked through two onsite maintenance buildings. As EPA and Defiance WWTP representatives walked to the maintenance buildings, EPA observed the sludge drying beds (Photograph 22 in Attachment A). Mr. Lehnert noted that some of the large white bags in the sludge drying area were old sludge that the WWTP was waiting to dispose of. EPA and Defiance WWTP representatives first walked through the east maintenance building. Here EPA observed where the WWTP stores its vactor truck, camera truck, and other sewer collection system maintenance vehicles. EPA also walked through the office where the sewer maintenance staff has its daily meetings and where sewer collection system maps are kept. Next, EPA and Defiance WWTP representatives walked to the west maintenance building. Mr. Lehnert showed EPA the Defiance WWTP inventory of spare parts, which include replacement parts for each of the lift stations in the sewer collection system and different sized sewer conveyance pipes. EPA then observed the portable generators storage area in this maintenance building. Mr. Lehnert told EPA that the Defiance WWTP does not have backup generation but does have two separate power sources. Mr. Lehnert indicated to EPA that there had not been power outages issues at the WWTP since he has been working at the Defiance WWTP. In the sewer collection system, two lift stations (Karnes and Elliot #2) have dedicated backup power generation and one lift station (Kingsbury) has two power sources. For the other lift stations, sewer maintenance staff will use portable generators to power the lift station during power outages as necessary.

EPA and Defiance WWTP representatives then continued walking north to the sludge lagoons. Along the way, EPA observed the Parshall flume where the effluent flow from the Defiance WWTP is measured. At the time of the inspection, the instantaneous flow meter readout at the Parshall flume indicated the effluent flow was 3.76 MGD. This was slightly high due to rainfall that had occurred on Sunday, November 27th. Defiance WWTP representatives told EPA that

this and the other 10 WWTP flowmeters are calibrated annually. The wastewater flowing from the Parshall flume to the effluent discharge pipe visually appeared to be clear. Then, EPA and Defiance WWTP representatives walked to and observed the four sludge storage lagoons, located on the far north side of the Defiance WWTP. Mr. Lehnert pointed out to EPA where the sludge enters the sludge lagoon (right portion of Photograph 25 in Attachment A) and the device used to decant the sludge lagoons (left side of Photograph 24 in Attachment A). Mr. Lehnert also told EPA that the sludge lagoons are used to store sludge until it can be land applied. EPA and Defiance WWTP representatives then walked to and observed the Maumee lift station, located to the southwest of the sludge lagoons (Photograph 26 in Attachment A).

Next, EPA and Defiance WWTP representatives then walked to the UV disinfection system. When EPA and Defiance WWTP representatives entered the UV disinfection system building, EPA first observed the Outfall 001 composite sampler used for NPDES permit compliance sampling (Photograph 27 in Attachment A). The composite sampler was an American Sigma I600, which was the same sampler model used for Outfall 602. Mr. Lehnert told EPA that this composite sampler also took timed composite samples, and was set up to take 7, 25 mL samples every 30 minutes. EPA also noticed that the temperature within the refrigerated portion of the composite sampler was 50 degrees Fahrenheit. Then, EPA and Defiance WWTP representatives walked into the UV disinfection system area. Defiance WWTP representatives then explained how the UV disinfection system worked, including showing the turbidity meter and the circular tubes that the wastewater flows through within the UV disinfection system.

After discussing and observing the UV disinfection system, EPA walked south to the sodium aluminate storage tanks (Photograph 27 in Attachment A). The sodium aluminate is a liquid product that is stored in two storage tanks before being pumped to the addition point prior to the aeration basin. The sodium aluminate pump system is shown in Photograph 28 in Attachment A. Defiance WWTP representatives told EPA that the approximately 375 mL per minute of sodium aluminate is added on a typical basis. EPA was also told by Defiance WWTP representatives that the tanks are cleaned out every 2-3 years, to remove solids that form in the tanks.

EPA and Defiance WWTP representatives then walked north to the Defiance WWTP laboratory (Photograph 28 in Attachment A). The laboratory was empty at approximately 3:00 pm on the day of the inspection. EPA observed that the laboratory appeared to be clean and well organized. EPA and Defiance WWTP representatives then went into Ms. Heck's office. Within Ms. Heck's office were operation and maintenance manuals for the WWTP. Daily morning meetings with the other WWTP operators also occur in Ms. Heck's office. Next, EPA and Defiance WWTP representatives walked through the building to a smaller laboratory room called the operator laboratory (Photograph 30 in Attachment A). This is the location where the WWTP operators will conduct pH and D.O. analysis of the NPDES permit compliance samples. This laboratory also appeared to be clean and well organized. EPA also took a picture of the pH and D.O. laboratory bench sheets used during sample analysis (Photograph 29 in Attachment A). EPA and

Defiance WWTP representatives then went back to the administrative building. At the administrative building, Defiance WWTP representatives showed EPA the main WWTP SCADA control computer terminal. At this location, Mr. Lehnert and Mr. Conner can make adjustments to the WWTP and can check the performance of in-system lift stations. Alarms are also tracked within the SCADA system, in addition to notifications sent to Mr. Conner's phone (WWTP issues) or Mr. Lehnert's phone (sewer collection system issues). EPA also learned from Defiance WWTP that all SCADA system data is kept on the main server for 2 years and in a backup server up to 5 years.

At approximately 3:30 pm, EPA ended its walk-through of the Defiance WWTP and walked back to the administrative building conference room. EPA then continued to review documents that the Defiance WWTP representatives had available prior to the inspection. EPA confirmed that the flow meters were calibrated in 2022. EPA learned from Defiance WWTP representatives that the WWTP has a safety committee that meets every Thursday and that refresher training is provided to the WWTP operators as needed. The WWTP also has standard operating procedures (SOPs) for each WWTP maintenance activity. The main purpose of these SOPs is to identify potential safety issues when facility staff is performing certain tasks. EPA and Defiance WWTP representatives then discussed the anaerobic digestors. EPA learned from Mr. Lehnert that the sludge retention in the digestors is approximately 60 days. EPA took a picture of an anaerobic digestors design specification (Photograph 31 in Attachment A) during the review of these documents and later took a picture of the anaerobic digestors outside after the closing conference before exiting the facility (Photograph 32 in Attachment A).

Closing Conference

In the administrative building conference room, Mr. Middleton began the closing conference at approximately 3:35 pm. Mr. Lehnert, Mr. Conner, and Ms. Zale were present, with Mr. O'Donnell rejoined the group for the closing conference. First, EPA thanked the Defiance WWTP representatives for their time. EPA then discussed the next steps, including the development of the inspection report. Mr. Middleton also indicated that there may be additional documentation that EPA would request after this inspection. EPA then went over the preliminary concerns it found during its inspection. These concerns along with others are listed below. After a discussion of the preliminary concerns, Mr. Middleton ended the closing conference at approximately 3:55 pm. This inspection was complete, and EPA left the Defiance WWTP at approximately 4:05 pm.

DOCUMENTS RECEIVED DURING THE INSPECTION:

A. Copy of Alloway chain of custody record from November 14, 2022
B. List of Significant Industrial Users with users within the WWTP's surcharge program
C. Copy of Notice of Violation sent to Sensory Effects, Inc in 2021
D. Copy of most recent NPDES Permit Application, sent to Ohio EPA

DOCUMENTS RECEIVED AFTER THE INSPECTION (ALL ELECTRONIC COPIES):

A. Defiance WWTP process control sheets from January 1, 2022 to December 1, 2022
B. Defiance WWTP 2020 CSO Annual Report
C. List of City of Defiance 2018 Water in Basement Occurrences (Excel)
D. List of City of Defiance 2018 Sanitary Sewer Overflow Occurrences (Excel)
E. SSO 5-Day Follow-up Report – March 6, 2018 SSO
F. SSO 5-Day Follow-up Report – August 2, 2018 SSO
G. SSO 5-Day Follow-up Reports – October 15-17, 2018 SSOs
H. List of City of Defiance 2019 Sanitary Sewer Overflow Occurrences (Excel)
I. SSO 5-Day Follow-up Report – January 6, 2019 SSO
J. SSO 5-Day Follow-up Reports – June 28–30, 2018 SSOs
K. List of City of Defiance 2020 Water in Basement Occurrences (Excel)
L. List of City of Defiance 2020 Sanitary Sewer Overflow Occurrences (Excel)
M. SSO 5-Day Follow-up Report – June 2, 2020 SSO
N. SSO 5-Day Follow-up Report – August 17, 2020 SSO
O. SSO 5-Day Follow-up Report – November 12, 2020 SSO
P. List of City of Defiance 2021 Water in Basement Occurrences (Excel)
Q. List of City of Defiance 2021 Sanitary Sewer Overflow Occurrences (Excel)

AREAS OF CONCERN:

EPA has identified 12 areas of concern based on findings during the inspection of the Defiance WWTP and based on a post-inspection review of the information provided to EPA by WWTP representatives. An enumerated list of the areas of concern are listed below:

1. Mechanical Screening System: During the inspection, EPA was told by Defiance WWTP representatives that the screen opening on the Mechanical Screening System may be too large, allowing sanitary debris (e.g., rags and other solids) to accumulate in downstream treatment units. EPA also observed some rags within the SDFC, downstream of the screening system. Larger sized sanitary debris that makes it through the mechanical screening may have an impact to the other treatment components and could affect WWTP performance/NPDES permit compliance.

2. Filamentous Bulking Event: From approximately July 2022 through October 2022, a filamentous bacteria bulking event occurred at the Defiance WWTP, causing or contributing to 21 NPDES permit effluent limit exceedances, with 8 of those exceedances being Ammonia-Nitrogen exceedances. Although the Defiance WWTP representatives were not sure what exactly caused the filamentous bulking event at the time of the inspection, if it was caused by the septic conditions, as believed by Mr. Lehnert, it is reasonable to believe that this could occur again during dry summer weather conditions. EPA is unclear if the Defiance WWTP is developing a plan/has developed a plan or WWTP improvements in order to mitigate any future filamentous bulking events.

3. Composite Sampling: Pursuant to the Defiance WWTP NPDES permit, Outfall 001, Outfall 601, and Outfall 602 require 24-hour Composite Sampling. For Outfall 602, there are effluent limitations for the following parameters that require 24-hour Composite Sampling: TSS, Ammonia-Nitrogen, Total Phosphorus , $CBOD_5$. Part II, Section J of the Defiance WWTP's NDPES permit further defines composite sampling as "a series of grab samples collected over a 24-hour period and proportionate in volume to the sewage flow rate at the time of sampling." "Such samples shall be collected at such times and locations, and in such a fashion, as to be representative of the facility's overall performance." EPA learned during the inspection that the Defiance WWTP takes timed samples at Outfalls 001, 601, and 602. At Outfall 001, this consists of 7, 25 mL samples over 3 hours. At Outfall 602, this consists of 8, 25 mL samples over 3.5 hours. This protocol does not meet the composite sampling definition in the Defiance WWTP's NPDES permit, as referenced above.

4. Clarifier Depth: During the inspection, EPA learned that two of the older clarifiers located after the aeration basin were 9-feet deep, according to Mr. Lehnert. According to the "Recommended Standards for Wastewater Facilities, dated 2014 (also referred to more commonly as the "10-State Standards for WWTPs"), Chapter 70 (Settling), Section 72.1, the minimum side water depth of a settling tank following activated sludge process (such as the one utilized by the Defiance WWTP) is 12 feet. EPA is concerned that the Defiance WWTP's two older clarifiers do not meet 10-State Standards for WWTPs and may contribute to treatment issues. Please note that the State of Ohio is a member state within the 10-State Standard document.

5. Refrigerator Temperature for Outfall 001 and Outfall 602 Composite Samplers: During the inspection, EPA observed a temperature reading of approximately 50 degrees Fahrenheit for the collected samples in the refrigerator unit for Outfall 001 and a temperature reading of approximately 44 degrees Fahrenheit for the collected samples in the refrigerator unit for Outfall 602. Pursuant to 40 C.F.R. Part 136, some of the pollutant parameters taken for compliance sampling, including Ammonia-Nitrogen, Total Phosphorus , $CBOD_5$, and total filterable residue, must be kept at or below 6 degrees Celsius (which translates to 42.8 degrees Fahrenheit) prior to sample analysis.

6. pH Compliance Sample Analysis Procedure: 40 C.F.R. Part 136 specifies a maximum holding time for pH samples of 15 minutes or less. Defiance WWTP operators do not conduct the pH sampling in the field after the sample is taken; instead the sampler collects the sample and then takes the sample to the operator lab to be analyzed. According to the pH laboratory bench sheet (Photograph 29 in Attachment A), it does not appear that the sampling time and the analysis time is recorded. Therefore, EPA would not be able to confirm whether the maximum 15-minute holding time for the pH compliance sampling was achieved or not.

7. Dissolved Oxygen Compliance Sample Analysis Procedure. 40 C.F.R. Part 136 specifies a maximum holding time for D.O. samples of 15 minutes or less. Defiance WWTP operators do not conduct the D.O. sampling in the field after the sample is taken; instead the sampler collects the sample and then takes the sample to the operator laboratory to be analyzed. According to the D.O. laboratory bench sheet (Photograph 29 in Attachment A), it does not appear that the sampling time and the analysis time is recorded. Therefore, EPA would not be able to confirm whether the maximum 15-minute holding time for the D.O. compliance sampling was achieved or not.

8. Ammonia-Nitrogen Exceedances: In the last five years, excluding the filamentous bulking event, the Defiance WWTP has reported 24 NPDES permit exceedances related to the WWTP's ammonia-nitrogen effluent limits for Outfall 602. EPA is concerned that the Ammonia-Nitrogen exceedances have not been addressed and may continue outside of filamentous bulking issues that occurred at the Defiance WWTP from July 2022 to October 2022. Note that the Maumee River, the WWTP effluent receiving waters, is impaired for Ammonia-Nitrogen.

9. Total Phosphorus Exceedances: Defiance WWTP has reported 10 NPDES permit exceedances related to the Defiance WWTP's total Phosphorus effluent limits in the last five years. Three of these NPDES permit exceedances occurred in October and November in 2022. EPA is concerned that the lack of immediate feedback on the Phosphorus treatment at the Defiance WWTP may lead to a delayed response and additional total Phosphorus exceedances. Note that the Maumee River, the WWTP effluent receiving waters, is impaired for Phosphorus.

10. Missing DMR Parameters: Defiance WWTP has not reported certain parameters with its DMR submittals to Ohio EPA in the last five years:
    a. Within the August 2020, September 2020, October 2020, May 2021, June 2021, July 2021, August 2021, September 2021, October 2021, May 2022, June 2022, July 2022, August 2022, September 2022, October 2022 DMRs, Defiance WWTP did not report its Outfall 001 daily TRC results. This lack of TRC reporting appears to correspond to when the Defiance WWTP switched from chlorine disinfection to UV disinfection and, therefore, was not adding chlorine to its effluent to disinfect. EPA is unaware of any NPDES permit modification that would remove this reporting requirement and notes that, as of January 18, 2022, the EPA ECHO website still shows these results as missing.
    b. Within the May 2022 and July 2022 DMRs, Defiance WWTP did not report its Outfall 801 *E. coli* results. During the inspection, Defiance WWTP representatives were not sure why the results had not been reported. EPA notes that, as of January 18, 2022, the EPA ECHO website still shows these results as missing.

11. Roughing Towers Use: During the inspection, Defiance WWTP representatives informed EPA that the roughing towers have not been utilized since 2008. The non-utilization of the roughing towers meets the definition of "bypass" in the General Conditions portion of the NPDES permit (Part III.1, page 44). Part III.11 of the NPDES permit (page 49) has more requirements regarding bypassing; EPA is unaware if Ohio EPA has approved or is aware of the bypassing of this WWTP treatment component.

12. Old Sludge Stored in Sludge Drying Bed: During the walkthrough portion of the Defiance WWTP inspection, EPA observed large white bags in the sludge drying bed (Photograph 22 in Attachment A). These white bags appeared to have holes with a black/brown material potentially exposed to air/stormwater. Mr. Lehnert indicated the material in the bags was old sewage sludge. EPA is concerned that the sludge in the bags is exposed to the elements, including stormwater and pests. EPA is also concerned that the sludge drying beds are being used more for storage than their intended purpose.

LIST OF ATTACHMENTS:

A. Inspection Photograph Log
B. Defiance WWTP's NPDES Permit
C. Tabulation of the Defiance WWTP's NPDES Permit Effluent Exceedances

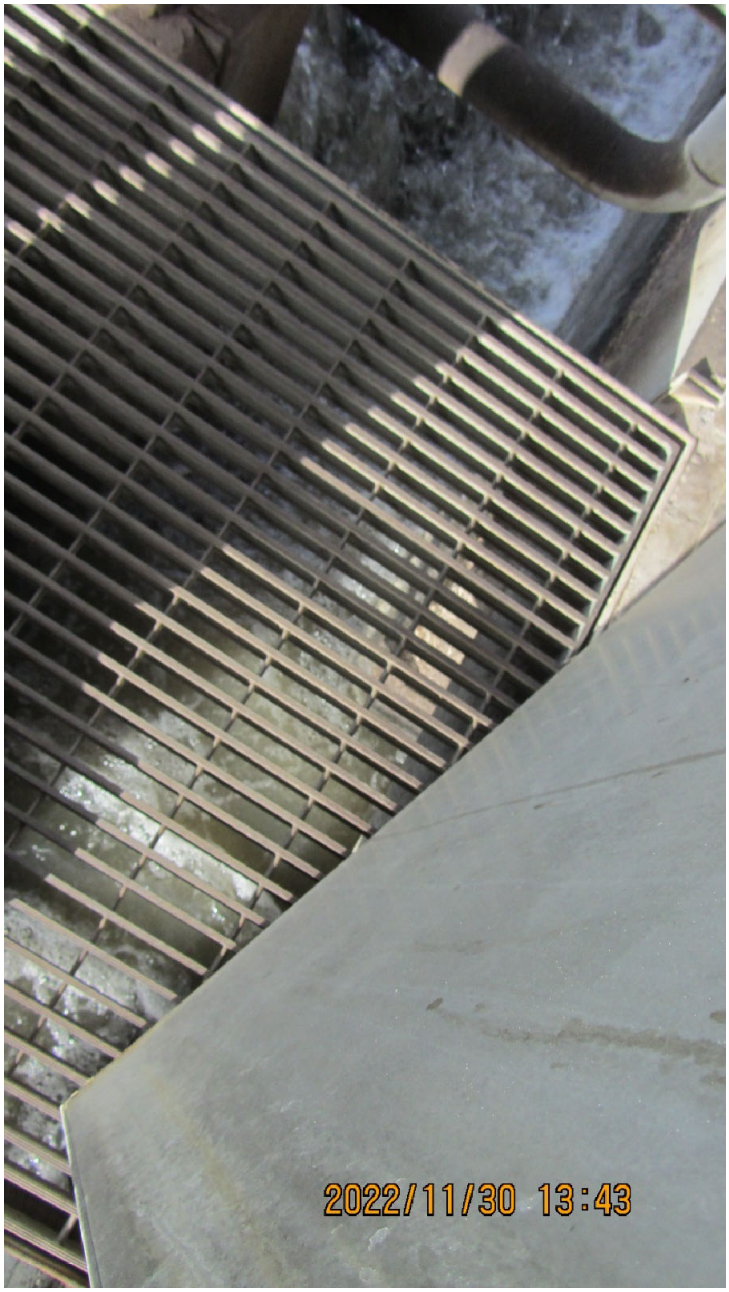
Attachment A: City of Defiance Wastewater Treatment Plant Photolog
EPA Inspection – November 30, 2022
All photos taken by Keith Middleton, Environmental Engineer, U.S. EPA
Camera: Canon PowerShot SX230 HS

1: IMG_0709
Description: Mechanical bar screen
Location: Defiance WWTP Preliminary Treatment
Camera Direction: North
Date/Time: November 30, 2022 – 1:41 pm EST

City of Defiance Wastewater Treatment Plant, Defiance, Ohio – OH0024899 – November 30, 2022

2: IMG_0710
Description: Back of the mechincal bar screen with dumpster shown
Location: Defiance WWTP Preliminary Treatment
Camera Direction: Southwest
Date/Time: November 30, 2022 – 1:42 pm EST

3: IMG_0711
Description: Aerated grit removal system
Location: Defiance WWTP Preliminary Treatment
Camera Direction: Northeast
Date/Time: November 30, 2022 – 1:43 pm EST



4: IMG_0712
Description: Location of oveflow for secondary manual bar screen (weir located on the left side of the wastewater channel)
Location: Defiance WWTP Preliminary Treatment
Camera Direction: N/A
Date/Time: November 30, 2022 – 1:43 pm EST

City of Defiance Wastewater Treatment Plant, Defiance, Ohio – OH0024899 – November 30, 2022

5: IMG_0713
Description: Influent (Outfall 601) composite sampler
Location: Defiance WWTP Preliminary Treatment Building
Camera Direction: Southeast
Date/Time: November 30, 2022 – 1:45 pm EST

6: IMG_0714
Description: Waste activated sludge discharge location to primary clarifier #5
Location: Defiance WWTP Primary Tanks
Camera Direction: N/A
Date/Time: November 30, 2022 – 1:48 pm EST

City of Defiance Wastewater Treatment Plant, Defiance, Ohio – OH0024899 – November 30, 2022

7: IMG_0715
Description: Circular primary tank #5
Location: Defiance WWTP Primary Tanks
Camera Direction: East
Date/Time: November 30, 2022 – 1:54 pm EST

8: IMG_0716
Description: Square tanks #1, #2, #3, and #4
Location: Defiance WWTP Primary Tanks
Camera Direction: Northeast
Date/Time: November 30, 2022 – 1:54 pm EST

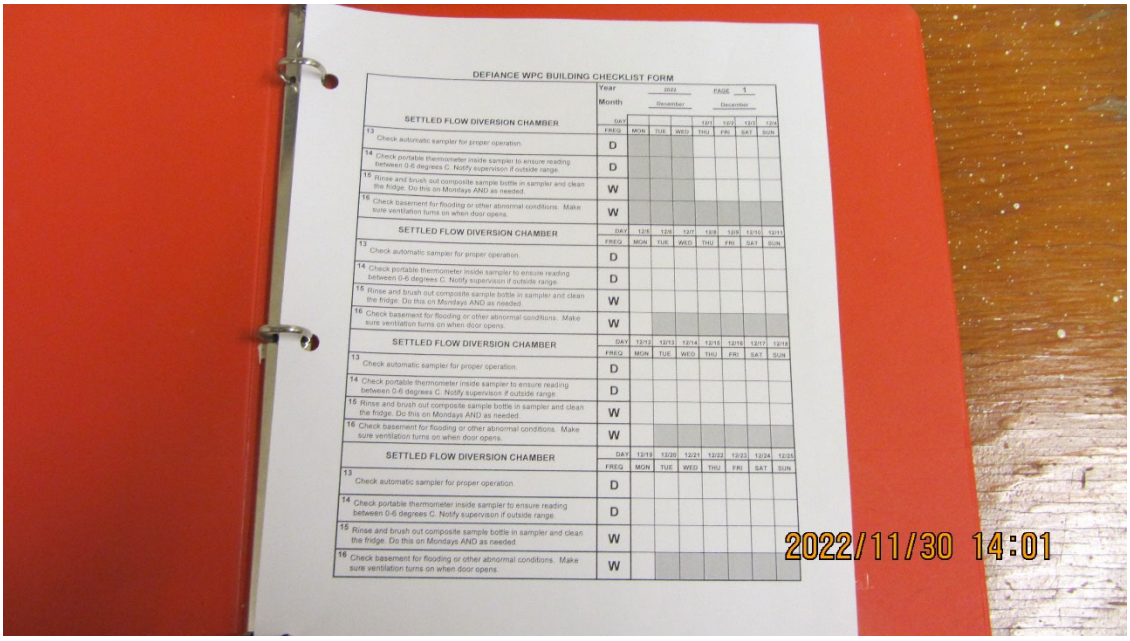
City of Defiance Wastewater Treatment Plant, Defiance, Ohio – OH0024899 – November 30, 2022

9: IMG_0717
Description: Empty primary tank #1
Location: Defiance WWTP Primary Tanks
Camera Direction: East
Date/Time: November 30, 2022 – 1:56 pm EST

10: IMG_0718
Description: Two roughing towers with primary tanks in the foreground
Location: Defiance WWTP
Camera Direction: South
Date/Time: November 30, 2022 – 1:58 pm EST

City of Defiance Wastewater Treatment Plant, Defiance, Ohio – OH0024899 – November 30, 2022

11: IMG_0719
Description: Sodium aluminate and return activated sludge (RAS) addition location in channel prior to aeration tanks
Location: Defiance WWTP Settled Flow Diversion Chamber
Camera Direction: East
Date/Time: November 30, 2022 – 1:59 pm EST



12: IMG_0720
Description: Settled flow diversion chamber WWTP operator checklist
Location: Defiance WWTP Settled Flow Diversion Chamber
Camera Direction: N/A
Date/Time: November 30, 2022 – 2:01 pm EST

City of Defiance Wastewater Treatment Plant, Defiance, Ohio – OH0024899 – November 30, 2022

13: IMG_0721
Description: Rabbit food/carbon source used to feed aeration tanks
Location: Defiance WWTP Settled Flow Diversion Chamber Building
Camera Direction: N/A
Date/Time: November 30, 2022 – 2:01 pm EST

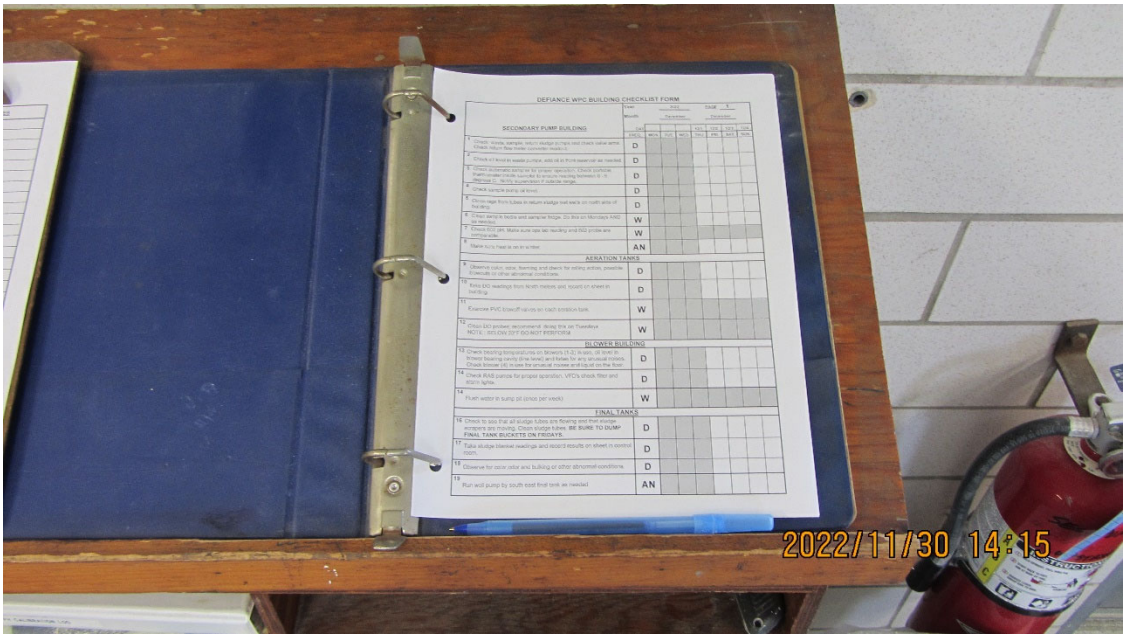
14: IMG_0722
Description: RAS and Sodium aluminate piping to addition location
Location: Defiance WWTP Settled Flow Diversion Chamber
Camera Direction: East
Date/Time: November 30, 2022 – 2:03 pm EST

City of Defiance Wastewater Treatment Plant, Defiance, Ohio – OH0024899 – November 30, 2022

15: IMG_0723
Description: Aeration tank #2
Location: Defiance WWTP Aeration Tanks
Camera Direction: South
Date/Time: November 30, 2022 – 2:06 pm EST

16: IMG_0724
Description: Final clarifiers #1, #2, and #3
Location: Defiance WWTP Final Clarifiers
Camera Direction: North
Date/Time: November 30, 2022 – 2:07 pm EST

17: IMG_0725
Description: Outfall 602 composite sampler used for NPDES compliance sampling
Location: Defiance WWTP Building in between the aeration tanks and the final clarifiers
Camera Direction: N/A
Date/Time: November 30, 2022 – 2:10 pm EST



18: IMG_0726
Description: Aeration tanks/final clarifier WWTP operator checklist
Location: Defiance WWTP Building in between the aeration tanks and the final clarifiers
Camera Direction: N/A
Date/Time: November 30, 2022 – 2:15 pm EST

City of Defiance Wastewater Treatment Plant, Defiance, Ohio – OH0024899 – November 30, 2022

19: IMG_0727
Description: Final clarifier #1
Location: Defiance WWTP Final Clarifiers
Camera Direction: Northwest
Date/Time: November 30, 2022 – 2:17 pm EST

20: IMG_0728
Description: Final clarifier #1
Location: Defiance WWTP Final Clarifiers
Camera Direction: Southwest
Date/Time: November 30, 2022 – 2:18 pm EST

City of Defiance Wastewater Treatment Plant, Defiance, Ohio – OH0024899 – November 30, 2022

21: IMG_0729
Description: Outfall 602 sampling point
Location: Defiance WWTP Final Clarifiers
Camera Direction: N/A
Date/Time: November 30, 2022 – 2:19 pm EST

22: IMG_0730
Description: Sludge drying beds
Location: Defiance WWTP Sludge Drying Beds
Camera Direction: Southwest
Date/Time: November 30, 2022 – 2:22 pm EST

City of Defiance Wastewater Treatment Plant, Defiance, Ohio – OH0024899 – November 30, 2022

23: IMG_0731
Description: Parshall flume used to calculat effluent flow
Location: Defiance WWTP
Camera Direction: North
Date/Time: November 30, 2022 – 2:36 pm EST

24: IMG_0732
Description: Sludge storage lagoon
Location: Defiance WWTP
Camera Direction: North
Date/Time: November 30, 2022 – 2:37 pm EST

City of Defiance Wastewater Treatment Plant, Defiance, Ohio – OH0024899 – November 30, 2022

25: IMG_733
Description: Sludge storage lagoon
Location: Defiance WWTP
Camera Direction: North
Date/Time: November 30, 2022 – 2:38 pm EST

26: IMG_0734
Description: Maumee lift station
Location: Defiance WWTP
Camera Direction: West
Date/Time: November 30, 2022 – 2:40 pm EST

City of Defiance Wastewater Treatment Plant, Defiance, Ohio – OH0024899 – November 30, 2022

27: IMG_0735
Description: Outfall 001 composite sampler used for NPDES compliance sampling
Location: Defiance WWTP Ultraviolet Treatment Building
Camera Direction: North
Date/Time: November 30, 2022 – 2:41 pm EST

28: IMG_0736
Description: Defiance WWTP UV treatment system
Location: Defiance WWTP UV Treatment Building
Camera Direction: Northeast
Date/Time: November 30, 2022 – 2:47 pm EST

City of Defiance Wastewater Treatment Plant, Defiance, Ohio – OH0024899 – November 30, 2022

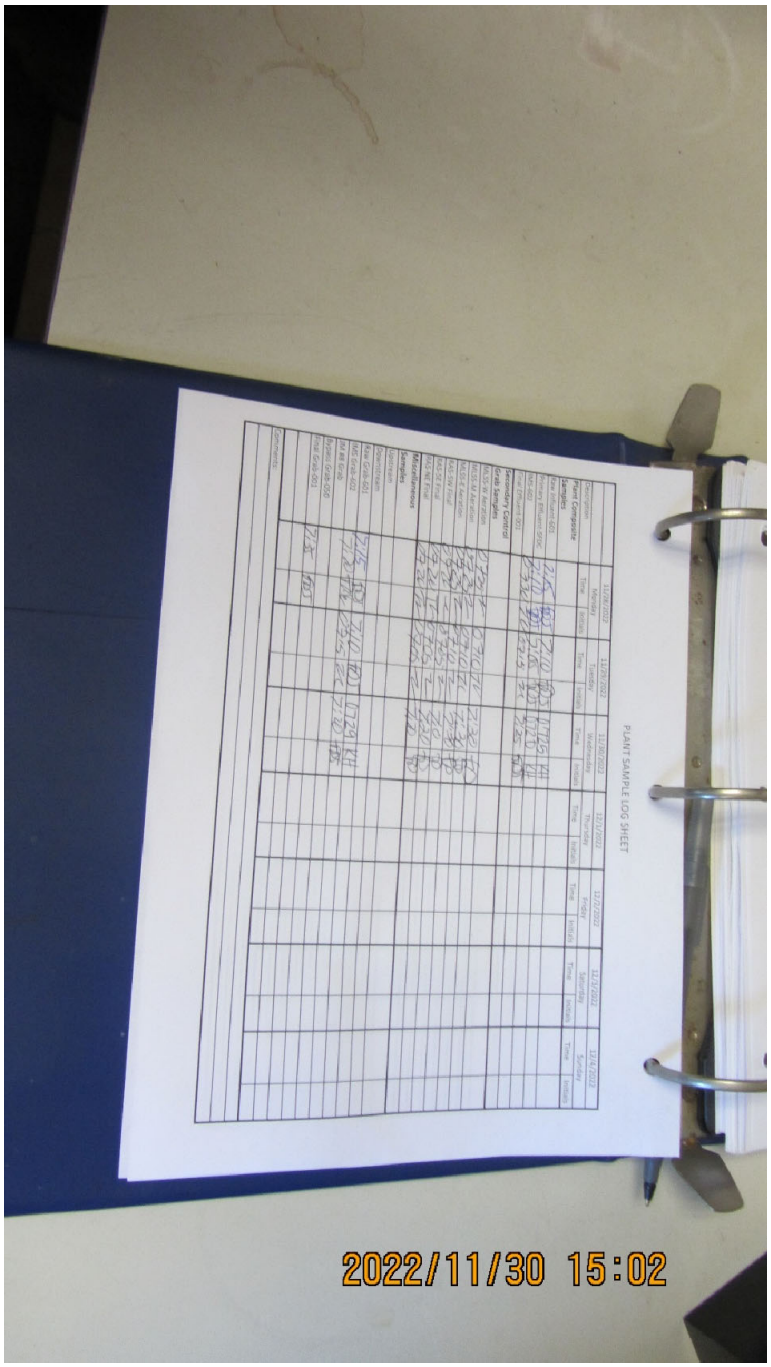
29: IMG_0737
Description: Sodium aluminate storage tanks
Location: Defiance WWTP Chemical Storage Building
Camera Direction: South
Date/Time: November 30, 2022 – 2:55 pm EST

30: IMG_0738
Description: Sodium aluminate pumping system
Location: Defiance WWTP Chemical Storage Building
Camera Direction: Northeast
Date/Time: November 30, 2022 – 2:56 pm EST

City of Defiance Wastewater Treatment Plant, Defiance, Ohio – OH0024899 – November 30, 2022

31: IMG_0739
Description: Outfall 050 bypass at the settled flow diversion chamber
Location: Defiance WWTP Settled Flow Diversion Chamber
Camera Direction: N/A
Date/Time: November 30, 2022 – 2:59 pm EST

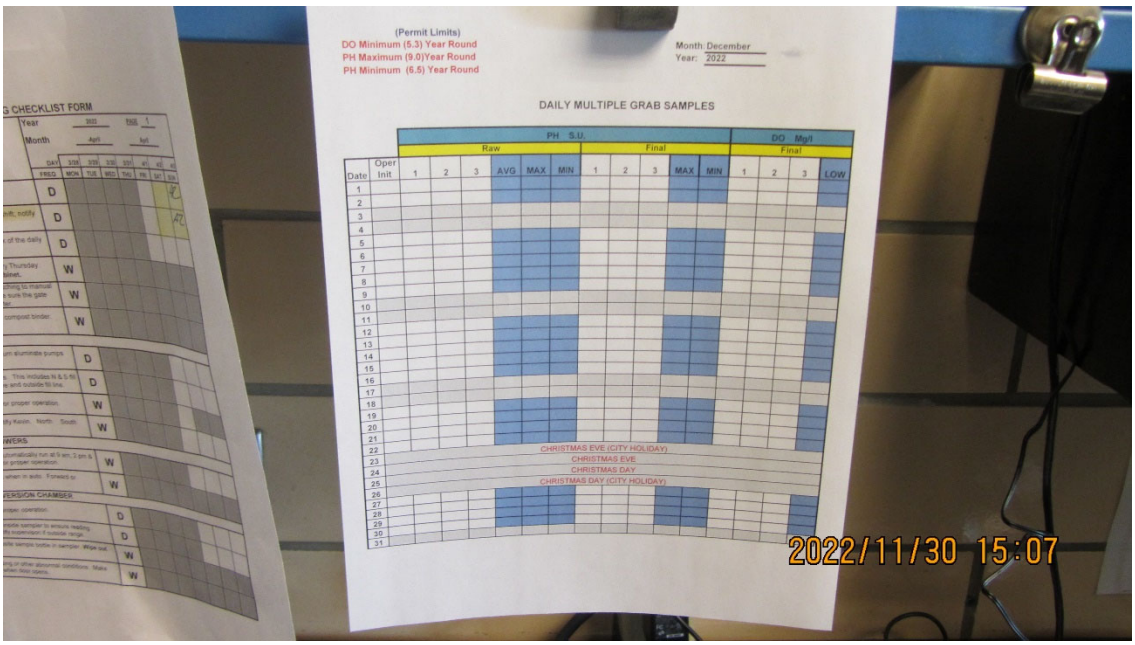
32: IMG_0740
Description: Settled flow diversion chamber
Location: Defiance WWTP Settled Flow Diversion Chamber
Camera Direction: East
Date/Time: November 30, 2022 – 3:01 pm EST



33: IMG_0741
Description: WWTP sample log sheet
Location: Defiance WWTP Main Laboratory
Camera Direction: N/A
Date/Time: November 30, 2022 – 3:02 pm EST

City of Defiance Wastewater Treatment Plant, Defiance, Ohio – OH0024899 – November 30, 2022

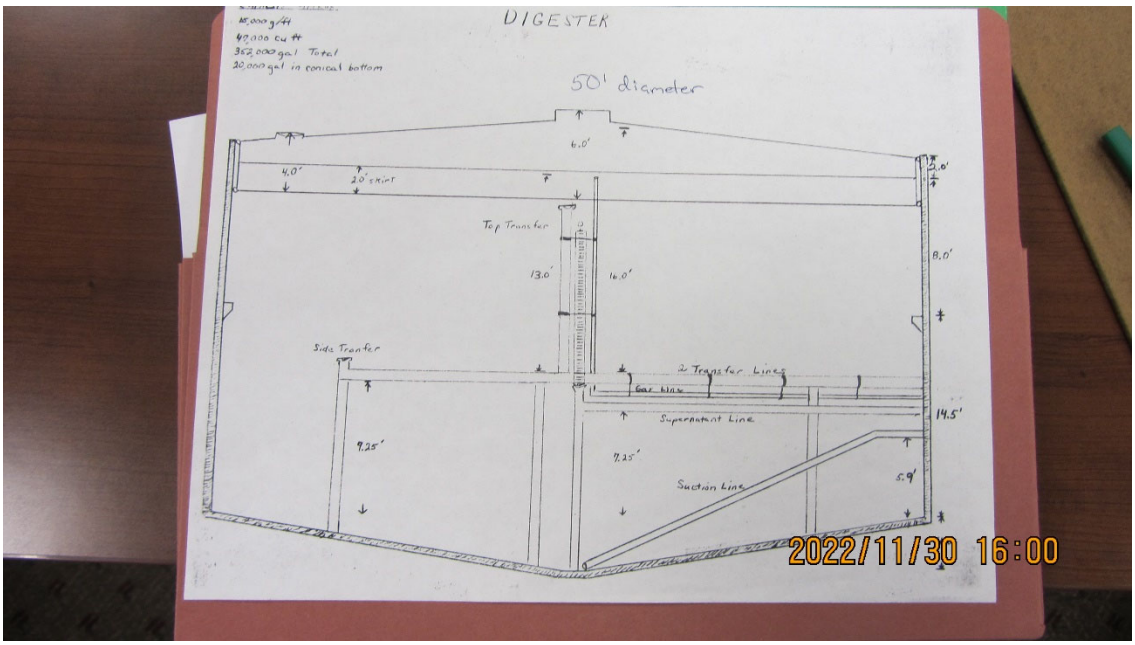
34: IMG_0742
Description: Main WWTP laboratory
Location: Defiance WWTP Main Laboratory Bulding
Camera Direction: Southwest
Date/Time: November 30, 2022 – 3:04 pm EST



35: IMG_0743
Description: WWTP sample log sheet for dissolved oxygen and pH
Location: Defiance WWTP Main Laboratory Bulding
Camera Direction: N/A
Date/Time: November 30, 2022 – 3:07 pm EST

City of Defiance Wastewater Treatment Plant, Defiance, Ohio – OH0024899 – November 30, 2022

36: IMG_0744
Description: Operator laboratory for dissolved oxygen and pH analysis
Location: Defiance WWTP Operator Laboratory
Camera Direction: East
Date/Time: November 30, 2022 – 3:08 pm EST



31: IMG_0745
Description: Anaerobic digester design specification
Location: Defiance WWTP Conference Room
Camera Direction: N/A
Date/Time: November 30, 2022 – 4:00 pm EST

City of Defiance Wastewater Treatment Plant, Defiance, Ohio – OH0024899 – November 30, 2022

32: IMG_0746
Description: Anaerobic digesters
Location: Defiance WWTP
Camera Direction: Southwest
Date/Time: November 30, 2022 – 4:02 pm EST

Application No. OH0024899

Issue Date: May 14, 2015

Effective Date: June 1, 2015

Expiration Date: May 31, 2020

Ohio Environmental Protection Agency
Authorization to Discharge Under the
National Pollutant Discharge Elimination System

In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq., hereinafter referred to as the "Act"), and the Ohio Water Pollution Control Act (Ohio Revised Code Section 6111),

Defiance Water Pollution Control

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from the Defiance Water Pollution Control located at 26273 State Route 281 East, Defiance, Ohio, Defiance County and discharging to the Maumee River in accordance with the conditions specified in Parts I, II, III, IV, V, and VI of this permit.

This permit is conditioned upon payment of applicable fees as required by Section 3745.11 of the Ohio Revised Code.

This permit and the authorization to discharge shall expire at midnight on the expiration date shown above. In order to receive authorization to discharge beyond the above date of expiration, the permittee shall submit such information and forms as are required by the Ohio EPA no later than 180 days prior to the above date of expiration.

_____
Craig W. Butler
Director

Total Pages: 77

Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outfall: 2PD00013001. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 001 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
00010 - Water Temperature - C	-	-	-	-	-	-	-	1/Day	Maximum Indicating Thermometer	All
00045 - Total Precipitation - Inches	-	-	-	-	-	-	-	1/Day	24hr Total	All
00300 - Dissolved Oxygen - mg/l	-	5.3	-	-	-	-	-	1/Day	Multiple Grab	All
00530 - Total Suspended Solids - mg/l	-	-	-	-	-	-	-	3/Week	24hr Composite	All
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	-	-	-	-	-	3/Week	24hr Composite	All
00630 - Nitrite Plus Nitrate, Total - mg/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
00665 - Phosphorus, Total (P) - mg/l	-	-	-	-	-	-	-	1/Week	24hr Composite	All
31648 - E. coli - #/100 ml	-	-	284	126	-	-	-	3/Week	Grab	Summer
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	Continuous	All
50060 - Chlorine, Total Residual - mg/l	0.038	-	-	-	-	-	-	1/Day	Multiple Grab	Summer
61425 - Acute Toxicity, Ceriodaphnia dubia - TUa	-	-	-	-	-	-	-	1/Year	24hr Composite	June
61426 - Chronic Toxicity, Ceriodaphnia dubia - TUc	-	-	-	-	-	-	-	1/Year	24hr Composite	June
61427 - Acute Toxicity, Pimephales promelas - TUa	-	-	-	-	-	-	-	1/Year	24hr Composite	June
61428 - Chronic Toxicity, Pimephales promelas - TUc	-	-	-	-	-	-	-	1/Year	24hr Composite	June
61941 - pH, Maximum - S.U.	9.0	-	-	-	-	-	-	1/Day	Multiple Grab	All
61942 - pH, Minimum - S.U.	-	6.5	-	-	-	-	-	1/Day	Multiple Grab	All
70300 - Residue, Total Filterable - mg/l	-	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
80082 - CBOD 5 day - mg/l	-	-	-	-	-	-	-	3/Week	24hr Composite	All

Notes for station 2PD00013001:

- Total suspended solids, ammonia-nitrogen, nitrate-nitrogen, phosphorus, and CBOD - Monitoring for these parameters at this station is required only on days when there is a discharge through station 2PD00013050 during the time that the discharge through station 2PD00013050 is active. On days when there is no discharge through station 2PD00013050, report "AH" with an appropriate explanation in the Remarks Section.

- Operation Classification Requirement - See Part II, Item A
- Total residual chlorine - See Part II, Item N
- Whole effluent toxicity - See Part II, Item AA

Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outfall: 2PD00013602. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Internal Monitoring Station - 602 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
00530 - Total Suspended Solids - mg/l	-	-	36.0	24.0	-	817	545	3/Week	24hr Composite	All
00552 - Oil and Grease, Hexane Extr Method - mg/l	10.0	-	-	-	-	-	-	1 / 2 Weeks	Grab	All
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	8.0	5.3	-	182	121	3/Week	24hr Composite	Summer
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	20.0	13.0	-	454	295	3/Week	24hr Composite	Winter
00620 - Nitrogen, Nitrate (NO3) - mg/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
00625 - Nitrogen Kjeldahl, Total - mg/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
00665 - Phosphorus, Total (P) - mg/l	-	-	1.5	1.0	-	34.0	22.7	1/Week	24hr Composite	All
00719 - Cyanide, Free - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
01074 - Nickel, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly
01094 - Zinc, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly
01113 - Cadmium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly
01114 - Lead, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly
01118 - Chromium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly
01119 - Copper, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly
01220 - Chromium, Dissolved Hexavalent - ug/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
39100 - Bis(2-ethylhexyl) Phthalate - ug/l	-	-	-	-	-	-	-	1/Quarter	Composite	Quarterly
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	Continuous	All
50092 - Mercury, Total (Low Level) - ng/l	1700	-	-	10.6	0.0387	-	0.00024	1/Month	Grab	All

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
70300 - Residue, Total Filterable - mg/l	-	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly
80082 - CBOD 5 day - mg/l	-	-	20.0	13.0	-	454	295	3/Week	24hr Composite	Summer
80082 - CBOD 5 day - mg/l	-	-	30.0	20.0	-	681	454	3/Week	24hr Composite	Winter

NOTES for Station Number 2PD00013602:

* Effluent loadings based on average design flow of 6.0 MGD.

- Operation Classification Requirement - See Part II, Item A
- Nickel, zinc, cadmium, lead, chromium, and copper - See Part II, Item Q
- Dissolved hexavalent chromium - See Part II, Item R
- Mercury - See Part II, Items R, AB, AC, and AD
- Free cyanide - See Part II, Items F and R
- Bis (2-ethylhexyl) phthalte - See Part II, Item Y

Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

3. During the period beginning on the effective date of the permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outfall: 2PD00013101, 2PD00013102, 2PD00013103, 2PD00013104, 2PD00013105, 2PD00013106, 2PD00013107, 2PD00013108 and 2PD00013109 . See Part II, OTHER REQUIREMENTS,
for locations of effluent sampling.

NOTES for Station Number 2PD00013101 through 2P00013109:
- These discharges are limited to storm water. See Part IV, V and VI.

Part I, B. - CSO MONITORING LIMITATIONS AND MONITORING REQUIREMENTS

1. CSO Monitoring. ***The monitoring tables for the 23 CSO sampling stations listed in Part II, Item D of this permit are identical to this one, which is for station 2PD00013002.*** During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor at Station Number 2PD00013002, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of CSO sampling.

Table - CSO Monitoring - 002 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
74062 - Overflow Occurrence - No./Month	-	-	-	-	-	-	-	1/Year	Total	January
74063 - Overflow Volume - Million Gallons	-	-	-	-	-	-	-	1/Year	Total	January

NOTES for Station Number 2PD00013002:

- The permittee is authorized to discharge from this station only during wet weather periods when the flow in the sewer system exceeds the capacity of the sewer system.

- Overflow Occurrence and Volume data that is reported for this station may be generated using the City's predictive collection system model using daily inputs of rainfall volume and duration. The total number of overflow occurrences and total overflow volume for the preceding calendar year shall be reported.

Part I, B. - CSO MONITORING LIMITATIONS AND MONITORING REQUIREMENTS

2. CSO Monitoring. ***The monitoring tables for the 5 CSO sampling stations listed in Part II, Item E of this permit are identical to this one, which is for station 2PD00013007.*** During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor at Station Number 2PD00013007, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of CSO sampling.

Table - CSO Monitoring - 007 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
00530 - Total Suspended Solids - mg/l	-	-	-	-	-	-	-	When Disch.	Grab	All
74062 - Overflow Occurrence - No./Month	-	-	-	-	-	-	-	1/Year	Total	January
74063 - Overflow Volume - Million Gallons	-	-	-	-	-	-	-	1/Year	Total	January
80082 - CBOD 5 day - mg/l	-	-	-	-	-	-	-	When Disch.	Grab	All

NOTES for Station Number 2PD00013007:

- The permittee is authorized to discharge from this station only during wet weather periods when the flow in the sewer system exceeds the capacity of the sewer system.

- CBOD and TSS shall be monitored and sampled at least twice per year during separate storm events. The presence or absence of river intrusion shall be noted in the comments section.

- Overflow Occurrence and Volume data that is reported for this station may be generated using the City's predictive collection system model using daily inputs of rainfall volume and duration. The total number of overflow occurrences and total overflow volume for the preceding calendar year shall be reported.

Part I, B. - BYPASS MONITORING LIMITATIONS AND MONITORING REQUIREMENTS

3. Bypass Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor the treatment plant's bypass when discharging, at Station Number 2PD00013050, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - Bypass Monitoring - 050 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
00051 - Bypass Occurrence - No./Day	-	-	-	-	-	-	-	When Disch.	24hr Total	All
00052 - Bypass Total Hours Per Day - Hrs/Day	-	-	-	-	-	-	-	When Disch.	24hr Total	All
00530 - Total Suspended Solids - mg/l	-	-	-	-	-	-	-	When Disch.	Grab	All
51428 - Bypass Volume - MGAL	-	-	-	-	-	-	-	When Disch.	24hr Total	All
80082 - CBOD 5 day - mg/l	-	-	-	-	-	-	-	When Disch.	Grab	All

Notes for Station Number 2PD00013050:

- A bypass through station 2PD00013050 is approved when the peak influent flow rate to the wastewater treatment plant as a result of a precipitation event exceeds 6.53 MGD. A bypass that occurs when the peak influent flow rate to the wastewater treatment plant is less than 6.53 MGD is not approved under this condition and is subject to the bypass provisions at 40 CFR 122.41(m) and Part III, Item 11, General Conditions of this permit. At times when a bypass through station 2PD00013050 is occurring, the secondary treatment unit processes shall be fully utilized. Approval of bypasses through station 2PD00013050 under this provision may be modified or terminated when: there is a substantial change in the volume or character of pollutants being introduced to the wastewater treatment plant; new monitoring information indicates that additional controls are necessary to assure attainment of water quality standards; or new monitoring information justifies the application of different permit conditions.

- Data for 24 hour total flow, bypass occurrence, and bypass duration may be estimated if a measuring device is not available.

- A Discharge Monitoring Report (DMR) for this station must be submitted every month.

- Monitoring and sampling shall be conducted and reported on each day that there is a discharge through this station.

- If there are no discharges during the entire month, select the "No Discharge" check box on the data entry form and PIN the eDMR.

- Bypass Occurrence: If a discharge from this station occurs intermittently during a day, starting and stopping several times, report "1" for that day. If a discharge from this station occurs on more than one day but is the result of a continuing precipitation event, it should be counted as one occurrence: Report "1" on the first day of the discharge.

- Treatment plant bypass is prohibited except under emergency conditions as authorized by federal regulation at 40 CFR 122.41(m) and Part III, Item 11, General Conditions, of this permit.

Part I, B. - BYPASS MONITORING LIMITATIONS AND MONITORING REQUIREMENTS

4. Bypass Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor the treatment plant's bypass when discharging, at Station Number 2PD00013051, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - Bypass Monitoring - 051 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
00051 - Bypass Occurrence - No./Day	-	-	-	-	-	-	-	When Disch.	24hr Total	All
00052 - Bypass Total Hours Per Day - Hrs/Day	-	-	-	-	-	-	-	When Disch.	24hr Total	All
00530 - Total Suspended Solids - mg/l	-	-	-	-	-	-	-	When Disch.	Grab	All
51428 - Bypass Volume - MGAL	-	-	-	-	-	-	-	When Disch.	24hr Total	All
80082 - CBOD 5 day - mg/l	-	-	-	-	-	-	-	When Disch.	Grab	All

Notes for Station Number 2PD00013051:

- Data for 24 hour total flow, bypass occurrence, and bypass duration may be estimated if a measuring device is not available.

- A Discharge Monitoring Report (DMR) for this station must be submitted every month.

- Monitoring and sampling shall be conducted and reported on each day that there is a discharge through this station.

- If there are no discharges during the entire month, select the "No Discharge" check box on the data entry form and PIN the eDMR.

- Bypass Occurrence: If a discharge from this station occurs intermittently during a day, starting and stopping several times, report "1" for that day. If a discharge from this station occurs on more than one day but is the result of a continuing precipitation event, it should be counted as one occurrence: Report "1" on the first day of the discharge.

- Treatment plant bypass is prohibited except under emergency conditions as authorized by federal regulation at 40 CFR 122.41(m) and Part III, Item 11, General Conditions, of this permit.

Part I, B. - SSO MONITORING EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

5. SSO Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor at Station Number 2PD00013300, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - SSO Monitoring - 300 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
74062 - Overflow Occurrence - No./Month	-	-	-	-	-	-	-	1/Month	Total	All

A sanitary sewer overflow is an overflow, spill, release, or diversion of wastewater from a sanitary sewer system. These overflows shall be monitored when they discharge. Only sanitary sewer overflows that enter waters of the state, either directly or through a storm sewer or other conveyance, must be reported under this monitoring station.

For the purpose of counting occurrences, each location on the sanitary sewer system where there is an overflow, spill, release, or diversion of wastewater on a given day that enters waters of the state is counted as one occurrence. For example, if on a given day overflows occur from a manhole at one location and from a damaged pipe at another location and they both enter waters of the state, record two occurrences for that day. If overflows from both locations continue on the following day, record two occurrences for the following day. At the end of the month, total the daily occurrences and report this number on Day 1 of the DMR. If there are no overflows during the entire month, report "zero" (0).

All sanitary sewer overflows are prohibited.

See Part II, Items I and H.

Part I, B. - SLUDGE MONITORING REQUIREMENTS

6. Sludge Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor the treatment works' final sludge at Station Number 2PD00013581, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sludge sampling.

Table - Sludge Monitoring - 581 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
00400 - pH - S.U.	-	-	-	-	-	-	-	1/Month	Grab	All
00611 - Ammonia (NH3) In Sludge - mg/kg	-	-	-	-	-	-	-	1/Quarter	Composite	Quarterly - Alt.
00627 - Nitrogen Kjeldahl, Total In Sludge - mg/kg	-	-	-	-	-	-	-	1/Quarter	Composite	Quarterly - Alt.
00668 - Phosphorus, Total In Sludge - mg/kg	-	-	-	-	-	-	-	1/Quarter	Composite	Quarterly - Alt.
00938 - Potassium In Sludge - mg/kg	-	-	-	-	-	-	-	1/Quarter	Composite	Quarterly - Alt.
01003 - Arsenic, Total In Sludge - mg/kg	75	-	-	-	-	-	-	1/Quarter	Composite	Quarterly - Alt.
01028 - Cadmium, Total In Sludge - mg/kg	85	-	-	-	-	-	-	1/Quarter	Composite	Quarterly - Alt.
01043 - Copper, Total In Sludge - mg/kg	4300	-	-	-	-	-	-	1/Quarter	Composite	Quarterly - Alt.
01052 - Lead, Total In Sludge - mg/kg	840	-	-	-	-	-	-	1/Quarter	Composite	Quarterly - Alt.
01068 - Nickel, Total In Sludge - mg/kg	420	-	-	-	-	-	-	1/Quarter	Composite	Quarterly - Alt.
01093 - Zinc, Total In Sludge - mg/kg	7500	-	-	-	-	-	-	1/Quarter	Composite	Quarterly - Alt.
01148 - Selenium, Total In Sludge - mg/kg	100	-	-	-	-	-	-	1/Quarter	Composite	Quarterly - Alt.
31641 - Fecal Coliform in Sludge - MPN/G	2000000	-	-	-	-	-	-	1/Quarter	Composite	Quarterly - Alt.
51129 - Sludge Fee Weight - dry tons	-	-	-	-	-	-	-	1/Quarter	Total	Quarterly - Alt.
70316 - Sludge Weight - Dry Tons	-	-	-	-	-	-	-	1/Quarter	Total	Quarterly - Alt.

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
71921 - Mercury, Total In Sludge - mg/kg	57	-	-	-	-	-	-	1/Quarter	Composite	Quarterly - Alt.
78465 - Molybdenum In Sludge - mg/kg	75	-	-	-	-	-	-	1/Quarter	Composite	Quarterly - Alt.

NOTES for Station Number 2PD00013581:

- Monitoring is required when sewage sludge is removed from the permittee's facility for application to the land. The monitoring data shall be reported on the March, June, September, and December Discharge Monitoring Report (DMR). The monitoring data can be collected at any time during the reporting period.

- Metal analysis must be completed during each reporting period whether or not sewage sludge is removed from the facility and applied to the land. Alternatively, the number of composite samples collected and reported prior to the next land application event shall be increased to account for the reporting period(s) in which land application did not occur. If all accumulated sewage sludge has been removed and hauled to a landfill, incinerated or transferred to another NPDES permit holder, then the metal analysis is not required.

- If no sewage sludge is removed from the facility during the reporting period, enter the results for the metal analysis on the DMR and enter "0" for sludge weight and sludge fee weight.

- If no sewage sludge is removed from the facility during the reporting period and no metal analysis is completed during the reporting period, select the "No Discharge" check box on the data entry form and PIN the eDMR.

- If metal analysis has not been completed previously during each reporting period: when sewage sludge is removed from the facility all metal analysis results shall be reported on the applicable DMR by entering the separate results on different days within the DMR. For example, if no sewage sludge has been removed from the facility for a full calendar year, and quarterly monitoring is required by the permit, then five (four from the previous year and one for the current monitoring period) separate composite samples of the sewage sludge are required to be collected and analyzed for metals prior to removal from the facility. The first sample result may be entered on the first day of the DMR, the second result on the second day of the DMR, and so on. A note may then be added to indicate the actual day(s) when the samples were collected.

- It is recommended that composite samples of the sewage sludge be collected and analyzed close enough to the time of land application to be reflective of the sludge's current quality, but not so close that the results of the analysis are not available prior to land applying the sludge.

- The permittee shall maintain the appropriate records on site to verify that the requirements of Pathogen Reduction and Vector Attraction Reduction have been met.

- Units of mg/kg are on a dry weight basis.

- Sludge weight is a calculated total for the year. To convert from gallons of liquid sewage sludge to dry tons of sewage sludge: dry tons= gallons x 8.34 (lbs/gallon) x 0.0005 (tons/lb) x decimal fraction total solids.

- Sludge fee weight means sludge weight, in dry U.S. tons, excluding any admixtures such as liming material or bulking agents.

- See Part II, Items T, U, V, and W.

To sample for fecal coliform, the treatment plant should collect and analyze a total of seven grab samples from each sludge storage lagoon prior to removing the sewage sludge being removed from the treatment facility for beneficial use. In order to account for process variability, each lagoon cell should be thoroughly mixed prior to taking the seven samples, otherwise the seven samples shall be taken on different days and the days shall not be consecutive. Each of the grab samples shall be analyzed independently to determine the MPN/g of fecal coliform in the individual sample. The geometric mean of those seven results shall be reported on the DMR. Each fecal coliform sample must be delivered to the analytical lab within six hours after the sample has been collected, in accordance with the requirements for Part 9221 E. or part 9222 D., "Standard Methods for the Examination of Water and Wastewater".

Part I, B. - SLUDGE MONITORING REQUIREMENTS

7. Sludge Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor the treatment works' final sludge at Station Number 2PD00013586, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sludge sampling.

Table - Sludge Monitoring - 586 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
51129 - Sludge Fee Weight - dry tons	-	-	-	-	-	-	-	1/Year	Total	December

NOTES for Station Number 2PD00013586:

- Monitoring is required when sewage sludge is removed from the permittee's facility for disposal in a mixed solid waste landfill. The total Sludge Fee Weight of sewage sludge disposed of in a mixed solid waste landfill for the entire year shall be reported on the December Discharge Monitoring Report (DMR).

- If no sewage sludge is removed from the Permittee's facility for disposal in a mixed solid waste landfill during the year, select the "No Discharge" check box on the data entry form and PIN the eDMR.

- Sludge fee weight means sludge weight, in dry U.S. tons, excluding any admixtures such as liming material or bulking agents.

- See Part II, Items T, U, V, and W.

Part I, B. - SLUDGE MONITORING REQUIREMENTS

8. Sludge Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor the treatment works' final sludge at Station Number 2PD00013588, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sludge sampling.

Table - Sludge Monitoring - 588 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
70316 - Sludge Weight - Dry Tons	-	-	-	-	-	-	-	1/Year	Total	December

NOTES for Station Number 2PD00013588:

- Monitoring is required when sewage sludge is removed from the permittee's facility for transfer to another NPDES permit holder. The total sludge weight or sludge volume transferred to another NPDES permit holder for the entire year shall be reported on the December Discharge Monitoring Report (DMR).

- If no sewage sludge is removed from the Permittee's facility for transfer to another NPDES permit holder during the year, select the "No Discharge" check box on the data entry form and PIN the eDMR.

- Sludge weight is a calculated total for the year. To convert from gallons of liquid sewage sludge to dry tons of sewage sludge: dry tons= gallons x 8.34 (lbs/gallon) x 0.0005 (tons/lb) x decimal fraction total solids.

- See Part II, Items T, U, and V.

Part I, B. - INFLUENT MONITORING REQUIREMENTS

9. Influent Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor the treatment works' influent wastewater at Station Number 2PD00013601, and report to the Ohio EPA in accordance with the following table. Samples of influent used for determination of net values or percent removal must be taken the same day as those samples of effluent used for that determination. See Part II, OTHER REQUIREMENTS, for location of influent sampling.

Table - Influent Monitoring - 601 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
00400 - pH - S.U.	-	-	-	-	-	-	-	1/Day	Grab	All
00530 - Total Suspended Solids - mg/l	-	-	-	-	-	-	-	3/Week	24hr Composite	All
00720 - Cyanide, Total - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
01074 - Nickel, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly
01094 - Zinc, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly
01113 - Cadmium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly
01114 - Lead, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly
01118 - Chromium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly
01119 - Copper, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly
01220 - Chromium, Dissolved Hexavalent - ug/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
50092 - Mercury, Total (Low Level) - ng/l	-	-	-	-	-	-	-	1/Month	Grab	All
61941 - pH, Maximum - S.U.	-	-	-	-	-	-	-	1/Day	Grab	All
61942 - pH, Minimum - S.U.	-	-	-	-	-	-	-	1/Day	Grab	All
80082 - CBOD 5 day - mg/l	-	-	-	-	-	-	-	3/Week	24hr Composite	All

NOTES for Station Number 2PD00013601:

* Nickel, zinc, cadmium, lead, chromium, copper, and mercury - See Part II, Item Q.
Dissolved hexavalent chromium, total cyanide, and mercury - See Part II, Item S.

Part I, B. - UPSTREAM MONITORING REQUIREMENTS

10. Upstream Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor the receiving stream, upstream of the point of discharge at Station Number 2PD00013801, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - Upstream Monitoring - 801 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00010 - Water Temperature - C	-	-	-	-	-	-	-	1/Month	Grab	All
00300 - Dissolved Oxygen - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
00400 - pH - S.U.	-	-	-	-	-	-	-	1/Month	Grab	All
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
00625 - Nitrogen Kjeldahl, Total - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
00630 - Nitrite Plus Nitrate, Total - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
31648 - E. coli - #/100 ml	-	-	-	-	-	-	-	1/Month	Grab	Summer
61432 - 48-Hr. Acute Toxicity Ceriodaphnia dubia - % Affected	-	-	-	-	-	-	-	1/Year	Grab	June
61435 - 96-Hr. Acute Toxicity Pimephales promela - % Affected	-	-	-	-	-	-	-	1/Year	Grab	June
61438 - 7-Day Chronic Toxicity Ceriodaphnia dubia - % Affected	-	-	-	-	-	-	-	1/Year	Grab	June
61441 - 7-Day Chronic Toxicity Pimephales promelas - % Affected	-	-	-	-	-	-	-	1/Year	Grab	June

NOTES for Station Number 2PD00013801:

- Whole effluent toxicity - See Part II, Item AA.

Part I, B. - DOWNSTREAM-FARFIELD MONITORING REQUIREMENTS

11. Downstream-Farfield Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor the receiving stream, downstream of the point of discharge, at Station Number 2PD00013901, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - Downstream-Farfield Monitoring - 901 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day					
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
00010 - Water Temperature - C	-	-	-	-	-	-	-	1/Month	Grab	All
00300 - Dissolved Oxygen - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
00400 - pH - S.U.	-	-	-	-	-	-	-	1/Month	Grab	All
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
00625 - Nitrogen Kjeldahl, Total - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
00630 - Nitrite Plus Nitrate, Total - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
00900 - Hardness, Total (CaCO3) - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
31648 - E. coli - #/100 ml	-	-	-	-	-	-	-	1/Month	Grab	Summer

NOTES for Station Number 2PD00013901:

- Water temperature, dissolved oxygen, pH, ammonia-Nitrogen, and E. coli - See Part II, Item Q.

Part I, C - Schedule of Compliance

Dissolved Metal Translator Study

The permittee shall develop a dissolved metal translator (DMT) for pollutants including but not limited to cadmium, chromium, copper, lead, nickel, selenium, and zinc at outfall 2PD00013602, the permittee shall follow the schedule presented below:

1. Not later than six months after the effective date of the permit, the permittee shall submit two copies of a study plan for determining site-specific water quality criteria based upon a dissolved metal translators for pollutants including but not limited to cadmium, chromium, copper, lead, nickel, selenium, and zinc. The study plan shall be developed consistent with the "Interim Guidance on Determination and Use of Water-Effect Ratios for Metals" (EPA-823_B_940-001; U.S. EPA, February 1994) and Ohio Administrative Code 3745-2-04(F) and associated Ohio EPA guidance for the development of dissolved metal translators.

2. Not later than 12 months after the effective date of this permit, the permittee shall begin implementation of the study plan after addressing any comments that were received from Ohio EPA.

3. Not later than 24 months after the effective date of the permit, the permittee shall submit the final report on the water-effect ratio or dissolved metal translator study.

a. The final report shall be prepared consistent with Section J of the "Interim Guidance on Determination and Use of Water-Effect Ratios for Metals" (EPA-823-B-92-001) or Ohio Administrative Code 3745-2-04(F), as appropriate.

b. If the permittee wishes to request an increase in the final effluent limits for any pollutants based upon the results of a dissolved metal translator study, an NPDES permit modification request accompanied by a completed antidegradation addendum shall accompany the final report for water-effect ratio or dissolved metal translator.

4. All submittals shall be made to Ohio EPA's Northwest District Office.

5. The DMT study outlined above may impact local limits and hence a municipal pretreatment schedule where technical justifications for various parameters, revisions to local limits, and evaluation of user limitations for mercury has been delayed. The Municipal Pretreatment Schedule shall take place upon renewal of this NPDES permit.

Part II, Other Requirements

A. Operator Certification Requirements

1. Classification

a. In accordance with Ohio Administrative Code 3745-7-04, the sewage treatment facility at this facility shall be classified as a Class III facility.

b. All sewerage (collection) systems that are tributary to this treatment works are Class II sewerage systems in accordance with paragraph (B)(1)(a) of rule 3745-7-04 of the Ohio Administrative Code.

2. Operator of Record

a. The permittee shall designate one or more operator of record to oversee the technical operation of the treatment works and sewerage (collection) system in accordance with paragraph (A)(2) of rule 3745-7-02 of the Ohio Administrative Code.

b. Each operator of record shall have a valid certification of a class equal to or greater than the classification of the treatment works as defined in Part II, Item A.1 of this NPDES permit.

c. Within three days of a change in an operator of record, the permittee shall notify the Director of the Ohio EPA of any such change on a form acceptable to Ohio EPA. The appropriate form can be found at the following website:

www.epa.ohio.gov/portals/28/documents/opcert/Operator%20of%20Record%20Notification%20Form.pdf

d. Within 60 days of the effective date of this permit, the permittee shall notify the Director of Ohio EPA of the operators of record on a form acceptable to Ohio EPA.

e. The operator of record for a class II, III, or IV treatment works or class II sewerage system may be replaced by a backup operator with a certificate one classification lower than the treatment works or sewerage system for a period of up to thirty consecutive days. The use of this provision does not require notification to the agency.

f. Upon proper justification, such as military leave or long term illness, the director may authorize the replacement of the operator of record for a class II, III, or IV treatment works or class II sewerage system by a backup operator with a certificate one classification lower than the facility for a period of greater than thirty consecutive days. Such requests shall be made in writing to the appropriate district office.

3. Minimum Staffing Requirements

a. The permittee shall ensure that the treatment works operator of record is physically present at the facility in accordance with the minimum staffing requirements per paragraph (C)(1) of rule 3745-7-04 of the Ohio Administrative Code or the requirements from an approved 3745-7-04(C) minimum staffing hour reduction plan.

b. Sewerage (collection) system Operators of Record are not required to meet minimum staffing requirements in paragraph (C)(1) of rule 3745-7-04 of the Ohio Administrative Code.

c. If Ohio EPA approves a reduction in minimum staffing requirements based upon a facility operating plan, any change in the criteria under which the operating plan was approved (such as enforcement status, history of noncompliance, or provisions included in the plan) will require that the treatment works immediately return to the minimum staffing requirements included in paragraph (C)(1) of rule 3745-7-04 of the Ohio Administrative Code.

B. Description of the location of the required sampling stations are as follows:

Sampling Station	Description of Location
2PD00013001	Final effluent after chlorine tanks and including the bypass
.	(Lat: 41N 17' 39"; Long: 84W 19' 01")
2PD00013002	Combined Sewer Overfow See Part II, Item D.
2PD00013003	Combined Sewer Overflow See Part II, Item D.
2PD00013004	Combined Sewer Overflow See Part II, Item D.
2PD00013005	Combined Sewer Overflow See Part II, Item D.
2PD00013006	Combined Sewer Overflow See Part II, Item D.
2PD00013007	Combined Sewer Overflow See Part II, Item E.
2PD00013010	Combined Sewer Overflow See Part II, Item D.
2PD00013011	Combined Sewer Overflow See Part II, Item D.
2PD00013012	Combined Sewer Overflow See Part II, Item E.
2PD00013013	Combined Sewer Overflow See Part II, Item D.
2PD00013014	Combined Sewer Overflow See Part II, Item D.
2PD00013015	Combined Sewer Overflow See Part II, Item D.
2PD00013016	Combined Sewer Overflow See Part II, Item D.
2PD00013017	Combined Sewer Overflow See Part II, Item E.
2PD00013018	Combined Sewer Overflow See Part II, Item E.
2PD00013019	Combined Sewer Overflow See Part II, Item D.
2PD00013020	Combined Sewer Overflow See Part II, Item D.

2PD00013026	Combined Sewer Overflow See Part II, Item D.
2PD00013027	Combined Sewer Overflow See Part II, Item D.
2PD00013030	Combined Sewer Overflow See Part II, Item D.
2PD00013032	Combined Sewer Overflow See Part II, Item E.
2PD00013033	Combined Sewer Overflow See Part II, Item D.
2PD00013037	Combined Sewer Overflow See Part II, Item D.
2PD00013039	Combined Sewer Overflow See Part II, Item D.
2PD00013040	Combined Sewer Overflow See Part II, Item D.
2PD00013041	Combined Sewer Overlfow See Part II, Item D.
2PD00013044	Combined Sewer Overflow See Part II, Item D.
2PD00013045	Combined Sewer Overflow See Part II, Item D.
2PD00013050	Post settled bypass
2PD00013051	Bypass prior to primary settling
2PD00013101	Storm Water Discharge - Creek west of WWTP property -
.	southwest of the digesters
.	(Lat: 41N 17' 18"; Long: 84W 19' 09")
2PD00013102	Storm Water Discharge - Creek west of WWTP Property -
.	west of the main lift station meter chamber
.	(Lat: 41N 17' 18"; Long: 84W 19' 09")
2PD00013103	Storm Water Discharge - Creek west of WWTP Property -
.	west of the administration building
.	(Lat: 41N 17' 20"; Long: 84W 19' 10")
2PD00013104	Storm Water Discharge - Maumme River - northwest of drying beds
.	(Lat: 41N 17' 27"; Long: 84W 19' 08")
2PD00013105	Storm Water Discharge - Maumee River - southwest of Lagoon 1
.	(Lat: 41N 17' 27"; Long: 84W 19' 08")
2PD00013106	Storm Water Discharge - Maumee River - north of parshall flume
.	(Lat: 41N 17' 27"; Long: 84W 19' 06")
2PD00013107	Storm Water Discharge - Maumee River - west of lagoon 3 and
.	prior to confluence with 001
.	(Lat: 41N 17' 03"; Long: 84W 19' 09")
2PD00013108	Storm Water Discharge - Swale on east side of property -
.	northeast of the setteld flow diversion chamber
.	(Lat: 41N 17' 21"; Long: 84W 19' 02")
2PD00013109	Storm Water Discharge - Swale on GM property - east of the
.	secondary aeration chambers and the final settling tanks
.	(Lat: 41N 17' 23"; Long: 84W 19' 02")
2PD00013300	System Wide Sanitary Sewer Overflows
2PD00013581	Sludge removed to land application
2PD00013586	Sludge removed to Permitted Solid Waste Landfill
2PD00013588	Sludge transferred to NPDES Permit Holder
2PD00013601	Raw influent
2PD00013602	After final settling tanks and prior to mixing with post settled bypass
2PD00013801	Upstream from station 2PD00013001
2PD00013901	Downstream from station 001

C. All parameters, except flow, need not be monitored on days when the plant is not normally staffed (Saturdays, Sundays, and Holidays). On those days, report "AN" on the monthly report form.

D. Description of the location of the required sampling stations are as follows:

Station Number	Latitude Longitude	Description Receiving Stream
2PD00013002	41 16' 22" 84 22' 30"	A-1 Sunday Street Auglaize River
2PD00013003	41 16' 25" 84 22' 18"	A-2 Lincoln Drive Augalize River
2PD00013004	41 16' 20" 84 22' 11"	A-3 Wayne Street Auglaize River
2PD00013005	41 16' 18" 84 22' 08"	A-4 Jefferson Street Auglaize River
2PD00013006	41 16' 17" 84 22' 58"	A-5 Riverside Avenue Auglaize River
2PD00013010	41 16' 43" 84 21' 20"	A-9 Summit Street (S) Auglaize River
2PD00013011	41 16' 53" 84 21' 25"	A-10 Hopkins Street Auglaize River
2PD00013013	41 17' 04" 84 21' 21"	A-12 East Second Street Auglaize River
2PD00013014	41 17' 06" 84 20' 50"	A-13 St. Paul Street Preston Run
2PD00013015	41 17' 08" 84 20' 48"	A-14 Minneapolis Street Preston Run
2PD00013016	41 17' 07" 84 20' 54"	A-15 E. Front Street Preston Run
2PD00013019	41 15' 54" 84 22' 53"	A-18 Glenwood Drive Auglaize River
2PD00013020	41 15' 49" 84 22' 58"	A-19 Huron Drive Auglaize River
2PD00013026	41 17' 18" 84 21' 46"	M-6 Perry Street Maumee River
2PD00013027	41 17' 19" 84 21' 40"	M-7 Clinton Street Maumee River
2PD00013030	41 17' 23" 84 21' 34"	NE-1 Clinton Street Maumee River
2PD00013033	41 17' 23" 84 21' 31"	NE-4 Carpenter Road Maumee River
2PD00013037	41 15' 55" 84 23' 13"	MH-720 S. Clinton St. Ditch to Auglaize
2PD00013039	41 16' 17" 84 20' 43"	MH-1115 Ayersville Ave. Preston Run
2PD00013040	41 17' 23" 84 20' 38"	MH-1423 E. River Drive Maumee River
2PD00013041	41 17' 24" 84 21' 36"	MH-1516 E. River Drive Maumee River
2PD00013044	41 17' 35" 84 21' 48"	MH-1587 Ralston Ave. Maumee River
2PD00013045	41 17' 24" 84 21' 57"	MH-1639 E. River Drive Maumee River

E. Description of the location of the required sampling stations are as follows:

Station Number	Latitude Longitude	Description Receiving Stream
2PD00013007	41 16' 28" 84 21' 51"	A-6 Riverside Avenue Auglaize River
2PD00013012	41 16' 56" 84 21' 26"	A-11 Auglaize Street Auglaize River
2PD00013017	41 17' 12" 84 21' 11"	A-16 Summit Street (N) Maumee River
2PD00013018	41 16' 00" 84 22' 50"	A-17 Bassard Drive Auglaize River
2PD00013032	41 17' 23" 84 21' 26"	NE-3 E.River Drive Maumee River

F. Currently there are two approved methods for free cyanide listed in 40 CFR 136 that have a quantification level lower than the water quality standards: ASTM D7237-10 and OIA-1677-09. The permittee shall begin using one of these approved methods as soon as possible. This permit no longer authorizes the use of method 4500 CN-I from Standard Methods for free cyanide testing. If you must use method 4500 CN-I during the transition to an approved method, report the results on your DMR and enter "Method 4500 CN-I" in the remarks section.

G. Nine Minimum Controls

The entire wastewater treatment system shall be operated and maintained so that the total loading of pollutants discharged during wet weather is minimized. To accomplish this, the permittee shall utilize the following technologies:

1) provide proper operation and maintenance for the collection system and the combined sewer overflow points;

2) provide the maximum use of the collection system for storage of wet weather flow prior to allowing overflows;

3) review and modify the pretreatment program to minimize the impact of non-domestic discharges from combined sewer overflows; or if there is no pretreatment program review and modify local programs to minimize the impact of non-domestic discharges from combined sewer overflows;

4) maximize the capabilities of the POTW to treat wet weather flows, and maximize the wet weather flow to the wastewater treatment plant within the limits of the plant's capabilities;

5) prohibit dry weather overflows;

6) control solid and floatable materials in the combined sewer overflow discharge;

7) conduct required inspection, monitoring and reporting of CSOs;

8) implement pollution prevention programs that focus on reducing the level of contaminants in CSOs; and

9) implement a public notification program for areas affected by CSOs, especially beaches and recreation areas.

H. Sanitary Sewer Overflow Reporting

A sanitary sewer overflow is an overflow, spill, release, or diversion of wastewater from a sanitary sewer system. SSOs do not include wet weather discharges from combined sewer overflows specifically listed in Part II of this NPDES permit (if any). All SSOs are prohibited.

1. Reporting for SSOs That Imminently and Substantially Endanger Human Health

a) Immediate Notification

You must notify Ohio EPA (1-800-282-9378) and the appropriate Board of Health (i.e., city or county) within 24 hours of learning of any SSO from your sewers or from your maintenance contract areas that may imminently and substantially endanger human health. The telephone report must identify the location, estimated volume and receiving water, if any, of the overflow. An SSO that may imminently and substantially endanger human health includes dry weather overflows, major line breaks, overflow events that result in fish kills or other significant harm, overflows that expose the general public to contact with raw sewage, and overflow events that occur in sensitive waters and high exposure areas such as protection areas for public drinking water intakes and waters where primary contact recreation occurs.

b) Follow-Up Written Report

Within 5 days of the time you become aware of any SSO that may imminently and substantially endanger human health, you must provide the appropriate Ohio EPA district office a written report that includes:

(i) the estimated date and time when the overflow began and stopped or will be stopped (if known);
(ii) the location of the SSO including an identification number or designation if one exists
(iii) the receiving water (if there is one);
(iv) an estimate of the volume of the SSO (if known);
(v) a description of the sewer system component from which the release occurred (e.g., manhole, constructed overflow pipe, crack in pipe);
(vi) the cause or suspected cause of the overflow;
(vii) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps; and
(viii) steps taken or planned to mitigate the impact(s) of the overflow and a schedule of major milestones for those steps.

An acceptable 5-day follow-up written report can be filled-in or downloaded from the Ohio EPA Division of Surface Water Permits Program Technical Assistance Web page at http://www.epa.ohio.gov/dsw/permits/technical_assistance.aspx.

2. Reporting for All SSOs, Including Those That Imminently and Substantially Endanger Human Health

a) Discharge Monitoring Reports (DMR)

Sanitary sewer overflows that enter waters of the state, either directly or through a storm sewer or other conveyance, shall be reported on your Discharge Monitoring Reports (DMR). You must report the system-wide number of occurrences for SSOs that enter waters of the state in accordance with the requirements for station number 300. A monitoring table for this station is included in Part I, B of this NPDES permit. For the purpose of counting occurrences, each location on the sanitary sewer system where there is an overflow, spill, release, or diversion of wastewater on a given day is counted as one occurrence. For example, if on a given day overflows occur from a manhole at one location and from a damaged pipe at another location and they both enter waters of the state, you should record two occurrences for that day. If overflows from both locations continue on the following day, you should record two occurrences for the following day. At the end of the month, total the daily occurrences from all locations on your system and report this number using reporting code 74062 (Overflow Occurrence, No./Month) on the 4500 form for station number 300.

b) Annual Report

You must prepare an annual report of all SSOs in your collection system, including those that do not enter waters of the state. The annual report must be in an acceptable format (see below) and must include:

(i) A table that lists an identification number, a location description, and the receiving water (if any) for each existing SSO. If an SSO previously included in the list has been eliminated, this shall be noted. Assign each SSO location a unique identification by numbering them consecutively, beginning with 301.

(ii) A table that lists the date that an overflow occurred, the unique ID of the overflow, the name of affected receiving waters (if any), and the estimated volume of the overflow (in millions of gallons). The annual report may summarize information regarding overflows of less than approximately 1,000 gallons.

(iii) A table that summarizes the occurrence of water in basements (WIBs) by total number and by sewershed. The report shall include a narrative analysis of WIB patterns by location, frequency and cause. Only WIBs caused by a problem in the publicly-owned collection system must be included.

Not later than March 31 of each year, you must submit one copy of the annual report for the previous calendar year to the appropriate Ohio EPA district office and one copy to: Ohio EPA; Division of Surface Water; NPDES Permit Unit; P.O. Box 1049; Columbus, OH, 43216-1049. You also must provide adequate notice to the public of the availability of the report. Adequate public notice would include: notices posted at the community administration building, the public library and the post office; a public notice in the newspaper; or a notice sent out with all sewer bills.

An acceptable annual SSO report can be filled-in or downloaded from the Ohio EPA Division of Surface Water Permits Program Technical Assistance Web page at http://www.epa.ohio.gov/dsw/permits/technical_assistance.aspx.

I. The permittee shall maintain in good working order and operate as efficiently as possible the "treatment works" and "sewerage system" as defined in ORC 6111.01 to achieve compliance with the terms and conditions of this permit and to prevent discharges to the waters of the state, surface of the ground, basements, homes, buildings, etc.

J. Composite samples shall be comprised of a series of grab samples collected over a 24-hour period and proportionate in volume to the sewage flow rate at the time of sampling. Such samples shall be collected at such times and locations, and in such a fashion, as to be representative of the facility's overall performance.

K. Grab samples shall be collected at such times and locations, and in such fashion, as to be representative of the facility's performance.

L. Multiple grab samples shall be comprised of at least three grab samples collected at intervals of at least three hours during the period that the plant is staffed on each day for sampling. Samples shall be collected at such times and locations, and in such fashion, as to be representative of the facility's overall performance. The critical value shall be reported.

M. The treatment works must obtain at least 85 percent removal of carbonaceous biochemical oxygen demand (five-day) and suspended solids (see Part III, Item 1).

N. The parameters below have had effluent limitations established that are below the Ohio EPA Quantification Level (OEPA QL) for the approved analytical procedure promulgated at 40 CFR 136. OEPA QLs may be expressed as Practical Quantification Levels (PQL) or Minimum Levels (ML).

Compliance with an effluent limit that is below the OEPA QL is determined in accordance with ORC Section 6111.13 and OAC Rule 3745-33-07(C). For maximum effluent limits, any value reported below the OEPA QL shall be considered in compliance with the effluent limit. For average effluent limits, compliance shall be determined by taking the arithmetic mean of values reported for a specified averaging period, using zero (0) for any value reported at a concentration less than the OEPA QL, and comparing that mean to the appropriate average effluent limit. An arithmetic mean that is less than or equal to the average effluent limit shall be considered in compliance with that limit.

The permittee must utilize the lowest available detection method currently approved under 40 CFR Part 136 for monitoring these parameters.

REPORTING:

All analytical results, even those below the OEPA QL (listed below), shall be reported. Analytical results are to be reported as follows:

1. Results above the QL: Report the analytical result for the parameter of concern.

2. Results above the MDL, but below the QL: Report the analytical result, even though it is below the QL.

3. Results below the MDL: Analytical results below the method detection limit shall be reported as "below detection" using the reporting code "AA".

The following table of quantification levels will be used to determine compliance with NPDES permit limits:

Parameter	PQL	ML
Chlorine, tot. res.	0.050 mg/l	--

This permit may be modified, or, alternatively, revoked and reissued, to include more stringent effluent limits or conditions if information generated as a result of the conditions of this permit indicate the presence of these pollutants in the discharge at levels above the water quality based effluent limit (WQBEL).

O. POTWs that accept hazardous wastes by truck, rail, or dedicated pipeline are considered to be hazardous waste treatment, storage, and disposal facilities (TSDFs) and are subject to regulation under the Resource Conservation and Recovery Act (RCRA). Under the "permit-by-rule" regulation found at 40 CFR 270.60(c), a POTW must:

1) comply with all conditions of its NPDES permit,

2) obtain a RCRA ID number and comply with certain manifest and reporting requirements under RCRA,

3) satisfy corrective action requirements, and

4) meet all federal, state, and local pretreatment requirements.

P. Water quality based permit limitations in this permit may be revised based on updated wasteload allocations or use designation rules. This permit may be modified, or revoked and reissued, to include new water quality based effluent limits or other conditions that are necessary to comply with a revised wasteload allocation, or an approved total maximum daily loads (TMDL) report as required under Section 303 (d) of the Clean Water Act.

Q. When sampling occurs for these parameters at the following stations: 2PD00013602 and 2PD00013601, the sampling shall occur on the same day.

R. Sampling at station 2PD00013602 for these parameters shall occur one detention time (the time it takes for a volume of water to travel through the treatment plant) after sampling at station 2PD00013601 for the same parameters on the same day.

S. Sampling at station 2PD00013601 for these parameters shall occur one detention time (the time it takes for a volume of water to travel through the treatment plant) prior to sampling at station 2PD00013602 for the same parameters on the same day.

T. All disposal, use, storage, or treatment of sewage sludge by the Permittee shall comply with Chapter 6111. of the Ohio Revised Code, Chapter 3745-40 of the Ohio Administrative Code, any further requirements specified in this NPDES permit, and any other actions of the Director that pertain to the disposal, use, storage, or treatment of sewage sludge by the Permittee.

U. Sewage sludge composite samples shall consist of a minimum of six grab samples collected at such times and locations, and in such fashion, as to be representative of the facility's sewage sludge.

V. No later than January 31 of each calendar year the Permittee shall submit two (2) copies of a report summarizing the sewage sludge disposal, use, storage, or treatment activities of the Permittee during the previous calendar year. One copy of the report shall be sent to the Ohio EPA, Division of Surface Water, P.O. Box 1049, Columbus, Ohio 43216-1049, and one copy of the report shall be sent to the appropriate Ohio EPA District Office. The report shall be submitted on Ohio EPA Form 4229.

W. Each day when sewage sludge is removed from the wastewater treatment plant for use or disposal, a representative sample of sewage sludge shall be collected and analyzed for percent total solids. This value of percent total solids shall be used to calculate the total Sewage Sludge Weight (Discharge Monitoring Report code 70316) and/or total Sewage Sludge Fee Weight (Discharge Monitoring Report code 51129) removed from the treatment plant on that day. The results of the daily monitoring, and the weight calculations, shall be maintained on site for a minimum of five years. The test methodology used shall be from the latest edition, Part 2540 G of Standard Methods for the Examination of Water and Wastewater American Public Health Association, American Water Works Association, and Water Environment Federation. To convert from gallons of liquid sewage sludge to dry tons of sewage sludge: dry tons = gallons x 8.34 (lbs/gallon) x 0.0005 (tons/lb) x decimal fraction total solids.

X. Outfall Signage

The permittee shall maintain a permanent marker on the stream bank at each outfall that is regulated under this NPDES permit. If a marker does not currently exist, the permittee shall install one within 4 months of the effective date of this permit. This includes final outfalls, bypasses, and combined sewer overflows. The marker shall consist at a minimum of the name of the establishment to which the permit was issued, the Ohio EPA permit number, and the outfall number and a contact telephone number. The information shall be printed in letters not less than two inches in height. The marker shall be a minimum of 2 feet by 2 feet and shall be a minimum of 3 feet above ground level. The sign shall not be obstructed such that persons in boats or persons swimming on the river or someone fishing or walking along the shore cannot read the sign. Vegetation shall be periodically removed to keep the sign visible. If the outfall is normally submerged the sign shall indicate that. If the outfall is a combined sewer outfall, the sign shall indicate that untreated human sewage may be discharged from the outfall during wet weather and that harmful bacteria may be present in the water. When an existing marker is replaced or reset, the new marker shall comply with the requirements of this section.

Y. Monitoring for Bis(2-ethylhexyl) Phthalate

Composite samples for Bis(2-ethylhexyl) phthalate shall be comprised of at least three grab samples proportionate in volume to the sewage flow rate at the time of sampling and collected at intervals of at least 30 minutes, but not more than 2 hours, during an 8 hour period that the plant is staffed for sampling. The samples shall be collected in glass to eliminate the potential for contamination from plastic containers; and they shall be collected at such times and locations, and in such fashion, as to be representative of the facility's overall performance.

Z. Pretreatment Program Requirements

The permittee's pretreatment program initially approved on August 20, 1985 and all subsequent modifications approved before the effective date of this permit, shall be an enforceable term and condition of this permit.

To ensure that the approved program is implemented in accordance with 40 CFR 403, Chapter 3745-3 of Ohio Administrative Code and Chapter 6111 of the Ohio Revised Code, the permittee shall comply with the following conditions:

1. Legal Authority

The permittee shall adopt and maintain legal authority which enables it to fully implement and enforce all aspects of its approved pretreatment program including the identification and characterization of industrial sources, issuance of control documents, compliance monitoring and reporting, and enforcement.

The permittee shall establish agreements with all contributing jurisdictions, as necessary, to enable the permittee to fulfill its requirements with respect to industrial users discharging to its system.

2. Industrial User Inventory

The permittee shall identify all industrial users subject to pretreatment standards and requirements and characterize the nature and volume of pollutants in their wastewater. Dischargers determined to be Significant Industrial Users according to OAC 3745-3-01(FF) must be notified of applicable pretreatment standards and requirements within 30 days of making such a determination. This inventory shall be updated at a frequency to ensure proper identification and characterization of industrial users.

3. Slug Load Control Plans for Significant Industrial Users

The permittee shall evaluate the need for a plan, device or structure to control a potential slug discharge at least once during the term of each significant industrial user's control mechanism. Existing significant industrial users shall be evaluated within one year of the effective date of this permit if the users have never been evaluated. New industrial users identified as significant industrial users shall be evaluated within one year of being identified as a significant industrial user.

4. Local Limits

The permittee shall develop and enforce technically based local limits to prevent the introduction of pollutants into the POTW which will interfere with the operation of the POTW, pass through the treatment works, be incompatible with the treatment works, or limit wastewater or sludge use options.

The permittee shall use the following waste load allocation values when evaluating local limits for the following pollutants for which a final effluent limit has not been established:

Antimony 554 ug/l
Arsenic 440 ug/l
Cadmium 22 ug/l
Chromium, hexavalent 31 ug/l
Chromium, total 1838 ug/l
Copper 68 ug/l
Free Cyanide 15 ug/l
Lead 279 ug/l
Molybdenum 58525 ug/l
Nickel 460 ug/l
Selenium 17 ug/l
Zinc 1400 ug/l

For the purpose of periodically reevaluating local limits, the permittee shall implement and maintain a sampling program to characterize pollutant contribution to the POTW from industrial and residential sources and to determine pollutant removal efficiencies through the POTW. The permittee shall continue to review and develop local limits as necessary.

5. Control Mechanisms

The permittee shall issue control mechanisms to all industries determined to be Significant Industrial Users as define in OAC 3745-3-01(FF). Control mechanisms must meet at least the minimum requirements of OAC-3745-3-03(C)(1)(c).

6. Industrial Compliance Monitoring

The permittee shall sample and inspect industrial users in accordance with the approved program or approved modifications, including inspection and sampling of all significant industrial users at least annually. Sample collection, preservation and analysis must be performed in accordance with procedures in 40 CFR 136 and with sufficient care to produce evidence admissible in judicial enforcement proceedings.

The permittee shall also require, receive, and review self-monitoring and other industrial user reports when necessary to determine compliance with pretreatment standards and requirements. If the permittee performs sampling and analysis in lieu of an industrial user's self-monitoring, the permittee shall perform repeat sampling and analysis within 30 days of becoming aware of a permit violation, unless the permittee notifies the user of the violation and requires the user to perform the repeat analysis and reporting.

7. POTW Priority Pollutant Monitoring

The permittee shall annually monitor priority pollutants, as defined by U.S. EPA, in the POTW's influent, effluent and sludge. Sample collection, preservation, and analysis shall be performed using U.S. EPA approved methods.

a. A sample of the influent and the effluent shall be collected when industrial discharges are occurring at normal to maximum levels. Sampling of the influent shall be done prior to any recycle streams and sampling of the effluent shall be after disinfection. Both samples shall be collected on the same day or, alternately, the effluent sample may be collected following the influent sample by approximately the retention time of the POTW.

Sampling of sludge shall be representative of sludge removed to final disposal. A minimum of one grab sample shall be taken during actual sludge removal and disposal unless the POTW uses more than one disposal option. If multiple disposal options are used, the POTW shall collect a composite of grab samples from all disposal practices which are proportional to the annual flows to each type of disposal.

b. A reasonable attempt shall be made to identify and quantify additional constituents (excluding priority pollutants and unsubstituted aliphatic compounds) at each sample location. Identification of additional peaks more than ten times higher than the adjacent background noise on the total ion plots (reconstructed gas chromatograms) shall be attempted through the use of U.S. EPA/NIH computerized library of mass spectra, with visual confirmation by an experienced analyst. Quantification may be based on an order of magnitude estimate compared with an internal standard.

The results of these samples must be submitted on Ohio EPA Form 4221 with the permittee's annual pretreatment report. Samples may be collected at any time during the 12 months preceding the due date of the annual report and may be used to fulfill other NPDES monitoring requirements where applicable.

8. Enforcement

The permittee shall investigate all instances of noncompliance with pretreatment standards and requirements and take timely, appropriate, and effective enforcement action to resolve the noncompliance in accordance with the permittee's approved enforcement response plan.

On or prior to June 15th of each year, the permittee shall publish, in a newspaper of general circulation that provides meaningful public notice within the jurisdiction served by the permittee, a list of industrial users which, during the previous 12 months, have been in Significant Noncompliance [OAC 3745-3-03(C)(2)(h)] with applicable pretreatment standards or requirements.

9. Reporting

All reports required under this section shall be submitted to the following address in duplicate:

Ohio Environmental Protection Agency
Division of Surface Water
Pretreatment Unit
P.O. Box 1049
Columbus, OH 43216-1049

a. Quarterly Industrial User Violation Report

On or prior to the 15th day of March, June, September, and December, the permittee shall report the industrial users that are in violation of applicable pretreatment standards during the previous quarter. The report shall be prepared in accordance with guidance provided by Ohio EPA and shall include a description of all industrial user violations and corrective actions taken to resolve the violations.

b. Annual Pretreatment Report

On or prior to July 15th of each year, the permittee shall submit an annual report on the effectiveness of the pretreatment program. The report shall be prepared in accordance with guidance provided by Ohio EPA and shall include, but not be limited to: a discussion of program effectiveness; and industrial user inventory; a description of the permittee's monitoring program; a description of any pass through or interference incidents; a copy of the annual publication of industries in Significant Noncompliance; and, priority pollutant monitoring results.

10. Record Keeping

All records of pretreatment activities including, but not limited to, industrial inventory data, monitoring results, enforcement actions, and reports submitted by industrial users must be maintained for a minimum of three (3) years. This period of retention shall be extended during the course of any unresolved litigation. Records must be made available to Ohio EPA and U.S. EPA upon request.

11. Program Modifications

Any proposed modifications of the approved pretreatment program must be submitted to Ohio EPA for review, on forms available from Ohio EPA and consistent with guidance provided by Ohio EPA. If the modification is deemed to be substantial, prior approval must be obtained before implementation; otherwise, the modification is considered to be effective 45 days after the date of application. Substantial program modifications include, among other things, changes to the POTW's legal authority, industrial user control mechanisms, local limits, confidentiality procedures, or monitoring frequencies.

AA. Biomonitoring Program Requirements

General Requirements

All toxicity testing conducted as required by this permit shall be done in accordance with "Reporting and Testing Guidance for Biomonitoring Required by the Ohio Environmental Protection Agency" (hereinafter, the "biomonitoring guidance"), Ohio EPA, July 1998 (or current revision). The Standard Operating Procedures (SOP) or verification of SOP submittal, as described in Section 1.B. of the biomonitoring guidance shall be submitted no later than three months after the effective date of this permit. If the laboratory performing the testing has modified its protocols, a new SOP is required.

Testing Requirements

1. Chronic Bioassays

For a period beginning on the effective date of the permit and lasting until the expiration date of the permit, the permittee shall conduct annual chronic toxicity tests using Ceriodaphnia dubia and fathead minnows (Pimephales promelas) on effluent samples from outfall 2PD00013001. These tests shall be conducted as specified in Section 3 of the biomonitoring guidance.

2. Acute Bioassays

For a period beginning on the effective date of the permit and lasting until the expiration date of the permit, the permittee shall conduct annual definitive acute toxicity tests using Ceriodaphnia dubia and fathead minnows (Pimephales promelas) on effluent samples from outfall 2PD00013001. These tests shall be conducted as specified in Section 2 of the biomonitoring guidance. Acute toxicity tests need not be performed for months in which chronic toxicity tests are conducted. Acute endpoints, as described in Section 2.H. of the biomonitoring guidance, shall be derived from the chronic test.

3. Testing of Ambient Water

In conjunction with the acute and chronic toxicity tests, upstream control water shall be collected at a point outside the zone of effluent and receiving water interaction at station 2PD00013801. Testing of ambient waters shall be done in accordance with Sections 2 and 3 of the biomonitoring guidance.

4. Data Review

a. Reporting

Following completion of each annual bioassay requirement, the permittee shall report results of the tests in accordance with Sections 2.H.1., 2.H.2.a., 3.H.1., and 3.H.2.a. of the biomonitoring guidance, including reporting the results on the monthly DMR and submitting a copy of the complete test report to Ohio EPA, Division of Surface Water, NPDES Permit Unit, P.O. Box 1049, Columbus, OH, 43216-1049.

Based on Ohio EPA's evaluation of the results, this permit may be modified to require additional biomonitoring, require a toxicity reduction evaluation, and/or contain whole effluent toxicity limits.

b. Definitions

TUa = Acute Toxicity Units = 100/LC50

TUc = Chronic Toxicity Units = 100/IC25

This equation for chronic toxicity units applies outside the mixing zone for warmwater, modified warmwater, exceptional warmwater, coldwater, and seasonal salmonid use designations except when the following equation is more restrictive (Ceriodaphnia dubia only):

TUc = Chronic Toxic Units = 100/square root of (NOEC x LOEC)

BB. General Mercury Variance

The permittee is granted a general mercury variance under the provisions of Rule 3745-33-07(D)(10) of the Ohio Administrative Code. The permittee has demonstrated that the facility is currently unable to comply with the monthly average water quality based effluent limit of 1.3 ng/l without construction of expensive end-of-pipe controls more stringent than those required by sections 301(b) and 306 of the Clean Water Act. The permittee is currently able to achieve an annual average mercury concentration of 12 ng/l. For general mercury variance purposes, the annual average mercury effluent concentration is defined as the average of the most recent 12 months of effluent data.

One of the conditions of the general mercury variance is that the permittee make reasonable progress towards attaining the water quality based effluent limits for mercury (1.b, below). To accomplish this, the permittee is required to continue implementing a pollutant minimization program (PMP) for mercury. The elements of a PMP include: a control strategy to locate, identify and, where cost-effective, reduce levels of mercury that contribute to discharge levels; periodic monitoring of sources and the treatment system; and annual reporting of results.

The plan of study that was part of the permittee's application for coverage under the general mercury variance included items associated with developing a control strategy and initial implementation of a PMP. By implementing the plan of study and meeting other conditions of its NPDES permit, the permittee has been taking actions consistent with a PMP for mercury. Condition 1.d below, requires the permittee to continue implementing a PMP for mercury.

1. As conditions of this variance, the permittee shall meet the following requirements:

a. The permittee shall comply with the effluent limitations for mercury at outfall 2PD00013602 given in Part I, A. of this permit.

b. The permittee shall make reasonable progress towards attaining the monthly average water quality-based effluent limit for mercury by complying with the general mercury variance conditions included in this NPDES permit.

c. The permittee shall use EPA Method 1631 to comply with the influent and effluent mercury monitoring requirements of this permit.

d. The permittee shall continue implementing a PMP for mercury consistent with the plan of study included in the permittee's mercury variance application submitted on April 25, 2013 and any other relevant information submitted by the permittee, including the following activities:

i. Continued sampling by the permittee within the collection system to locate and remove sources of low level mercury.

ii. Removal of mercury from sources found in BB.d.i. and continued education of identified sources.

iii. Require industrial user permits to include low level mercury sampling.

iv. Recycle fluorescent light bulbs and other items that may contain mercury.

e. The permittee shall assess the impact of the mercury variance on public health, safety, and welfare by, as a minimum, monitoring for mercury in the facility's influent and effluent as required by this NPDES permit.

f. The permittee shall maintain an annual average mercury effluent concentration equal to or less than 12 ng/l.

g. On or prior to March 1st of each year, the permittee shall submit two copies of an annual PMP report to Ohio EPA, Division of Surface Water, NPDES Permit Unit, P.O. Box 1049, Columbus, OH, 43216-1049. The annual PMP report shall include:

i. All minimization program monitoring results for the year

ii. A list of potential sources of mercury

iii. A summary of all actions taken to meet the effluent limits for mercury

iv. Any updates of the control strategy, including actions planned to reduce the levels of mercury in the treatment plant's final effluent

The Ohio EPA Annual Mercury PMP Report and Appendices are available on the Division of Surface Water Permits Program Technical Assistance web page at http://www.epa.ohio.gov/dsw/permits/technical_assistance.aspx . Open the Mercury list.

h. Upon completion of the actions identified in the plan of study as required in Part II, Item AB.1.d. of this permit or upon submittal of the permittee's NPDES permit renewal application, whichever comes first, the permittee shall submit to Ohio EPA's Northwest District Office a certification stating that all permit conditions imposed to implement the plan of study and the PMP have been satisfied and whether compliance with the monthly average water quality based effluent limit for mercury has been achieved and can be maintained. This certification shall be accompanied by the following:

i. All available mercury influent and effluent data for the most recent 12 month period.

ii. Data documenting all known significant sources of mercury and the steps that have been taken to reduce or eliminate those sources; and

iii. A determination of the lowest mercury concentration that currently available data indicate can be reliably achieved through implementation of the PMP.

2. Exceedance of the annual average limit of 12 ng/l.

a. If at any time after the effective date of this permit, the permittee's annual average mercury effluent concentration exceeds 12 ng/l, the permittee shall:

i. Notify Ohio EPA's Northwest District Office not later than 30 days from the date of the exceedance.

ii. Submit an individual variance application, if a variance is desired, not later than 6 months from the date of the exceedance; or

iii. Request a permit modification not later than 6 months from the date of the exceedance for a compliance schedule to attain compliance with the water quality-based effluent limits for mercury.

b. If the permittee complies with either 2.a.ii or 2.a.iii, above, the general mercury variance conditions included in this NPDES permit will remain in effect until the date that the Director acts on the individual variance application or the date that the permit modification becomes effective.

c. If the permittee does not comply with either 2.a.ii or 2.a.iii, above, a monthly water-quality based effluent limit for mercury of 1.3 ng/l shall apply at outfall 2PD00013602 beginning 6 months from the date of the exceedance.

3. The requirements of Part II, Item AB.2 shall not apply if the permittee demonstrates to the satisfaction of the Director that the mercury concentration in the permittee's effluent exceeds 12 ng/l due primarily to the presence of mercury in the permittee's intake water.

CC. Permit Reopener for Mercury Variance Revisions

Ohio EPA may reopen and modify this permit at any time based upon Ohio EPA water quality standard revisions to the mercury variance granted in Part II, Item BB of this permit.

DD. Renewal of Mercury Variance

For renewal of the mercury variance authorized in this permit, the permittee shall include the following information with the submittal of the subsequent NPDES permit renewal application:

1. the certification described under Part II, Item BB.1.h., and all information required under Part II, Item BB.1.h.i. through Part II, Item BB.1.h.iii;

2. a status report on the progress being made implementing the pollutant minimization program (PMP). This information may be included in the annual PMP report required under Part II, Item BB.1.g;

3. a listing of the strategies and/or programs in the PMP which will be continued under the next renewal of this permit; and

4. a statement requesting the renewal of the mercury variance.

PART III - GENERAL CONDITIONS

1. DEFINITIONS

"Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

"Average weekly" discharge limitation means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week. Each of the following 7-day periods is defined as a calendar week: Week 1 is Days 1 - 7 of the month; Week 2 is Days 8 - 14; Week 3 is Days 15 - 21; and Week 4 is Days 22 - 28. If the "daily discharge" on days 29, 30 or 31 exceeds the "average weekly" discharge limitation, Ohio EPA may elect to evaluate the last 7 days of the month as Week 4 instead of Days 22 - 28. Compliance with fecal coliform bacteria or E coli bacteria limitations shall be determined using the geometric mean.

"Average monthly" discharge limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month. Compliance with fecal coliform bacteria or E coli bacteria limitations shall be determined using the geometric mean.

"85 percent removal" means the arithmetic mean of the values for effluent samples collected in a period of 30 consecutive days shall not exceed 15 percent of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period.

"Absolute Limitations" Compliance with limitations having descriptions of "shall not be less than," "nor greater than," "shall not exceed," "minimum," or "maximum" shall be determined from any single value for effluent samples and/or measurements collected.

"Net concentration" shall mean the difference between the concentration of a given substance in a sample taken of the discharge and the concentration of the same substances in a sample taken at the intake which supplies water to the given process. For the purpose of this definition, samples that are taken to determine the net concentration shall always be 24-hour composite samples made up of at least six increments taken at regular intervals throughout the plant day.

"Net Load" shall mean the difference between the load of a given substance as calculated from a sample taken of the discharge and the load of the same substance in a sample taken at the intake which supplies water to given process. For purposes of this definition, samples that are taken to determine the net loading shall always be 24-hour composite samples made up of at least six increments taken at regular intervals throughout the plant day.

"MGD" means million gallons per day.

"mg/l" means milligrams per liter.

"ug/l" means micrograms per liter.

"ng/l" means nanograms per liter.

"S.U." means standard pH unit.

"kg/day" means kilograms per day.

"Reporting Code" is a five digit number used by the Ohio EPA in processing reported data. The reporting code does not imply the type of analysis used nor the sampling techniques employed.

"Quarterly (1/Quarter) sampling frequency" means the sampling shall be done in the months of March, June, August, and December, unless specifically identified otherwise in the Effluent Limitations and Monitoring Requirements table.

"Yearly (1/Year) sampling frequency" means the sampling shall be done in the month of September, unless specifically identified otherwise in the effluent limitations and monitoring requirements table.

"Semi-annual (2/Year) sampling frequency" means the sampling shall be done during the months of June and December, unless specifically identified otherwise.

"Winter" shall be considered to be the period from November 1 through April 30.

"Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.

"Summer" shall be considered to be the period from May 1 through October 31.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

"Sewage sludge" means a solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works as defined in section 6111.01 of the Revised Code. "Sewage sludge" includes, but is not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment processes. "Sewage sludge" does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator, grit and screenings generated during preliminary treatment of domestic sewage in a treatment works, animal manure, residue generated during treatment of animal manure, or domestic septage.

"Sewage sludge weight" means the weight of sewage sludge, in dry U.S. tons, including admixtures such as liming materials or bulking agents. Monitoring frequencies for sewage sludge parameters are based on the reported sludge weight generated in a calendar year (use the most recent calendar year data when the NPDES permit is up for renewal).

"Sewage sludge fee weight" means the weight of sewage sludge, in dry U.S. tons, excluding admixtures such as liming materials or bulking agents. Annual sewage sludge fees, as per section 3745.11(Y) of the Ohio Revised Code, are based on the reported sludge fee weight for the most recent calendar year.

2. GENERAL EFFLUENT LIMITATIONS

The effluent shall, at all times, be free of substances:

A. In amounts that will settle to form putrescent, or otherwise objectionable, sludge deposits; or that will adversely affect aquatic life or water fowl;

B. Of an oily, greasy, or surface-active nature, and of other floating debris, in amounts that will form noticeable accumulations of scum, foam or sheen;

C. In amounts that will alter the natural color or odor of the receiving water to such degree as to create a nuisance;

D. In amounts that either singly or in combination with other substances are toxic to human, animal, or aquatic life;

E. In amounts that are conducive to the growth of aquatic weeds or algae to the extent that such growths become inimical to more desirable forms of aquatic life, or create conditions that are unsightly, or constitute a nuisance in any other fashion;

F. In amounts that will impair designated instream or downstream water uses.

3. FACILITY OPERATION AND QUALITY CONTROL

All wastewater treatment works shall be operated in a manner consistent with the following:

A. At all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee necessary to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with conditions of the permit.

B. The permittee shall effectively monitor the operation and efficiency of treatment and control facilities and the quantity and quality of the treated discharge.

C. Maintenance of wastewater treatment works that results in degradation of effluent quality shall be scheduled during non-critical water quality periods and shall be carried out in a manner approved by Ohio EPA as specified in the Paragraph in the PART III entitled, "UNAUTHORIZED DISCHARGES".

4. REPORTING

A. Monitoring data required by this permit shall be submitted monthly on Ohio EPA 4500 Discharge Monitoring Report (DMR) forms using the electronic DMR (e-DMR) internet application. e-DMR allows permitted facilities to enter, sign, and submit DMRs on the internet. e-DMR information is found on the following web page:

http://www.epa.ohio.gov/dsw/edmr/eDMR.aspx

Alternatively, if you are unable to use e-DMR due to a demonstrated hardship, monitoring data may be submitted on paper DMR forms provided by Ohio EPA. Monitoring data shall be typed on the forms. Please contact Ohio EPA, Division of Surface Water at (614) 644-2050 if you wish to receive paper DMR forms.

B. DMRs shall be signed by a facility's Responsible Official or a Delegated Responsible Official (i.e. a person delegated by the Responsible Official). The Responsible Official of a facility is defined as:

1. For corporations - a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

2. For partnerships - a general partner;

3. For a sole proprietorship - the proprietor; or,

4. For a municipality, state or other public facility - a principal executive officer, a ranking elected official or other duly authorized employee.

For e-DMR, the person signing and submitting the DMR will need to obtain an eBusiness Center account and Personal Identification Number (PIN). Additionally, Delegated Responsible Officials must be delegated by the Responsible Official, either on-line using the eBusiness Center's delegation function, or on a paper delegation form provided by Ohio EPA. For more information on the PIN and delegation processes, please view the following web page:

http://epa.ohio.gov/dsw/edmr/eDMR.aspx

C. DMRs submitted using e-DMR shall be submitted to Ohio EPA by the 20th day of the month following the month-of-interest. DMRs submitted on paper must include the original signed DMR form and shall be mailed to Ohio EPA at the following address so that they are received no later than the 15th day of the month following the month-of-interest:

Ohio Environmental Protection Agency
Lazarus Government Center
Division of Surface Water - PCU
P.O. Box 1049
Columbus, Ohio 43216-1049

D. Regardless of the submission method, a paper copy of the submitted Ohio EPA 4500 DMR shall be maintained onsite for records retention purposes (see Section 7. RECORDS RETENTION). For e-DMR users, view and print the DMR from the Submission Report Information page after each original or revised DMR is submitted. For submittals on paper, make a copy of the completed paper form after it is signed by a Responsible Official or a Delegated Responsible Official.

E. If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified in Section 5. SAMPLING AND ANALYTICAL METHODS, the results of such monitoring shall be included in the calculation and reporting of the values required in the reports specified above.

F. Analyses of pollutants not required by this permit, except as noted in the preceding paragraph, shall not be reported to the Ohio EPA, but records shall be retained as specified in Section 7. RECORDS RETENTION.

5. SAMPLING AND ANALYTICAL METHOD

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored flow. Test procedures for the analysis of pollutants shall conform to regulation 40 CFR 136, "Test Procedures For The Analysis of Pollutants" unless other test procedures have been specified in this permit. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to insure accuracy of measurements.

6. RECORDING OF RESULTS

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

A. The exact place and date of sampling; (time of sampling not required on EPA 4500)

B. The person(s) who performed the sampling or measurements;

C. The date the analyses were performed on those samples;

D. The person(s) who performed the analyses;

E. The analytical techniques or methods used; and

F. The results of all analyses and measurements.

7. RECORDS RETENTION

The permittee shall retain all of the following records for the wastewater treatment works for a minimum of three years except those records that pertain to sewage sludge disposal, use, storage, or treatment, which shall be kept for a minimum of five years, including:

A. All sampling and analytical records (including internal sampling data not reported);

B. All original recordings for any continuous monitoring instrumentation;

C. All instrumentation, calibration and maintenance records;

D. All plant operation and maintenance records;

E. All reports required by this permit; and

F. Records of all data used to complete the application for this permit for a period of at least three years, or five years for sewage sludge, from the date of the sample, measurement, report, or application.

These periods will be extended during the course of any unresolved litigation, or when requested by the Regional Administrator or the Ohio EPA. The three year period, or five year period for sewage sludge, for retention of records shall start from the date of sample, measurement, report, or application.

8. AVAILABILITY OF REPORTS

Except for data determined by the Ohio EPA to be entitled to confidential status, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate district offices of the Ohio EPA. Both the Clean Water Act and Section 6111.05 Ohio Revised Code state that effluent data and receiving water quality data shall not be considered confidential.

9. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking, and reissuing, or terminating the permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

10. RIGHT OF ENTRY

The permittee shall allow the Director or an authorized representative upon presentation of credentials and other documents as may be required by law to:

A. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.

C. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.

D. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

11. UNAUTHORIZED DISCHARGES

A. Bypass Not Exceeding Limitations - The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 11.B and 11.C.

B. Notice

1. Anticipated Bypass - If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

2. Unanticipated Bypass - The permittee shall submit notice of an unanticipated bypass as required in paragraph 12.B (24 hour notice).

C. Prohibition of Bypass

1. Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

c. The permittee submitted notices as required under paragraph 11.B.

2. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 11.C.1.

12. NONCOMPLIANCE NOTIFICATION

A. Exceedance of a Daily Maximum Discharge Limit

1. The permittee shall report noncompliance that is the result of any violation of a daily maximum discharge limit for any of the pollutants listed by the Director in the permit by e-mail or telephone within twenty-four (24) hours of discovery.

The permittee may report to the appropriate Ohio EPA district office e-mail account as follows (this method is preferred):

Southeast District Office: sedo24hournpdes@epa.state.oh.us
Southwest District Office: swdo24hournpdes@epa.state.oh.us
Northwest District Office: nwdo24hournpdes@epa.state.oh.us
Northeast District Office: nedo24hournpdes@epa.state.oh.us
Central District Office: cdo24hournpdes@epa.state.oh.us
Central Office: co24hournpdes@epa.state.oh.us

The permittee shall attach a noncompliance report to the e-mail. A noncompliance report form is available on the following web site under the Monitoring and Reporting - Non-Compliance Notification section:

http://epa.ohio.gov/dsw/permits/individuals.aspx

Or, the permittee may report to the appropriate Ohio EPA district office by telephone toll-free between 8:00 AM and 5:00 PM as follows:

Southeast District Office: (800) 686-7330
Southwest District Office: (800) 686-8930
Northwest District Office: (800) 686-6930
Northeast District Office: (800) 686-6330
Central District Office: (800) 686-2330
Central Office: (614) 644-2001

The permittee shall include the following information in the telephone noncompliance report:

a. The name of the permittee, and a contact name and telephone number;

b. The limit(s) that has been exceeded;

c. The extent of the exceedance(s);

d. The cause of the exceedance(s);

e. The period of the exceedance(s) including exact dates and times;

f. If uncorrected, the anticipated time the exceedance(s) is expected to continue; and,

g. Steps taken to reduce, eliminate or prevent occurrence of the exceedance(s).

B. Other Permit Violations

1. The permittee shall report noncompliance that is the result of any unanticipated bypass resulting in an exceedance of any effluent limit in the permit or any upset resulting in an exceedance of any effluent limit in the permit by e-mail or telephone within twenty-four (24) hours of discovery.

The permittee may report to the appropriate Ohio EPA district office e-mail account as follows (this method is preferred):

Southeast District Office: sedo24hournpdes@epa.state.oh.us
Southwest District Office: swdo24hournpdes@epa.state.oh.us
Northwest District Office: nwdo24hournpdes@epa.state.oh.us
Northeast District Office: nedo24hournpdes@epa.state.oh.us
Central District Office: cdo24hournpdes@epa.state.oh.us
Central Office: co24hournpdes@epa.state.oh.us

The permittee shall attach a noncompliance report to the e-mail. A noncompliance report form is available on the following web site:

http://www.epa.ohio.gov/dsw/permits/permits.aspx

Or, the permittee may report to the appropriate Ohio EPA district office by telephone toll-free between 8:00 AM and 5:00 PM as follows:

Southeast District Office: (800) 686-7330
Southwest District Office: (800) 686-8930
Northwest District Office: (800) 686-6930
Northeast District Office: (800) 686-6330
Central District Office: (800) 686-2330
Central Office: (614) 644-2001

The permittee shall include the following information in the telephone noncompliance report:

a. The name of the permittee, and a contact name and telephone number;

b. The time(s) at which the discharge occurred, and was discovered;

c. The approximate amount and the characteristics of the discharge;

d. The stream(s) affected by the discharge;

e. The circumstances which created the discharge;

f. The name and telephone number of the person(s) who have knowledge of these circumstances;

g. What remedial steps are being taken; and,

h. The name and telephone number of the person(s) responsible for such remedial steps.

2. The permittee shall report noncompliance that is the result of any spill or discharge which may endanger human health or the environment within thirty (30) minutes of discovery by calling the 24-Hour Emergency Hotline toll-free at (800) 282-9378. The permittee shall also report the spill or discharge by e-mail or telephone within twenty-four (24) hours of discovery in accordance with B.1 above.

C. When the telephone option is used for the noncompliance reports required by A and B, the permittee shall submit to the appropriate Ohio EPA district office a confirmation letter and a completed noncompliance report within five (5) days of the discovery of the noncompliance. This follow up report is not necessary for the e-mail option which already includes a completed noncompliance report.

D. If the permittee is unable to meet any date for achieving an event, as specified in a schedule of compliance in their permit, the permittee shall submit a written report to the appropriate Ohio EPA district office within fourteen (14) days of becoming aware of such a situation. The report shall include the following:

1. The compliance event which has been or will be violated;

2. The cause of the violation;

3. The remedial action being taken;

4. The probable date by which compliance will occur; and,

5. The probability of complying with subsequent and final events as scheduled.

E. The permittee shall report all other instances of permit noncompliance not reported under paragraphs A or B of this section on their monthly DMR submission. The DMR shall contain comments that include the information listed in paragraphs A or B as appropriate.

F. If the permittee becomes aware that it failed to submit an application, or submitted incorrect information in an application or in any report to the director, it shall promptly submit such facts or information.

13. RESERVED

14. DUTY TO MITIGATE

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

15. AUTHORIZED DISCHARGES

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than, or at a level in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such violations may result in the imposition of civil and/or criminal penalties as provided for in Section 309 of the Act and Ohio Revised Code Sections 6111.09 and 6111.99.

16. DISCHARGE CHANGES

The following changes must be reported to the appropriate Ohio EPA district office as soon as practicable:

A. For all treatment works, any significant change in character of the discharge which the permittee knows or has reason to believe has occurred or will occur which would constitute cause for modification or revocation and reissuance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Notification of permit changes or anticipated noncompliance does not stay any permit condition.

B. For publicly owned treatment works:

1. Any proposed plant modification, addition, and/or expansion that will change the capacity or efficiency of the plant;

2. The addition of any new significant industrial discharge; and

3. Changes in the quantity or quality of the wastes from existing tributary industrial discharges which will result in significant new or increased discharges of pollutants.

C. For non-publicly owned treatment works, any proposed facility expansions, production increases, or process modifications, which will result in new, different, or increased discharges of pollutants.

Following this notice, modifications to the permit may be made to reflect any necessary changes in permit conditions, including any necessary effluent limitations for any pollutants not identified and limited herein. A determination will also be made as to whether a National Environmental Policy Act (NEPA) review will be required. Sections 6111.44 and 6111.45, Ohio Revised Code, require that plans for treatment works or improvements to such works be approved by the Director of the Ohio EPA prior to initiation of construction.

D. In addition to the reporting requirements under 40 CFR 122.41(l) and per 40 CFR 122.42(a), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

1. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis of any toxic pollutant which is not limited in the permit. If that discharge will exceed the highest of the "notification levels" specified in 40 CFR Sections 122.42(a)(1)(i) through 122.42(a)(1)(iv).

2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" specified in 122.42(a)(2)(i) through 122.42(a)(2)(iv).

17. TOXIC POLLUTANTS

The permittee shall comply with effluent standards or prohibitions established under Section 307 (a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement. Following establishment of such standards or prohibitions, the Director shall modify this permit and so notify the permittee.

18. PERMIT MODIFICATION OR REVOCATION

A. After notice and opportunity for a hearing, this permit may be modified or revoked, by the Ohio EPA, in whole or in part during its term for cause including, but not limited to, the following:

1. Violation of any terms or conditions of this permit;

2. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

3. Change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

B. Pursuant to rule 3745-33-04, Ohio Administrative Code, the permittee may at any time apply to the Ohio EPA for modification of any part of this permit. The filing of a request by the permittee for a permit modification or revocation does not stay any permit condition. The application for modification should be received by the appropriate Ohio EPA district office at least ninety days before the date on which it is desired that the modification become effective. The application shall be made only on forms approved by the Ohio EPA.

19. TRANSFER OF OWNERSHIP OR CONTROL

This permit may be transferred or assigned and a new owner or successor can be authorized to discharge from this facility, provided the following requirements are met:

A. The permittee shall notify the succeeding owner or successor of the existence of this permit by a letter, a copy of which shall be forwarded to the appropriate Ohio EPA district office. The copy of that letter will serve as the permittee's notice to the Director of the proposed transfer. The copy of that letter shall be received by the appropriate Ohio EPA district office sixty (60) days prior to the proposed date of transfer;

B. A written agreement containing a specific date for transfer of permit responsibility and coverage between the current and new permittee (including acknowledgement that the existing permittee is liable for violations up to that date, and that the new permittee is liable for violations from that date on) shall be submitted to the appropriate Ohio EPA district office within sixty days after receipt by the district office of the copy of the letter from the permittee to the succeeding owner;

At anytime during the sixty (60) day period between notification of the proposed transfer and the effective date of the transfer, the Director may prevent the transfer if he concludes that such transfer will jeopardize compliance with the terms and conditions of the permit. If the Director does not prevent transfer, he will modify the permit to reflect the new owner.

20. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

21. SOLIDS DISPOSAL

Collected grit and screenings, and other solids other than sewage sludge, shall be disposed of in such a manner as to prevent entry of those wastes into waters of the state, and in accordance with all applicable laws and rules.

22. CONSTRUCTION AFFECTING NAVIGABLE WATERS

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

23. CIVIL AND CRIMINAL LIABILITY

Except as exempted in the permit conditions on UNAUTHORIZED DISCHARGES or UPSETS, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

24. STATE LAWS AND REGULATIONS

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act.

25. PROPERTY RIGHTS

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

26. UPSET

The provisions of 40 CFR Section 122.41(n), relating to "Upset," are specifically incorporated herein by reference in their entirety. For definition of "upset," see Part III, Paragraph 1, DEFINITIONS.

27. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

28. SIGNATORY REQUIREMENTS

All applications submitted to the Director shall be signed and certified in accordance with the requirements of 40 CFR 122.22.

All reports submitted to the Director shall be signed and certified in accordance with the requirements of 40 CFR Section 122.22.

29. OTHER INFORMATION

A. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

B. ORC 6111.99 provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $25,000 per violation.

C. ORC 6111.99 states that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $25,000 per violation.

D. ORC 6111.99 provides that any person who violates Sections 6111.04, 6111.042, 6111.05, or division (A) of Section 6111.07 of the Revised Code shall be fined not more than $25,000 or imprisoned not more than one year, or both.

30. NEED TO HALT OR REDUCE ACTIVITY

40 CFR 122.41(c) states that it shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with conditions of this permit.

31. APPLICABLE FEDERAL RULES

All references to 40 CFR in this permit mean the version of 40 CFR which is effective as of the effective date of this permit.

32. AVAILABILITY OF PUBLIC SEWERS

Not withstanding the issuance or non-issuance of an NPDES permit to a semi-public disposal system, whenever the sewage system of a publicly owned treatment works becomes available and accessible, the permittee operating any semi-public disposal system shall abandon the semi-public disposal system and connect it into the publicly owned treatment works.

Part IV. Storm Water Control Measures

In Part IV.A and in Part VI, the term "minimize" means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice.

A. Control Measures.

You shall select, design, install, and implement control measures (including best management practices) to address the selection and design considerations in Part IV.B, meet the control measures/best management practices in Part IV.C. The selection, design, installation, and implementation of these control measures shall be in accordance with good engineering practices and manufacturer's specifications. Note that you may deviate from such manufacturer's specifications where you provide justification for such deviation and include documentation of your rationale in the part of your SWPPP that describes your control measures, consistent with Part V.D.3. If you find that your control measures are not achieving their intended effect of minimizing pollutant discharges, you shall modify these control measures as expeditiously as practicable. Regulated storm water discharges from your facility include storm water run-on that commingles with storm water discharges associated with industrial activity at your facility.

B. Control Measure Selection and Design Considerations.

You shall consider the following when selecting and designing control measures:

1. Preventing storm water from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from storm water;
2. Using control measures in combination is more effective than using control measures in isolation for minimizing pollutants in your storm water discharge;
3. Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures that will achieve the limits in this permit;
4. Minimizing impervious areas at your facility and infiltrating runoff onsite (including bioretention cells, green roofs, and pervious pavement, among other approaches) can reduce runoff and improve groundwater recharge and stream base flows in local streams, although care shall be taken to avoid ground water contamination;
5. Attenuating flow using open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;
6. Conserving and/or restoring of riparian buffers will help protect streams from storm water runoff and improve water quality; and
7. Using treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

C. Control Measures/Best Management Practices (BMPs)

1. Minimize Exposure. You shall minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff by either locating these industrial materials and activities inside or protecting them with storm resistant coverings (although significant enlargement of impervious surface area is not recommended). In minimizing exposure, you should pay particular attention to the following:
    a. Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas;
    b. Locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas);
    c. Clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants;
    d. Use drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible;
    e. Use spill/overflow protection equipment;
    f. Drain fluids from equipment and vehicles prior to on-site storage or disposal;
    g. Perform all cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also that capture any overspray; and
    h. Ensure that all washwater drains to a proper collection system (i.e., not the storm water drainage system).

2. Good Housekeeping. You shall keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals, keeping materials orderly and labeled, and storing materials in appropriate containers.

3. Maintenance. You shall regularly inspect, test, maintain, and repair all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in storm water discharged to receiving waters. You shall maintain all control measures that are used to achieve the control measures/best management practices (BMPs) required by this permit in effective operating condition. Nonstructural control measures shall also be diligently maintained (e.g., spill response supplies available, personnel appropriately trained). If you find that your control measures need to be replaced or repaired, you shall make the necessary repairs or modifications as expeditiously as practicable.

4. Spill Prevention and Response Procedures. You shall minimize the potential for leaks, spills and other releases that may be exposed to storm water and develop plans for effective response to such spills if or when they occur. At a minimum, you shall implement:

a. Procedures for plainly labeling containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides," etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
b. Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;
c. Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of your storm water pollution prevention team (Part V.D.1); and
d. Where a leak, spill or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period, you shall notify the Ohio EPA in accordance with the requirements of Part III Item 12 of this permit.

5. Erosion and Sediment Controls. You shall stabilize exposed areas and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants. Among other actions you shall take to meet this limit, you shall place flow velocity dissipation devices at discharge locations and within outfall channels where necessary to reduce erosion and/or settle out pollutants. In selecting, designing, installing, and implementing appropriate control measures, you are encouraged to consult with the Ohio Department of Natural Resources (ODNR) Division of Soil and Water Conservation's Rainwater and Land Development manual (http://www.dnr.state.oh.us/tabid/9186/Default.aspx), U.S. EPA's internet-based resources relating to BMPs for erosion and sedimentation, including the sector-specific *Industrial Storm Water Fact Sheet Series*, (www.epa.gov/npdes/stormwater/msgp), *National Menu of Storm Water BMPs* (www.epa.gov/npdes/stormwater/menuofbmps), and *National Management Measures to Control Nonpoint Source Pollution from Urban Areas* (www.epa.gov/owow/nps/urbanmm/index.html).

6. Management of Runoff. You shall divert, infiltrate, reuse, contain, or otherwise reduce storm water runoff, to minimize pollutants in your discharges. In selecting, designing, installing, and implementing appropriate control measures, you are encouraged to consult with the Ohio Department of Natural Resources (ODNR) Division of Soil and Water Conservation's Rainwater and Land Development manual (http://www.dnr.state.oh.us/tabid/9186/Default.aspx), U.S. EPA's internet-based resources relating to runoff management, including the sector-specific *Industrial Storm Water Fact Sheet Series*, (www.epa.gov/npdes/stormwater/msgp), *National Menu of Storm Water BMPs* (www.epa.gov/npdes/stormwater/menuofbmps), and *National Management Measures to Control Nonpoint Source Pollution from Urban Areas* (www.epa.gov/owow/nps/urbanmm/index.html).

7. Salt Storage Piles or Piles Containing Salt. You shall enclose or cover storage piles of salt, or piles containing salt, used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces. You shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile.

8. Employee Training. You shall train all employees who work in areas where industrial materials or activities are exposed to storm water, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of your Pollution Prevention Team. Training shall cover both the specific control measures used to achieve the conditions in this Part, and monitoring, inspection, planning, reporting, and documentation requirements in other parts of this permit. Ohio EPA requires that training be conducted at least annually (or more often if employee turnover is high).

9. Non-Storm Water Discharges. You shall eliminate non-storm water discharges not authorized by an NPDES permit. The following are the non-storm water discharges authorized under this permit:
    a. Discharges from fire-fighting activities (not planned excercises);
    b. Fire hydrant flushings;
    c. Potable water, including water line flushings;
    d. Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
    e. Irrigation drainage;
    f. Landscape watering provided all pesticides, herbicides; and fertilizer have been applied in accordance with the approved labeling;
    g. Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
    h. Routine external building washdown that does not use detergents;
    i. Uncontaminated ground water or spring water;
    j. Foundation or footing drains where flows are not contaminated with process materials; and
    k. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of your facility, but not intentional discharges from the cooling tower (e.g., “piped” cooling tower blowdown or drains).

10. Waste, Garbage and Floatable Debris. You shall ensure that waste, garbage, and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting them before they are discharged.

11. Dust Generation and Vehicle Tracking of Industrial Materials. You shall minimize generation of dust and off-site tracking of raw, final, or waste materials.

D. Corrective Actions

1. Conditions Requiring Review and Revision to Eliminate Problem. If any of the following conditions occur, you shall review and revise the selection, design, installation, and implementation of your control measures to ensure that the condition is eliminated and will not be repeated in the future:
    a. An unauthorized release or discharge (e.g., spill, leak, or discharge of non-storm water not authorized by this or another NPDES permit) occurs at your facility;
    b. A discharge violates a numeric effluent limit;
    c. You become aware, or Ohio EPA determines, that your control measures are not stringent enough for the discharge to meet applicable water quality standards;
    d. An inspection or evaluation of your facility by an Ohio EPA official or local MS4 operator determines that modifications to the control measures are necessary to meet the control measures/best management practices (BMPs) in this permit; or
    e. You find in your routine facility inspection, quarterly visual assessment, or comprehensive site inspection that your control measures are not being properly operated and maintained.

2. Conditions Requiring Review to Determine if Modifications Are Necessary. If any of the following conditions occur, you shall review the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the Part IV.A conditions in this permit:
    a. Construction or a change in design, operation, or maintenance at your facility significantly changes the nature of pollutants discharged in storm water from your facility, or significantly increases the quantity of pollutants discharged; or
    b. Sampling results exceeds an applicable benchmark.

3. Corrective Action Deadlines. You shall document your discovery of any of the conditions listed in Part IV.D.1 and Part IV.D.2 within 24 hours of making such discovery. Subsequently, within 30 days of such discovery, you shall document any corrective action(s) to be taken to eliminate or further investigate the deficiency, or if no corrective action is needed, the basis for that determination. Specific documentation required within 24 hours and 30 days is detailed in Part IV.D.4. If you determine that changes are necessary following your review, any modifications to your control measures shall be made before the next storm event if possible, or as soon as practicable following that storm event. These time intervals are not grace periods, but are schedules considered reasonable for documenting your findings and for making repairs and improvements. They are included in this permit to ensure that the conditions prompting the need for these repairs and improvements are not allowed to persist indefinitely.

4. Corrective Action Report. Within 24 hours of discovery of any condition listed in Part IV.D.1 and Part IV.D.2, you shall document the following information (i.e., questions 3-5 of the Corrective Actions section in the Annual Reporting Form, available at http://www.epa.state.oh.us/portals/35/permits/IndustrialStormWater_Final_GP_AppI_dec11.pdf):
    - Identification of the condition triggering the need for corrective action review;
    - Description of the problem identified; and
    - Date the problem was identified.

Within 30 days of discovery of any condition listed in Part IV.D.1 and Part IV.D.2, you shall document the following information (i.e., questions 7-11 of the Corrective Actions section in the Annual Reporting Form):

- Summary of corrective action taken or to be taken (or, for triggering events identified in Part IV.D.2 where you determine that corrective action is not necessary, the basis for this determination);
- Notice of whether SWPPP modifications are required as a result of this discovery or corrective action;
- Date corrective action initiated; and
- Date corrective action completed or expected to be completed.

You shall include this documentation in an annual report as required in Part VI.C.2 and retain onsite with your SWPPP.

5. Effect of Corrective Action. If the event triggering the review is a permit violation (e.g., non-compliance with an effluent limit), correcting it does not remove the original violation. Additionally, failing to take corrective action in accordance with this section is an additional permit violation. Ohio EPA will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations.

6. Substantially Identical Outfalls. If the event triggering corrective action is linked to an outfall that represents other substantially identical outfalls, your review shall assess the need for corrective action for each outfall represented by the outfall that triggered the review. Any necessary changes to control measures that affect these other outfalls shall also be made before the next storm event if possible, or as soon as practicable following that storm event.

E. Inspections

Beginning on the effective date of this permit, you shall conduct the inspections in Part IV.E.1, Part IV.E.2, and Part IV.E.3 at your facility. Include the following areas in all inspections: access roads and rail lines; grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station.

1. Routine Facility Inspections. Conduct routine facility inspections of all areas of the facility where industrial materials or activities are exposed to storm water, and of all storm water control measures used to comply with Part IV. Items A-C conditions contained in this permit. Routine facility inspections shall be conducted at least quarterly (i.e., once each calendar quarter) although in many instances, more frequent inspection (e.g., monthly) may be appropriate for some types of equipment, processes, and control measures or areas of the facility with significant activities and materials exposed to storm water. Perform these inspections during periods when the facility is in operation. You shall specify the relevant inspection schedules in your SWPPP document as required in Part IV. Items A-C. These routine inspections shall be performed by qualified personnel (for definition see VI - Definitions) with at least one member of your storm water pollution prevention team participating. At least once each calendar year, the routine facility inspection shall be conducted during a period when a storm water discharge is occurring.

You shall document the findings of each routine facility inspection performed and maintain this documentation onsite with your SWPPP. You are not required to submit your routine facility inspection findings to Ohio EPA, unless specifically requested to do so. At a minimum, your documentation of each routine facility inspection shall include:

a. The inspection date and time;
b. The name(s) and signature(s) of the inspector(s);
c. Weather information and a description of any discharges occurring at the time of the inspection;
d. Any previously unidentified discharges of pollutants from the site;
e. Any control measures needing maintenance or repairs;
f. Any failed control measures that need replacement;
g. Any incidents of noncompliance observed; and
h. Any additional control measures needed to comply with the permit requirements.

Any corrective action required as a result of a routine facility inspection shall be performed consistent with Part IV.D of this permit.

2. Quarterly Visual Assessment of Storm Water Discharges. Once each calendar quarter for the entire permit term, you shall collect a storm water sample from each outfall that requires sampling under this permit and conduct a visual assessment of each of these samples. These samples are not required to be collected consistent with 40 CFR Part 136 procedures but should be collected in such a manner that the samples are representative of the storm water discharge. The visual assessment shall be made:

- Of a sample in a clean, clear glass, or plastic container, and examined in a well-lit area;
- On samples collected within the first 30 minutes of an actual discharge from a storm event. If it is not possible to collect the sample within the first 30 minutes of discharge, the sample shall be collected as soon as practicable after the first 30 minutes and you shall document why it was not possible to take samples within the first 30 minutes. In the case of snowmelt, samples shall be taken during a period with a measurable discharge from your site; and
- For storm events, on discharges that occur at least 72 hours (3 days) from the previous discharge. The 72-hour (3-day) storm interval does not apply if you document that less than a 72-hour (3-day) interval is representative for local storm events during the sampling period. If it is not possible to collect the sample on discharges that occur at least 72 hours (3 days) from the previous discharge, the sample shall be collected as close to this storm interval as practicable and you shall document why it was not possible to take samples from a 72 hour (3 day) storm interval.
- Areas Subject to Snow: In areas subject to snow, at least one quarterly visual assessment shall capture snowmelt discharge.
- For the following water quality characteristics: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution.

You shall document the results of your visual assessments and maintain this documentation onsite with your SWPPP. You are not required to submit your visual assessment findings to Ohio EPA,

unless specifically requested to do so. At a minimum, your documentation of the visual assessment shall include:

- Sample location(s);
- Sample collection date and time, and visual assessment date and time for each sample;
- Personnel collecting the sample and performing visual assessment, and their signatures;
- Nature of the discharge (i.e., runoff or snowmelt);
- Results of observations of the storm water discharge;
- Probable sources of any observed storm water contamination; and
- If applicable, why it was not possible to take samples within the first 30 minutes and/or from a 72 hour (3 day) storm interval.

Any corrective action required as a result of a quarterly visual assessment shall be performed consistent with Part IV.D of this permit.

The following are exceptions to quarterly visual assessments:

- Adverse Weather Conditions: When adverse weather conditions prevent the collection of samples during the quarter, you shall take a substitute sample during the next qualifying storm event. Documentation of the rationale for no visual assessment for the quarter shall be included with your SWPPP records. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make sampling impractical, such as drought or extended frozen conditions.
- Inactive and unstaffed sites: The requirement for a quarterly visual assessment does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to storm water. To invoke this exception, you shall maintain a statement in your SWPPP indicating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in 40 CFR 122.26(g)(4)(iii). The statement shall be signed and certified in accordance with Part III.28 of this permit. If circumstances change and industrial materials or activities become exposed to storm water or your facility becomes active and/or staffed, this exception no longer applies and you shall immediately resume quarterly visual assessments. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to storm water, then you shall include the same signed and certified statement as above and retain it with your records.

3. Comprehensive Site Inspections. You shall conduct annual comprehensive site inspections while you are covered under this permit. The annual period to conduct the comprehensive site inspections begins on the date Ohio EPA has granted your authorization to discharge under this permit. Should your coverage be administratively continued after the expiration date of this permit, you shall continue to perform these inspections annually until you are no longer covered. Comprehensive site inspections shall be conducted by qualified personnel with at least one member of your storm water pollution prevention team participating in the comprehensive site inspections. Your comprehensive site inspections shall cover all areas of the facility affected by the requirements in this permit,

including the areas identified in the SWPPP as potential pollutant sources (see Part V.D.2) where industrial materials or activities are exposed to storm water, any areas where control measures are used to comply with the conditions in Part IV. Items A-C, and areas where spills and leaks have occurred in the past 3 years. The inspections shall also include a review of monitoring data collected in accordance with Part VI.B. Inspectors shall consider the results of the past year's visual and analytical monitoring when planning and conducting inspections. Inspectors shall examine the following:

- Industrial materials, residue, or trash that may have or could come into contact with storm water;
- Leaks or spills from industrial equipment, drums, tanks, and other containers;
- Offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit the site;
- Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas; and
- Control measures needing replacement, maintenance, or repair.

Storm water control measures required by this permit shall be observed to ensure that they are functioning correctly. If discharge locations are inaccessible, nearby downstream locations shall be inspected. Your annual comprehensive site inspection may also be used as one of the routine inspections, as long as all components of both types of inspections are included.

You shall document the findings of each comprehensive site inspection and maintain this documentation onsite with your SWPPP. In addition, you shall include this documentation in an annual report as required in Part VI.C.2. At a minimum, your documentation of the comprehensive site inspection shall include (see the Annual Reporting Form at http://www.epa.state.oh.us/portals/35/permits/IndustrialStormWater_Final_GP_AppI_dec11.pdf):

- The date of the inspection;
- The name(s) and title(s) of the personnel making the inspection;
- Findings from the examination of areas of your facility identified in Part IV.E.3;
- All observations relating to the implementation of your control measures including:
    - Previously unidentified discharges from the site;
    - Previously unidentified pollutants in existing discharges;
    - Evidence of, or the potential for, pollutants entering the drainage system;
    - Evidence of pollutants discharging to receiving waters at all facility outfall(s), and the condition of and around the outfall, including flow dissipation measures to prevent scouring, and
    - Additional control measures needed to address any conditions requiring corrective action identified during the inspection.
- Any required revisions to the SWPPP resulting from the inspection;
- Any incidents of noncompliance observed or a certification stating the facility is in compliance with this permit (if there is no noncompliance); and
- A statement signed and certified in accordance with Part III.28 of the permit.

Any corrective action required as a result of the comprehensive site inspection shall be performed consistent with Part IV.D of this permit.

Part V. Storm Water Pollution Prevention Plan (SWPPP)

A storm water pollution prevention plan (SWPPP) shall be developed to address each outfall that discharges to waters of the state that contains storm water associated with industrial activity. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. The SWPPP shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Facilities must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

The SWPPP does not contain effluent limitations; the limitations are contained in Parts I and IV A-C of this permit. The SWPPP is intended to document the selection, design, and installation of control measures. As distinct from the SWPPP, the documentation requirements are intended to document the implementation (including inspection, maintenance, monitoring, and corrective action) of the permit requirements.

A. Deadlines for SWPPP Preparation and Compliance.

1. The plan for a storm water discharge associated with industrial activity:

    a. Shall be prepared within six months of the effective date of this permit ((and updated based on facility or materials handling changes as specified in Part V, Item C);

    b. Shall provide for implementation and compliance with the terms of the plan within twelve months of the effective date of this permit.

2. Upon showing of good cause, the Director may establish a later date for preparing and compliance with a plan for a storm water discharge associated with industrial activity.

B. Signature and SWPPP Review.

1. The plan shall be signed and dated in accordance with Part III, Item 28, and be retained on-site at the facility which generates the storm water discharge.

2. The permittee shall make plans immediately available upon request to the Ohio EPA Director, or authorized representative, or Regional Administrator of U.S. EPA, a local agency approving storm water management plans, or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system, to the operator of the municipal system.

3. The Director may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this Part. Within 30 days of such notification from the Director, the

permittee shall make the required changes to the plan and shall submit to the Director a written certification that the requested changes have been made.

4. All storm water pollution prevention plans required under this permit are considered reports that shall be available to the public under Section 308(b) of the Act. Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from those staff cleared for CBI review within Ohio EPA. An interested party wishing a copy of a discharger's SWPPP will have to contact the Ohio EPA to obtain a copy.

C. Keeping Plans Current

The permittee shall modify the plan whenever necessary to address any of the triggering conditions for corrective action in Part IV.D and to ensure that they do not reoccur, or to reflect changes implemented when a review following the triggering conditions in Part IV.D.2 indicates that changes to your control measures are necessary to meet the control measures/best management practices (BMPs) in this permit. Changes to your SWPPP document shall be made in accordance with the corrective action deadlines in Part IV.D.3 and Part IV.D.4.

Amendments to the plan may be reviewed by Ohio EPA in the same manner as Part IV.B above.

D. **Contents of Plan**. The plan shall include, at a minimum, the following items:

1. Pollution Prevention Team. You shall identify the staff members (by name or title) that comprise the facility's storm water pollution prevention team as well as their individual responsibilities. Your storm water pollution prevention team is responsible for assisting the facility manager in developing and revising the facility's SWPPP as well as maintaining control measures and taking corrective actions where required. Each member of the storm water pollution prevention team shall have ready access to either an electronic or paper copy of applicable portions of this permit and your SWPPP.

2. Description of Potential Pollutant Sources. You shall document at your facility where industrial materials or activities are exposed to storm water and from which allowable non-storm water discharges are released. Industrial materials or activites, include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes: and intermediate products, by-products, final product or waste product. For each area identified, the description shall include, at a minimum:

   a. Site Description. Your SWPPP shall include:

      i. A description of the industrial activities at your facilitiy;
      ii. A general location map (e.g. U.S. Geologic Survey (USGS) quadrangle map) with enough detail to identify the location of your facility and all receiving waters for your storm water discharges.
      iii. A site map showing

- The size of the property in acres;
- The location and extent of significant structures and impervious surfaces;
- Directions of storm water flow (use arrows);
- Locations of all existing structural control measures;
- Locations of all receiving waters in the immediate vicinity of your facility;
- Locations of all storm water conveyances including ditches, pipes and swales;
- Locations of potential pollutant sources identified under Part IV J. 2.b;
- Locations where significant spills or leaks identified under Part IV J. 2.b. have occurred;
- Locations of all storm water monitoring points;
- Locations of storm water inlets and outfalls, with a unique identification code for each outfall (e.g. Outfall 001, Outfall 002, etc), indicating any outfalls that are considered substantially identical to another outfall, and an approximate outline of the areas draining to each outfall;
- Municipal separate storm sewer systems, where your storm water discharges to them;
- Locations and descriptions of all non-storm water discharges identified under Part IV. C. 10;
- Locations of the following activities where such activities are exposed to precipitation
    - Fueling stations;
    - Vehicle and equipment maintenance and/or cleaning areas;
    - Loading/unloading areas;
    - Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
    - Transfer areas for substances in bulk;
    - Machinery; and

b. Inventory of Exposed Materials. This includes a list of industrial activities exposed to storm water (e.g., material storage; equipment fueling, maintenance, and cleaning; cutting steel beams). This also includes a list of the pollutant(s) or pollutant constituents (e.g, crankcase oil, zinc, sulfuric acid, and cleaning solvents) associated with each identified activity. The pollutant list shall include all significant materials that have been handled, treated, stored, or disposed, and that have been exposed to storm water in the three years prior to the data you prepare of amend your SWPPP.

c. Spills and Leaks. You shall document where potential spills and leaks could occur that could contribute pollutants to storm water discharges, and the corresponding outfall(s) that would be affected by such spills and leaks. You shall document all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a storm water conveyance, in the three years prior to the date you prepare or amend your SWPPP. Note that significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC Section 9602. This permit

does not relieve you of the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 relating to spills or other releases of oil or hazardous substances.

d. Sampling Data. A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility.

e. Non-Storm Water Discharges. You shall document that you have evaluated for the presence of non-storm water discharges and that all unauthorized discharges have been eliminated. Documentation of your evaluation shall include: 1) The date of any evaluation; 2) A description of the evaluation criteria used; 3) A list of the outfalls or onsite drainage points that were directly observed during the evaluation; 4) The different types of non-storm water discharge(s) and source locations; and 5) The action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified. For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an NPDES permit application was submitted for an unauthorized cooling water discharge. Keep a copy of all your current NPDES permits issued for wastewater and industrial, vehicle and equipment washwater discharges or, if an NPDES permit has not yet been issued, a copy of the pending application(s) with your SWPPP. If the washwater is handled in another manner, the disposal method shall be described and all pertinent documentation shall be retained onsite.

f. Salt Storage. You shall document the location of any storage piles containing salt used for deicing or other commercial or industrial purposes.

3. Description of Control Measures. You shall document the location and type of control measures you have installed and implemented at your site to achieve the control measures/best management practices (BMPs) in Part IV.C, and where applicable, in Part VI.A. You shall describe how you addressed the control measure selection and design considerations in Part IV.B. This documentation shall describe how the control measures at your site address both the pollutant sources identified in Part V.D.2 and any storm water run-on that commingles with any discharges covered under this permit. In addition to the other control measures, consider the following: routing contaminated storm water to the treatment works; or covering exposed materials (i.e., from the following areas: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station).

4. Schedules and Procedures.

a. Pertaining to Control Measures used to Comply with the Control Measures/Best Management Practices (BMPs). The following shall be documented in your SWPPP:
   i. Good Housekeeping (See Part IV.C.2) – A schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers.
   ii. Maintenance (See Part IV.C.3) – Preventative maintenance procedures, including regular inspections, testing, maintenance, and repair of all industrial equipment and systems, and

control measures, to avoid situations that may result in leaks, spills, and other releases, and any back-up practices in place should a runoff event occur while a control measure is off-line;

iii. Spill Prevention and Response Procedures (See Part IV.C.4) – Procedures for preventing and responding to spills and leaks. You may reference the existence of other plans for Spill Prevention Control and Countermeasure (SPCC) developed for the facility under Section 311 of the CWA or BMP programs otherwise required by an NPDES permit for the facility, provided that you keep a copy of that other plan onsite and make it available for review consistent with Part V.B.4; and

iv. Employee Training (See Part IV.C.9) – A schedule for all types of necessary training. At a minimum, training shall address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and controls; fueling procedures; general good housekeeping practices; and proper procedures for using fertilizer, herbicides, and pesticides.

b. Pertaining to Monitoring and Inspection. Where applicable, you shall document in your SWPPP your procedures for conducting analytical storm water monitoring. You shall document in your SWPPP your procedures for performing, as appropriate, the three types of inspections specified by this permit, including: 1) Routine facility inspections (See Part IV.E.1), 2) Quarterly visual assessment of storm water discharges (See Part IV.E.2), and 3) Comprehensive site inspections (See Part IV.E.3).

5. Documentation Requirements. You are required to keep inspection, monitoring, and certification records with your SWPPP that together keep your records complete and up-to-date, and demonstrate your full compliance with the conditions of this permit.

Part VI. Sector Specific Requirements and Reporting

A. Reporting and Recordkeeping

1. Annual Report. You shall complete an annual report that includes the findings from your Part IV.E.3 comprehensive site inspection and any corrective action documentation as required in Part IV.D.4. If corrective action is not yet completed at the time of completion of this annual report, you shall describe the status of any outstanding corrective action(s). In addition to the information required in Part IV.D.4 (Corrective Action Report) and Part IV.E.3 (Comprehensive Site Inspection Documentation), you shall include the following information with your annual report:
    a. Facility name
    b. Ohio EPA Facility permit number
    c. Facility physical address
    d. Contact person name, title, and phone number

    You shall complete this report using the Annual Reporting Form provided by Ohio EPA at the following: http://www.epa.gov/npdes/pubs/msgp2008_appendixi.pdf. You shall keep the annual report with your SWPPP.

B. Sector-Specific Requirements for Industrial Activity

1 Limitations on Coverage.- Prohibition of Non-Storm Water Discharges. Industrial wastewater and equipment and vehicle washwater are not authorized from storm water only outfalls by this permit.

C. Definitions and Acronyms

Action Area – all areas to be affected directly or indirectly by the storm water discharges, allowable non-storm water discharges, and storm water discharge-related activities, and not merely the immediate area involved in these discharges and activities.

Best Management Practices (BMPs) – schedules of activities, practices (and prohibitions of practices), structures, vegetation, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to surface waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. See 40 CFR 122.2.

Co-located Industrial Activities – Any industrial activities, excluding your primary industrial activity(ies), located on-site that are defined by the storm water regulations at 122.26(b)(14)(i)-(ix) and (xi). An activity at a facility is not considered co-located if the activity, when considered separately, does not meet the description of a category of industrial activity covered by the storm water regulations or identified by the SIC code list in Appendix D.

Control Measure – refers to any BMP or other method (including effluent limitations) used to prevent or reduce the discharge of pollutants to surface waters of the State.

Director – the Director of the Ohio Environmental Protection Agency (Ohio EPA).

Discharge – when used without qualification, means the "discharge of a pollutant." See 40 CFR 122.2.

Discharge of a pollutant – any addition of any "pollutant" or combination of pollutants to "surface waters of the State" from any "point source," or any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. This includes additions of pollutants into surface waters of the State from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. See 40 CFR 122.2.

Discharge-related activities – activities that cause, contribute to, or result in storm water and allowable non-storm water point source discharges, and measures such as the siting, construction and operation of BMPs to control, reduce, or prevent pollution in the discharges.

Drought-stricken area – a period of below average water content in streams, reservoirs, ground-water aquifers, lakes and soils.

U.S. EPA Approved or Established Total Maximum Daily Loads (TMDLs) – "U.S. EPA Approved TMDLs" are those that are developed by a State and approved by U.S. EPA. "U.S. EPA Established TMDLs" are those that are developed by U.S. EPA.

Existing Discharger – an operator applying for coverage under this permit for discharges authorized previously under an NPDES general or individual permit.

Facility or Activity – any NPDES "point source" (including land or appurtenances thereto) that is subject to regulation under the NPDES program. See 40 CFR 122.2.

Federal Facility – any buildings, installations, structures, land, public works, equipment, aircraft, vessels, and other vehicles and property, owned by, or constructed or manufactured for the purpose of leasing to, the federal government.

Illicit Discharge – is defined at 40 CFR 122.26(b)(2) and refers to any discharge to a municipal separate storm sewer that is not entirely composed of storm water, except discharges authorized under an NPDES permit (other than the NPDES permit for discharges from the MS4) and discharges resulting from fire fighting activities.

Impaired Water (or "Water Quality Impaired Water" or "Water Quality Limited Segment") – A water is impaired for purposes of this permit if it has been identified by a State or U.S. EPA pursuant to Section 303(d) of the Clean Water Act as not meeting applicable State water quality standards (these waters are called "water quality limited segments" under 40 CFR 30.2(j)). Impaired waters include both waters with approved or established TMDLs, and those for which a TMDL has not yet been approved or established.

Industrial Activity – the 10 categories of industrial activities included in the definition of "storm water discharges associated with industrial activity" as defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi).

Industrial Storm Water – storm water runoff from industrial activity.

Municipal Separate Storm Sewer – a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters of the State;

(ii) Designed or used for collecting or conveying storm water;

(iii) Which is not a combined sewer; and

(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2. See 40 CFR 122.26(b)(4) and (b)(7).

New Discharger – a facility from which there is a discharge, that did not commence the discharge at a particular site prior to August 13, 1979, which is not a new source, and which has never received a finally effective NPDES permit for discharges at that site. See 40 CFR 122.2.

New Source – any building, structure, facility, or installation from which there is or may be a "discharge of pollutants," the construction of which commenced:

- after promulgation of standards of performance under section 306 of the CWA which are applicable to such source, or
- after proposal of standards of performance in accordance with section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal. See 40 CFR 122.2.

New Source Performance Standards (NSPS) – technology-based standards for facilities that qualify as new sources under 40 CFR 122.2 and 40 CFR 122.29.

No exposure – all industrial materials or activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. See 40 CFR 122.26(g).

Ohio EPA – the Ohio Environmental Protection Agency.

Operator – any entity with a storm water discharge associated with industrial activity that meets either of the following two criteria:

(i) The entity has operational control over industrial activities, including the ability to modify those activities; or
(ii) The entity has day-to-day operational control of activities at a facility necessary to ensure compliance with the permit (e.g., the entity is authorized to direct workers at a facility to carry out activities required by the permit).

Person – an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof. See 40 CFR 122.2.

Point source – any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff. See 40 CFR 122.2.

Pollutant – dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal and agricultural waste discharged into water. See 40 CFR 122.2.

Pollutant of concern – A pollutant which causes or contributes to a violation of a water quality standard, including a pollutant which is identified as causing an impairment in a state's 303(d) list.

Primary industrial activity – includes any activities performed on-site which are (1) identified by the facility's primary SIC code; or (2) included in the narrative descriptions of 122.26(b)(14)(i), (iv), (v), or (vii), and (ix). [For co-located activities covered by multiple SIC codes, it is recommended that the primary industrial determination be based on the value of receipts or revenues or, if such information is not available for a particular facility, the number of employees or production rate for each process may be compared. The operation that generates the most revenue or employs the most personnel is the operation in which the facility is primarily engaged. In situations where the vast majority of on-site activity falls within one SIC code, that activity may be the primary industrial activity.] Narrative descriptions in 40 CFR 122.26(b)(14) identified above include: (i) activities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards; (iv) hazardous waste treatment storage, or disposal facilities including those that are operating under interim status or a permit under subtitle C of the Resource Conservation and Recovery Act (RCRA); (v) landfills, land application sites and open dumps that receive or have received industrial wastes; (vii) steam electric power generating facilities; and (ix) sewage treatment works with a design flow of 1.0 mgd or more.

Qualified Personnel – Qualified personnel are those who possess the knowledge and skills to assess conditions and activities that could impact storm water quality at your facility, and who can also evaluate the effectiveness of control measures.

Reportable Quantity Release – a release of a hazardous substance at or above the established legal threshold that requires emergency notification. Refer to 40 CFR Parts 110, 117, and 302 for complete definitions and reportable quantities for which notification is required.

Runoff coefficient – the fraction of total rainfall that will appear at the conveyance as runoff. See 40 CFR 122.26(b)(11).

Semi-Arid Climate – areas where annual rainfall averages from 10 to 20 inches.

Significant materials – includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges. See 40 CFR 122.26(b)(12).

Special Aquatic Sites – sites identified in 40 CFR 230 Subpart E. These are geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region.

Storm Water – storm water runoff, snow melt runoff, and surface runoff and drainage. See 40 CFR 122.26(b)(13).

Storm Water Discharges Associated with Construction Activity – a discharge of pollutants in storm water runoff from areas where soil disturbing activities (e.g., clearing, grading, or excavating), construction materials, or equipment storage or maintenance (e.g., fill piles, borrow areas, concrete truck washout, fueling), or other industrial storm water directly related to the construction process (e.g., concrete or asphalt batch plants) are located. See 40 CFR 122.26(b)(14)(x) and 40 CFR 122.26(b)(15).

Storm Water Discharges Associated with Industrial Activity – the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under Part 122. For the categories of industries identified in this section, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at part 401 of this chapter); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities include those that are federally, State, or municipally owned or operated that meet the description of the facilities listed in 40 CFR 122.26(b)(14).

Surface Waters of the State - Means all streams, lakes, ponds, marshes, watercourses, waterways, springs, irrigation systems, drainage systems, and all other bodies or accumulations of surface water,

natural or artificial, which are situated wholly or partly within, or border upon, this state, or are within its jurisdiction, except those private waters which do not combine or effect a junction with natural surface waters.

Total Maximum Daily Loads (TMDLs) – A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges; load allocations (LAs) for nonpoint sources and/or natural background, and shall include a margin of safety (MOS) and account for seasonal variations. (See section 303(d) of the Clean Water Act and 40 CFR 130.2 and 130.7).

Water Quality Impaired – See 'Impaired Water'.

Water Quality Standards – A water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses. States and U.S. EPA adopt water quality standards to protect public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act (See CWA sections 101(a)2 and 303(c)). Water quality standards also include an antidegradation policy. See P.U.D. o. 1 of Jefferson County et al v. Wash Dept of Ecology et al, 511 US 701, 705 (1994).

"You" and "Your" – as used in this permit are intended to refer to the permittee, the operator, or the discharger as the context indicates and that party's facility or responsibilities. The use of "you" and "your" refers to a particular facility and not to all facilities operated by a particular entity. For example, "you shall submit" means the permittee shall submit something for that particular facility. Likewise, "all your discharges" would refer only to discharges at that one facility.

ABBREVIATIONS AND ACRONYMS

BAT – Best Available Technology Economically Achievable

BOD5 – Biochemical Oxygen Demand (5-day test)

BMP – Best Management Practice

BPJ – Best Professional Judgment

BPT – Best Practicable Control Technology Currently Available

CERCLA – Comprehensive Environmental Response, Compensation and Liability Act

CGP – Construction General Permit

COD – Chemical Oxygen Demand

CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 *et seq*)

CWT – Centralized Waste Treatment

DMR – Discharge Monitoring Report

U.S. EPA – U. S. Environmental Protection Agency

FWS – U. S. Fish and Wildlife Service

LA – Load Allocations

MDMR – MSGP Discharge Monitoring Report

MGD – Million Gallons per Day

MOS – Margin of Safety

MS4 – Municipal Separate Storm Sewer System

MSDS – Material Safety Data Sheet

MSGP – Multi-Sector General Permit

NAICS – North American Industry Classification System

NMFS – U. S. National Marine Fisheries Service

NOI – Notice of Intent

NOT – Notice of Termination

NPDES – National Pollutant Discharge Elimination System

NRC – National Response Center

NTU – Nephelometric Turbidity Unit

OMB – U. S. Office of Management and Budget

ORW – Outstanding Resource Water

OSM – U. S. Office of Surface Mining

POTW – Publicly Owned Treatment Works

RCRA – Resource Conservation and Recovery Act

RQ – Reportable Quantity

SARA – Superfund Amendments and Reauthorization Act

SIC – Standard Industrial Classification

SMCRA – Surface Mining Control and Reclamation Act

SPCC – Spill Prevention, Control, and Countermeasures

SWPPP – Storm Water Pollution Prevention Plan

TMDL – Total Maximum Daily Load

TSDF – Treatment, Storage, or Disposal Facility

TSS – Total Suspended Solids

USGS – United States Geological Survey

WLA – Wasteload Allocation

WQS – Water Quality Standard

Defiance Water Pollution Control Plant - Defiance, OH - NPDES Permit #OH0024899

Attachment C: Tabulation of NPDES Permit Effluent Exceedances

Month/Year	Number of exceedances per parameter											
	E. coli	*E. coli*	Total Phosphorus	Total Phosphorus	Ammonia-Nitogen	Ammonia-Nitogen	$CBOD_5$	$CBOD_5$	Dissolved Oxygen	Total Residual Chlorine	TSS	# of Violations
	Monthly Geo-Mean	Weekly Geo-Mean	Monthly Avg.	Weekly Max	Monthly Avg.	Weekly Max	Monthly Avg.	Weekly Max	Daily Min	Daily Max	Daily Min	
December 2017	0	0	0	1	0	0	0	0	0	0	0	1
January 2018	0	0	0	0	1	0	0	0	0	0	0	1
March 2018	0	0	0	0	0	0	0	0	1	0	0	1
May 2018	0	1	0	0	0	0	0	0	0	0	0	1
June 2018	0	1	0	0	0	0	0	0	0	0	0	1
August 2018	0	0	0	0	0	2	0	0	0	0	0	2
December 2018	0	0	0	0	1	0	0	0	0	0	0	1
May 2019	1	1	0	0	0	0	0	0	0	1	0	3
June 2019	0	0	0	0	0	0	0	0	0	1	0	1
August 2019	0	1	0	0	0	0	0	0	0	0	0	1
September 2019	1	1	0	1	0	0	0	0	1	0	0	4
October 2019	0	0	0	0	1	1	0	0	0	0	0	2
May 2020	0	0	0	0	0	1	0	0	0	1	0	2
July 2020	0	0	0	0	0	1	0	0	0	0	0	1
January 2021	0	0	0	0	1	1	0	0	0	0	0	2
March 2021	0	0	0	0	1	1	0	0	0	0	0	2
May 2021	0	0	0	0	0	0	0	0	1	0	0	1
June 2021	0	0	1	1	0	1	0	0	0	0	0	3
August 2021	0	1	1	2	2	2	0	0	1	0	0	9
January 2022	0	0	0	0	1	1	0	0	0	0	0	2
April 2022	0	0	0	0	1	0	0	0	0	0	0	1
May 2022	0	0	0	0	2	2	0	0	0	0	0	4
July 2022	0	0	0	0	2	2	1	1	1	0	1	8
August 2022	0	0	0	0	1	1	0	0	1	0	0	3
September 2022	1	0	0	0	1	1	0	0	1	0	0	4
October 2022	0	1	1	1	1	1	0	1	0	0	0	6
November 2022	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL	**3**	**7**	**3**	**7**	**16**	**18**	**1**	**2**	**7**	**3**	**1**	**68**