

**Ohio Environmental Protection Agency
Modification of National Pollutant Discharge
Elimination System (NPDES) Permit**

Issue Date: October 4, 2022

Existing Permit No.: 1PD00019*ND

Proposed Effective Date: November 1, 2022

Application No.: OH0027758

Entity Name: City of Troy

Facility Location: 1400 Dye Mill Road, Troy, Ohio

In accordance with Rule 3745-33-04 (D) of the Ohio Administrative Code (formerly Ohio EPA Regulation EP-31-06), the above referenced NPDES Permit is hereby modified as follows:

Revision

- 1) On the cover page at the top, the word "Modified" was added to read as Modification Issue Date, Modification Effective Date and Modification Expiration Date.
- 2) On pages 2-4, an interim table for outfall 001 was added.
- 3) On Pages 5-7, the final effluent limits were changed; monthly and weekly concentration limits for Total Suspended Solids were changed to 21 mg/l and 31.5 mg/l, Nitrogen-Ammonia (Mar-May & Oct-Nov) to 6 mg/l and 9 mg/l, Nitrogen-Ammonia (June-Sept) to 1.5 mg/l and 2.25 mg/l, Nitrogen-Ammonia (Dec-Feb) to 10 mg/l and 15 mg/l, CBOD 5-day (Dec-Feb) to 17.9 mg/l and 26.85 mg/l and CBOD 5-day (March-Nov) to 10.9 mg/l and 16.35 mg/l.
- 4) On page 21, a municipal construction compliance schedule to meet the final limits for outfall 001 was added.

Attached is the modified NPDES permit.

All terms and conditions of the existing permit not recommended for modification by this document will remain in effect. Any modified term or condition contained in this modification shall supersede, on the date this modification is effective, the existing respective term or condition of the permit.

When the modification is effective, the Ohio EPA permit number will be changed to **1PD00019*OD**. The application number will remain OH0027758.



Laurie A. Stevenson
Director

Ohio Permit Number: 1PD00019*OD
Application No. OH0027758

Modification Action Date: October 4, 2022
Modification Effective Date: November 1, 2022
Modification Expiration Date: May 31, 2027

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),

City of Troy

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from the City of Troy wastewater treatment works located at 1400 Dye Mill Road, Troy, Ohio, Miami County and discharging to the Great Miami River in accordance with the conditions specified in Parts I, II, and III 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.



Laurie A. Stevenson
Director

Total Pages: 47

Part I, A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit and lasting until August 31, 2024, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outfall: 1PD00019001. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 001 - Interim

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/Day	Maximum Indicating Thermometer	All
00300 - Dissolved Oxygen - mg/l	-	6.0	-	-	-	-	-	1/Day	Continuous	All
00530 - Total Suspended Solids - mg/l	-	-	40	27	-	1060	715	3/Week	24hr Composite	All
00552 - Oil and Grease, Hexane Extr Method - mg/l	10	-	-	-	-	-	-	1 / 2 Weeks	Grab	All
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	12	7.8	-	307	204	3/Week	24hr Composite	Mar-May & Oct-Nov
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	2.8	1.9	-	74.2	50.3	3/Week	24hr Composite	June - Sep
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	20	13	-	523	341	3/Week	24hr Composite	Dec. - Feb.
00625 - Nitrogen Kjeldahl, Total - mg/l	-	-	-	-	-	-	-	1/Month	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
00671 - Orthophosphate, Dissolved (as P) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
01009 - Barium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
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/Month	24hr Composite	All
01220 - Chromium, Dissolved Hexavalent - ug/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
31648 - E. coli - #/100 ml	-	-	284	126	-	-	-	3/Week	Grab	Summer
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	Continuous	All
50092 - Mercury, Total (Low Level) - ng/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
51173 - Cyanide, Free (Low-Level) - ug/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
61425 - Acute Toxicity, Ceriodaphnia dubia - TUa	-	-	-	-	-	-	-	1/Year	24hr Composite	October
61426 - Chronic Toxicity, Ceriodaphnia dubia - TUc	-	-	-	-	-	-	-	1/Year	24hr Composite	October
61427 - Acute Toxicity, Pimephales promelas - TUa	-	-	-	-	-	-	-	1/Year	24hr Composite	October
61428 - Chronic Toxicity, Pimephales promelas - TUc	-	-	-	-	-	-	-	1/Year	24hr Composite	October
61941 - pH, Maximum - S.U.	9.0	-	-	-	-	-	-	1/Day	Continuous	All
61942 - pH, Minimum - S.U.	-	6.5	-	-	-	-	-	1/Day	Continuous	All
70300 - Residue, Total Filterable - mg/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
80082 - CBOD 5 day - mg/l	-	-	34	23	-	901	609	3/Week	24hr Composite	Dec. - Feb.
80082 - CBOD 5 day - mg/l	-	-	21	14	-	556	371	3/Week	24hr Composite	March-Nov.

Notes for Station Number 1PD00019001:

* Effluent loadings based on average design flow of 7.0 MGD.

a. Nickel, zinc, cadmium, lead, total chromium, and copper - See Part II, Item N.

- b. Barium - See Part II, Item N and I.
- c. Dissolved hexavalent chromium - See Part II, Item O.
- d. Mercury - See Part II, Item O and V.
- e. Free cyanide - See Part II, Item L and O.
- f. Dissolved orthophosphate - See Part II, Item M.
- g. Biomonitoring - See Part II, Item X.

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

2. During the period beginning on September 1, 2024 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: 1PD00019001. 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			Measuring Frequency	Sampling Type	Monitoring Months
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00010 - Water Temperature - C	-	-	-	-	-	-	-	1/Day	Maximum Indicating Thermometer	All
00300 - Dissolved Oxygen - mg/l	-	6.0	-	-	-	-	-	1/Day	Continuous	All
00530 - Total Suspended Solids - mg/l	-	-	31.5	21.0	-	1060	715	3/Week	24hr Composite	All
00552 - Oil and Grease, Hexane Extr Method - mg/l	10	-	-	-	-	-	-	1 / 2 Weeks	Grab	All
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	9.0	6.0	-	307	204	3/Week	24hr Composite	Mar-May & Oct-Nov
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	2.25	1.5	-	74.2	50.3	3/Week	24hr Composite	June - Sep
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	15.0	10.0	-	523	341	3/Week	24hr Composite	Dec. - Feb.
00625 - Nitrogen Kjeldahl, Total - mg/l	-	-	-	-	-	-	-	1/Month	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
00671 - Orthophosphate, Dissolved (as P) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
01009 - Barium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
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/Month	24hr Composite	All
01220 - Chromium, Dissolved Hexavalent - ug/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
31648 - E. coli - #/100 ml	-	-	284	126	-	-	-	3/Week	Grab	Summer
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	Continuous	All
50092 - Mercury, Total (Low Level) - ng/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
51173 - Cyanide, Free (Low-Level) - ug/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
61425 - Acute Toxicity, Ceriodaphnia dubia - TUa	-	-	-	-	-	-	-	1/Year	24hr Composite	October
61426 - Chronic Toxicity, Ceriodaphnia dubia - TUc	-	-	-	-	-	-	-	1/Year	24hr Composite	October
61427 - Acute Toxicity, Pimephales promelas - TUa	-	-	-	-	-	-	-	1/Year	24hr Composite	October
61428 - Chronic Toxicity, Pimephales promelas - TUc	-	-	-	-	-	-	-	1/Year	24hr Composite	October
61941 - pH, Maximum - S.U.	9.0	-	-	-	-	-	-	1/Day	Continuous	All
61942 - pH, Minimum - S.U.	-	6.5	-	-	-	-	-	1/Day	Continuous	All
70300 - Residue, Total Filterable - mg/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
80082 - CBOD 5 day - mg/l	-	-	26.9	17.9	-	901	609	3/Week	24hr Composite	Dec. - Feb.
80082 - CBOD 5 day - mg/l	-	-	16.4	10.9	-	556	371	3/Week	24hr Composite	March-Nov.

Notes for station 1PD00019001:

* Effluent loadings based on average design flow of 9.0 MGD.

a. Nickel, zinc, cadmium, lead, total chromium, and copper - See Part II, Item N.

b. Barium - See Part II, Item N and I.

c. Dissolved hexavalent chromium - See Part II, Item O.

d. Mercury - See Part II, Item O and V.

e. Free cyanide - See Part II, Item L and O.

f. Dissolved Orthophosphate - See Part II, Item M.

g. Biomonitoring - See Part II, Item X.

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

1. 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 1PD00019300, 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			Measuring Frequency	Sampling Type	Monitoring Months
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
74062 - Overflow Occurrence - No./Month	-	-	-	-	-	-	-	1/Month	Total	All

NOTES for Station Number 1PD00019300:

a. A sanitary sewer overflow is an overflow, spill, release, or diversion of wastewater from a sanitary sewer system. Although the above table indicates that the Measuring Frequency for Overflow Occurrence is 1/Month, the intent of that provision is to specify a reporting frequency for Overflow Occurrence, not a monitoring frequency. The monitoring requirement under this permit is that these overflows shall be monitored on each day 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.

b. 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).

c. All sanitary sewer overflows are prohibited.

d. See Part II, Items D and E.

Part I, B. - SLUDGE MONITORING REQUIREMENTS

2. 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 1PD00019581, 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			Measuring Frequency	Sampling Type	Monitoring Months
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
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.
51129 - Sludge Fee Weight - dry tons	-	-	-	-	-	-	-	1/Quarter	Total	Quarterly - Alt.
51131 - Fecal Coliform in Sludge - CFU/gram	2000000	-	-	-	-	-	-	1/Quarter	Multiple Grab	Quarterly - Alt.
70316 - Sludge Weight - Dry Tons	-	-	-	-	-	-	-	1/Quarter	Total	Quarterly - Alt.

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 1PD00019581:

- a. 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.
- b. 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.
- c. 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.
- d. 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.
- e. 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.
- f. 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.
- g. The permittee shall maintain the appropriate records on site to verify that the requirements of Pathogen Reduction and Vector Attraction Reduction have been met.

h. To sample for fecal coliform, the treatment plant should collect and analyze a grab sample every other day over a two-week period for a total of seven grab samples when practical. Each of the grab samples shall be analyzed independently to determine the CFU/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". This process must be completed prior to sewage sludge being removed from the treatment facility.

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

j. 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.

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

l. See Part II, Items Q, R, S, T and U.

Part I, B. - SLUDGE MONITORING REQUIREMENTS

3. 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 1PD00019586, 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			Measuring Frequency	Sampling Type	Monitoring Months
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
51129 - Sludge Fee Weight - dry tons	-	-	-	-	-	-	-	1/Year	Total	December

NOTES for Station Number 1PD00019586:

- a. 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).
- b. 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.
- c. Sludge fee weight means sludge weight, in dry U.S. tons, excluding any admixtures such as liming material or bulking agents.
- d. See Part II, Items Q, R, S, T and U.

Part I, B. INFLUENT MONITORING LIMITATIONS AND MONITORING REQUIREMENTS

4. Influent Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor the Intake at Station Number 1PD00019601, 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 sampling.

Table - Intake Monitoring - 601 - 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			
00530 - Total Suspended Solids - mg/l	-	-	-	-	-	-	-	3/Week	24hr Composite	All
00720 - Cyanide, Total - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
01009 - Barium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
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/Month	24hr Composite	All
01220 - Chromium, Dissolved Hexavalent - ug/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
50092 - Mercury, Total (Low Level) - ng/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
61941 - pH, Maximum - S.U.	-	-	-	-	-	-	-	1/Day	Continuous	All
61942 - pH, Minimum - S.U.	-	-	-	-	-	-	-	1/Day	Continuous	All
80082 - CBOD 5 day - mg/l	-	-	-	-	-	-	-	3/Week	24hr Composite	All

Notes for Station Number 1PD00019601:

- a. Barium, nickel, zinc, cadmium, lead, total chromium, and copper - See Part II, Item N.
- b. Dissolved hexavalent chromium and total cyanide - See Part II, Item P.
- c. Mercury - See Part II, Item P and V.

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

5. 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 1PD00019602, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - Bypass Monitoring - 602 - 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			
00051 - Bypass Occurrence - No./Day	-	-	-	-	-	-	-	When Disch.	Total	All
00052 - Bypass Total Hours Per Day - Hrs/Day	-	-	-	-	-	-	-	When Disch.	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 1PD00019602:

- a. Data for 24-hour total flow, bypass occurrence, and bypass duration may be estimated if a measuring device is not available.
- b. A Discharge Monitoring Report (DMR) for this station must be submitted every month.
- c. Monitoring and sampling shall be conducted and reported on each day that there is a discharge through this station.
- d. If there are no discharges during the entire month, select the "No Discharge" check box on the data entry form and PIN the eDMR.
- e. 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.

f. Discharge through this station is prohibited. The Director may take enforcement action for violations of this prohibition unless the three conditions specified at 40 CFR 122.41(m) and in Part III, Item 11.C.1 of this permit are met.

Part I, B. - UPSTREAM MONITORING REQUIREMENTS

6. 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 1PD00019801, 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			
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
00665 - Phosphorus, Total (P) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
31648 - E. coli - #/100 ml	-	-	-	-	-	-	-	1 / 2 Weeks	Grab	June - Aug
61432 - 48-Hr. Acute Toxicity Ceriodaphnia dubia - % Affected	-	-	-	-	-	-	-	1/Year	Grab	October
61435 - 96-Hr. Acute Toxicity Pimephales promela - % Affected	-	-	-	-	-	-	-	1/Year	Grab	October
61438 - 7-Day Chronic Toxicity Ceriodaphnia dubia - % Affected	-	-	-	-	-	-	-	1/Year	Grab	October
61441 - 7-Day Chronic Toxicity Pimephales promelas - % Affected	-	-	-	-	-	-	-	1/Year	Grab	October

NOTES for Station Number 1PD00019801:

a. Biomonitoring - See Part II, Item X.

Part I, B. - DOWNSTREAM-FARFIELD MONITORING REQUIREMENTS

7. 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 1PD00019901, 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			Measuring Frequency	Sampling Type	Monitoring Months
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00010 - Water Temperature - C	-	-	-	-	-	-	-	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
00665 - Phosphorus, Total (P) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
00900 - Hardness, Total (CaCO3) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
31648 - E. coli - #/100 ml	-	-	-	-	-	-	-	1 / 2 Weeks	Grab	June - Aug

NOTES for Station Number 1PD00019901:

- a. Water temperature, pH, ammonia-Nitrogen, TKN, nitrite+nitrate, phosphorus, and e. coli - See Part II, Item N.

Part I, C - Schedule of Compliance

A. Municipal Pretreatment Schedule

1. The permittee shall evaluate the adequacy of local industrial user limitations to prevent the introduction of pollutants into the POTW which will interfere with the operation of the POTW, pass through the POTW in amounts that exceed water quality standard-based limits, be incompatible with the POTW, or limit wastewater or sludge use options. Technical justification for revising local industrial user limitations to attain compliance with final table limits, along with a pretreatment program modification request, or technical justification for retaining existing local industrial user limitations shall be submitted for acceptance to Ohio EPA, Central Office Pretreatment Unit and to Ohio EPA, Southwest District Office, as soon as possible, but no later than August 1, 2024.

Technical justification is required for arsenic, barium, cadmium, total chromium, dissolved hexavalent chromium, copper, free cyanide, lead, mercury, molybdenum, nickel, selenium, silver, and zinc unless screening of wastewater and sludge indicate these pollutants are not present in significant amounts. Technical justification is also required for any other pollutants where a local limit may be necessary to protect against pass through, interference or sludge disposal.

To demonstrate technical justification for new local industrial user limits or justification for retaining existing limits, a local limits technical justification report shall be submitted to Ohio EPA. The report shall be consistent with the guidance, procedures and methodologies found in Ohio EPA's and USEPA's local limits guidance documents available at:

<https://epa.ohio.gov/static/Portals/35/pretreatment/OhioEPALocalLimitsGuidance.pdf>

The report shall include the following:

- a. Identification of and justification for pollutants of concern for which local limits will be developed.
- b. Treatment plant flow and industrial flows to which local limits will be applied. If the POTW is accepting any hauled waste include for each type of hauled waste (e.g. landfill leachate, septage), at least 5 data points detailing the dates and volumes of discharge and sampling results for all the pollutants of concern.
- c. Domestic/background concentrations. To determine domestic/background concentrations, the permittee shall, at a minimum, sample at three different locations for five consecutive days or two different locations for seven consecutive days. These locations shall, to the extent possible, convey only domestic wastewater.
- d. Treatment plant removal efficiencies. Whenever possible, site specific removal efficiencies shall be determined using actual plant data with analytical detection levels that are sensitive enough to provide values above the reporting level (RL) or practical quantification limit (PQL).
- e. A comparison of maximum allowable headworks loadings based on all applicable criteria. Criteria may include sludge disposal, NPDES permit limits, waste load allocation values, and interference with biological processes such as activated sludge, sludge digestion, nitrification, etc. Calculation tables can be found on the Ohio EPA website at:
<https://epa.ohio.gov/static/Portals/35/pretreatment/OhioEPALocalLimitsGuidance.pdf>

- f. If revised industrial user discharge limits are proposed, the method of allocating available pollutant loads to industrial users.
- g. If narrative or best management practices (BMPs) are proposed as local limits, information on how they will be implemented. When appropriate, industrial user discharge limits may include narrative local limits requiring industrial users to develop and implement BMPs. These narrative local limits may be used either alone or as a supplement to numeric limits.
- h. Supporting data, assumptions, and methodologies used in establishing the information in item 1.a through 1.g above.
- i. If new or revised industrial user discharge limits are proposed, the stamp and signature of a licensed Ohio professional engineer.

2. Revisions. The permittee shall submit a revised local limit technical justification report within 90 days of receiving notification from Ohio EPA of deficiencies in the submitted report.

3. If revisions to local industrial user limitations including best management practices are determined to be necessary, the permittee shall incorporate revised local industrial user limitations in all industrial user control documents, as applicable, no later than 4 months after the date of Ohio EPA's approval.

4. Sampling Methods

a. Mercury: If the permittee uses EPA Method 245.1 or 245.2 to sample domestic background locations and mercury concentrations are below detection, the permittee shall use EPA method 1631 or 245.7 to quantify domestic background contributions of mercury.

b. Free Cyanide: The permittee shall use ASTM D7237, OIA-1677-09, or ASTM D4282-02 to quantify domestic background contributions of free cyanide. [Note: The use of ASTM D4282-02 requires supporting documentation that it meets the requirement of a "sufficiently sensitive" test procedure as defined in 40 CFR 122.44(i)(1)(iv)].

B. Municipal Construction Schedule to meet final limits at outfall 001

1. This entity shall attain compliance with the final effluent limitations of the permit as expeditiously as practicable, but not later than the dates developed in accordance with the following schedule:

a. Submit detail plans for plant and sewer system improvements as soon as possible. (completed)

b. Advertise for construction bids, receive bids, and award contracts as soon as possible, but not later than December 1, 2022.

c. Commence construction as soon as possible, but not later than April 1, 2023. Notify the appropriate Ohio EPA District Office within seven days of construction initiation.

d. Not later than April 1, 2024, submit a progress report to the Southwest District Office of Ohio EPA regarding construction of the plant improvements.

e. Complete construction as soon as possible, but not later than September 1, 2024. Notify the appropriate Ohio EPA District Office within seven days of construction completion.

f. Attain operational level of the treatment works and meet final effluent limitations as soon as possible, but not later than September 1, 2024. Notify the appropriate Ohio EPA District Office within seven days of attaining operational level.

Part II, Other Requirements

A. Operator Certification Requirements

1. Classification

a. In accordance with Ohio Administrative Code 3745-7-04, the sewage treatment facility shall be classified as a Class III treatment works. By August 1, 2024, at the completion of the wastewater treatment plant modification and expansion, the sewage treatment facility shall be classified as a Class IV treatment works. The permittee shall designate one or more professional operator of record to oversee the technical operation of the treatment works with a valid certification of a class equal to or greater than the classification of the treatment works.

b. All sewerage (collection) systems that are tributary to this treatment works are Class II sewerage systems in accordance with paragraph (B)(1)(b) of rule 3745-7-04 of the Ohio Administrative Code. The permittee shall designate one or more professional operator of record to oversee the technical operation of the sewerage (collection) system with a valid certification of a class equal to or greater than the classification of the sewerage (collection) system.

2. Professional Operator of Record

a. Within three days of a change in a professional 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:

<http://epa.ohio.gov/Portals/28/documents/opcert/Operator%20of%20Record%20Notification%20Form.pdf>

b. All applications for renewal of this NPDES permit shall include an updated Operator of Record Notification form along with other necessary forms and fees to be considered a complete application.

c. The professional operator of record for a class II, III, or IV treatment works or class II sewerage system may be replaced by a backup professional 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. This provision may not be used to routinely circumvent minimum staffing requirements.

d. Upon proper justification, such as military leave or long-term illness, the director may authorize the replacement of the professional operator of record for a class II, III, or IV treatment works or class II sewerage system by a backup professional 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 professional 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. The permittee shall ensure that the collection system professional operator of record or a professional operator that is certified in the field of wastewater collection or wastewater treatment, class A operators excluded, is physically present at the collection system in accordance with the minimum staffing requirements per paragraph (C)(2) 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 (e.g., retirement of a professional operator listed in the approved staffing plan, loss of the professional operator of record, reduction in the workforce, removal or failure of automation or continuous monitoring, etc.) 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.

4. Additional Staffing Requirements

Visits to all treatment works shall be performed by the permittee, the permittee's representative, or agent five days a week and noted in the operational and maintenance records required by rule 3745-7-09 of the Administrative Code. Visits shall not be necessary when the treatment works is not in operation.

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

Sampling Station	Description of Location
1PD00019001	Final effluent from wastewater treatment plant prior to discharge to the Great Miami River. (Lat: 40 N 01 ' 30 "; Long: 84 W 11 ' 07 ")
1PD00019300	System-wide sanitary sewer overflow occurrences.
1PD00019601	Plant influent.
1PD00019602	Plant bypass from flow equalization.
1PD00019581	Sludge to land application.
1PD00019586	Sludge hauled to a sanitary landfill.
1PD00019588	Sludge hauled to another NPDES permit holder in an emergency
1PD00019801	Upstream of the wastewater treatment plant on the Great Miami River at the State Route 41 bridge.
1PD00019901	Downstream of the wastewater treatment plant on the Great Miami River at the Tipp-Elizabeth Road bridge.

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. Sanitary Sewer Overflow (SSO) Reporting Requirements

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:

<https://epa.ohio.gov/divisions-and-offices/surface-water/guides-manuals/permits-program-technical-assistance>

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

a) Discharge Monitoring Reports (DMRs)

Sanitary sewer overflows that enter waters of the state, either directly or through a storm sewer or other conveyance, shall be reported on your DMRs. 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. The report may be submitted electronically using the NPDES Annual Sanitary Sewer Overflow Report available through the Ohio EPA eBusiness Center, Division of Surface Water NPDES Permit Applications service. Alternatively, you may submit one hardcopy of the report 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. 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:

<https://epa.ohio.gov/divisions-and-offices/surface-water/guides-manuals/permits-program-technical-assistance>

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.

E. 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.

F. 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.

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

H. 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).

I. Tracking of Group 4 Parameters

A preliminary effluent limit (PEL) has been provided below for parameters with a projected effluent quality (PEQ) equivalent to or exceeding seventy-five percent of the PEL. In accordance with rule 3745-33-07(A)(2) of the Ohio Administrative Code, the permittee must report in writing, any effluent concentration sample result greater than the PEL values listed below to Ohio EPA, Southwest District Office. Written notification must be submitted within 30 days of an effluent concentration sample result that exceeds the PEL and must detail the reasons why the PEL has been exceeded and the expectation of continued levels above the PEL.

Parameter	PEL(avg)	PEL(max.)	PEL(avg)*	PEL(max.)*
Barium	354 ug/l	3608 ug/l	343 ug/l	3478 ug/l

* After August 1, 2024

The permittee must reduce discharge levels to below the PEL if either of the following conditions are met:

1. The maximum detected concentration per month is greater than the maximum PEL for four or more months during a consecutive six-month period; or
2. The thirty-day average for any pollutant is greater than the average PEL for two or more months during a consecutive six-month period; and

If the permittee cannot reduce discharge levels below the PEL within six months after either of conditions 1 or 2 above are met, the permittee may request to modify the permit to contain a compliance schedule. This request shall contain justification for the additional time necessary to reduce discharge levels.

J. 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.

K. 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.

L. Currently there are three approved methods for free cyanide listed in 40 CFR 136 that have a quantification level lower than any water quality-based effluent limits: ASTM D7237-10, OIA-1677-09, and ASTM D4282-02. (Note: The use of ASTM D4282-02 requires supporting documentation that it meets the requirement of a sufficiently sensitive test procedure as defined in 40 CFR 122.44(i)(1)(iv)). The permittee shall begin using one of these approved methods as soon as possible. The permittee must continue using one of these approved methods.

M. Monitoring for Dissolved Orthophosphate (as P)

The permittee shall monitor for dissolved orthophosphate by grab sample. The permittee shall filter the grab sample within 15 minutes of collection using a 0.45-micron filter. The filtered sample must be analyzed within 48 hours. Samples shall be collected at such times and locations, and in such fashion, as to be representative of the facility's overall performance.

N. Sampling for these parameters at station 1PD00019001, 1PD00019601, and 1PD00019901 shall occur the same day.

O. Sampling at station 1PD00019001 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 1PD00019601 for the same parameters on the same day.

P. Sampling at station 1PD00019601 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 1PD00019001 for the same parameters on the same day.

Q. 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.

R. 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.

S. No later than March 1 of each calendar year, the Permittee shall submit a report summarizing the sewage sludge disposal, use, storage, or treatment activities of the Permittee during the previous calendar year. The report shall be submitted through the Ohio EPA eBusiness Center, Division of Surface Water NPDES Permit Applications service.

T. 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.

U. The Permittee is authorized to dispose of sewage sludge by transferring the sewage sludge to another NPDES permit holder in an emergency. This station is included in the authorized list of stations in Part II of this permit; however, a table is not included in Part 1.B for this station. If this station is used in an emergency situation, the Permittee shall report the total amount of sludge taken to another facility on the Permittee's Annual Sludge Report. The permittee does not need to report sewage sludge transferred to another facility in an emergency on their Discharge Monitoring Report (DMR).

V. The permittee shall use either EPA Method 1631 or EPA Method 245.7 promulgated under 40 CFR 136 to comply with the influent and effluent mercury monitoring requirements of this permit.

W. The permittee shall maintain a permanent sign on the stream bank at each outfall that is regulated under this NPDES permit and discharges to the Great Miami River. This includes final outfalls and bypasses. The sign 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 sign 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 sign is replaced or reset, it shall comply with the requirements of this section.

X. Biomonitoring Program Requirements

The permittee shall continue to implement an effluent biomonitoring program to determine the toxicity of the effluent from outfall 1PD00019001.

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, 1991 (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 the term of this permit, the permittee shall conduct yearly chronic toxicity tests using Ceriodaphnia dubia and fathead minnows (Pimephales promelas) on effluent samples from outfall 1PD00019001. These tests shall be conducted as specified in Section 2 of the biomonitoring guidance.

2. Acute Bioassays

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 1PD00019801. 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. The test report may be submitted electronically using the acute or chronic NPDES Biomonitoring Report Form available through the Ohio EPA eBusiness Center, Division of Surface Water NPDES Permit Applications service. Alternatively, the permittee may submit a hard copy of the 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

TU_a = Acute Toxic Units = 100/LC50 or 100/EC50

TU_c = Chronic Toxic Units = 100/square root of NOEC x LOEC

Y. Pretreatment Program Requirements

The permittee's pretreatment program initially approved on November 14, 1984 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. Funding

The permittee shall have sufficient resources and qualified personnel to fully implement all aspects of its approved pretreatment program.

3. 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.

4. 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.

5. 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:

Arsenic 287 ug/l
Barium 343 ug/l
Cadmium 10.9 ug/l
Chromium, hexavalent 21 ug/l
Chromium, total 401 ug/l
Copper 42 ug/l
Free Cyanide 23 ug/l
Lead 47 ug/l
Mercury 12 ng/l
Molybdenum 38394 ug/l
Nickel 246 ug/l
Selenium 9.5 ug/l
Silver 2.5 ug/l
Zinc 525 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.

6. Control Mechanisms

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

7. 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.

8. 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. 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.

9. 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 January 20th 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.

10. Reporting

All reports required under this section shall be submitted either through Ohio EPA's eBusiness Center or by mail. The Ohio EPA eBusiness Center can be found in the link: <https://ebiz.epa.ohio.gov/login.html>

If submitting hardcopies by mail, reports shall be sent 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 April, July, October and January, 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 February 1st 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.

11. 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.

12. 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.

Z. Storm Water

To comply with industrial storm water regulations, the permittee submitted a form for "No Exposure Certification" which was signed on December 16, 2021. Compliance with the industrial storm water regulations must be re-affirmed every five years. No later than December 16, 2026, the permittee must submit a new form for "No Exposure Certification" or make other provisions to comply with the industrial storm water regulations.

PART III - GENERAL CONDITIONS

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 LIMITATION

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 waterfowl;
- 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 growth 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:

<https://epa.ohio.gov/divisions-and-offices/surface-water/permitting/electronic-business-services>

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 a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (a) 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 (b) The manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions that 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 a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

3. In the case of a municipal, state or other public facility, by either the principal executive officer, the 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:

<https://epa.ohio.gov/divisions-and-offices/surface-water/guides-manuals/edmr-pin-information-and-application>

C. DMRs submitted using e-DMR shall be submitted to Ohio EPA by the 20th day of the month following the month-of-interest.

D. 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.

E. 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 ensure 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.ohio.gov
Southwest District Office: swdo24hournpdes@epa.ohio.gov
Northwest District Office: nwdo24hournpdes@epa.ohio.gov
Northeast District Office: nedo24hournpdes@epa.ohio.gov
Central District Office: cdo24hournpdes@epa.ohio.gov
Central Office: co24hournpdes@epa.ohio.gov

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:

<https://epa.ohio.gov/divisions-and-offices/surface-water/permitting/individual-wastewater-discharge-permits>

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.ohio.gov
Southwest District Office: swdo24hournpdes@epa.ohio.gov
Northwest District Office: nwdo24hournpdes@epa.ohio.gov
Northeast District Office: nedo24hournpdes@epa.ohio.gov
Central District Office: cdo24hournpdes@epa.ohio.gov
Central Office: co24hournpdes@epa.ohio.gov

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:

<https://epa.ohio.gov/divisions-and-offices/surface-water/permitting/individual-wastewater-discharge-permits>

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:

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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 any time 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

Notwithstanding 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.

National Pollutant Discharge Elimination System (NPDES) Permit Program

F A C T S H E E T

Regarding an NPDES Permit to Discharge to Waters of the State of Ohio
for the Troy Wastewater Treatment Plant

Public Notice No.: 155599
Public Notice Date: August 22, 2022
Comment Period Ends: October 6, 2022

OEPA Permit No.: 1PD00019*ND
Application No.: OH0027758

Name and Address of Applicant:

City of Troy
100 S. Market Street
Troy, OH 45373

Name and Address of Facility Where

Discharge Occurs:

Troy Wastewater Treatment Plant
1400 Dye Mill Road
Troy, OH 45373
Miami County

Receiving Water: Great Miami River

Subsequent Stream Network: Ohio River

Introduction

Development of a Fact Sheet for NPDES permits is mandated by Title 40 of the Code of Federal Regulations, Section 124.8 and 124.56. This document fulfills the requirements established in those regulations by providing the information necessary to inform the public of actions proposed by the Ohio Environmental Protection Agency, as well as the methods by which the public can participate in the process of finalizing those actions.

This Fact Sheet is prepared in order to document the technical basis and risk management decisions that are considered in the determination of water quality based NPDES Permit effluent limitations. The technical basis for the Fact Sheet may consist of evaluations of promulgated effluent guidelines, existing effluent quality, instream biological, chemical and physical conditions, and the relative risk of alternative effluent limitations. This Fact Sheet details the discretionary decision-making process empowered to the Director by the Clean Water Act and Ohio Water Pollution Control Law (ORC 6111). Decisions to award variances to Water Quality Standards or promulgated effluent guidelines for economic or technological reasons will also be justified in the Fact Sheet where necessary.

No antidegradation review was necessary.

Effluent limits based on available treatment technologies are required by Section 301(b) of the CWA. Many of these have already been established by the United States Environmental Protection Agency (U.S. EPA) in the effluent guideline regulations (a.k.a. categorical regulations) for industry categories in 40 CFR Parts 405-499. Technology-based regulations for publicly owned treatment works are listed in the Secondary Treatment Regulations (40 CFR Part 133). If regulations have not been established for a category of dischargers, the director may establish technology-based limits based on best professional judgment (BPJ).

Ohio EPA reviews the need for water-quality-based limits on a pollutant-by-pollutant basis. Wasteload allocations (WLAs) are used to develop these limits based on the pollutants that have been detected in the discharge, and the receiving water's assimilative capacity. The assimilative capacity depends on the flow in the water receiving the discharge, and the concentration of the pollutant upstream. The greater the upstream flow, and the lower the upstream concentration, the greater the assimilative capacity is. Assimilative capacity may represent dilution (as in allocations for metals), or it may also incorporate the break-down of pollutants in the receiving water (as in allocations for oxygen-demanding materials).

The need for water-quality-based limits is determined by comparing the WLA for a pollutant to a measure of the effluent quality. The measure of effluent quality is called Projected Effluent Quality (PEQ). This is a statistical measure of the average and maximum effluent values for a pollutant. As with any statistical method, the more data that exists for a given pollutant, the more likely that PEQ will match the actual observed data. If there is a small data set for a given pollutant, the highest measured value is multiplied by a statistical factor to obtain a PEQ; for example, if only one sample exists, the factor is 6.2, for two samples - 3.8, for three samples - 3.0. The factors continue to decline as samples sizes increase. These factors are intended to account for effluent variability, but if the pollutant concentrations are fairly constant, these factors may make PEQ appear larger than it would be shown to be if more sample results existed.

Procedures for Participation in the Formulation of Final Determinations

The proposed modification is tentative but shall become final on the effective date unless (1) an adjudication hearing is requested, (2) the Director withdraws and revises the proposed modification after consideration of the record of a public meeting or written comments, or (3) upon disapproval by the Administrator of the U.S. Environmental Protection Agency.

Within forty-five (45) days of publication of this notice, any person may submit written comments, a statement as to why the proposed modification should be changed, a request for a public meeting on the proposed modification and/or a request for notice of further actions concerning the modification. All communications timely received will be considered in the final formulation of the modification. If significant public interest is shown a public meeting will be held prior to finalization of the modification.

Within thirty (30) days of the issuance of the proposed modification any officer of an agency of the state or of a political subdivision, acting in his representative capacity or any person aggrieved or adversely affected by issuance of it may request an adjudication hearing by submitting a written objection in accordance with Ohio Revised Code Section 3745.07. Since all other conditions of the permit remain in effect, a hearing may not be requested on any issues other than the proposed modification. If an adjudication hearing is requested, the existing NPDES permit will remain in effect until the hearing is resolved. Following the finalization of the modification by the Director, any person who was a party to an adjudication hearing may appeal to the Environmental Review Appeals Commission.

Requests for public meetings shall be in writing and shall state the action of the Director objected to, the questions to be considered, and the reasons the action is contested. Such requests should be addressed to:

**Legal Records Section
Ohio Environmental Protection Agency
Lazarus Government Center
P.O. Box 1049**

Columbus, Ohio 43216-1049

Interested persons are invited to submit written comments upon the proposed modification. Comments should be submitted in person or by mail no later than 30 days after the date of this Public Notice. Deliver or mail all comments to:

**Ohio Environmental Protection Agency
Attention: Division of Surface Water
Permits and Compliance Section
Lazarus Government Center
P.O. Box 1049
Columbus, Ohio 43216-1049**

The OEPA permit number and Public Notice numbers should appear on each page of any submitted comments. All comments received no later than 30 days after the date of the Public Notice will be considered.

Citizens may conduct file reviews regarding specific companies or sites. Appointments are necessary to conduct file reviews, because requests to review files have increased dramatically in recent years. The first 250 pages copied are free. For requests to copy more than 250 pages, there is a five-cent charge for each page copied. Payment is required by check or money order, made payable to Treasurer State of Ohio.

Location of Discharge/Receiving Water Use Classification

The Troy wastewater treatment plant (WWTP) discharges to the Great Miami River at River Mile 105.62. Figure 1 shows the location of the WWTP on the Great Miami River. Figure 2 shows the approximate location of the facility.

This segment of the Great Miami River is described by Ohio EPA River Code: 14-001, Hydrologic Unit Code: 05080001-20-05, Large River Assessment Unit: 05080001-90-01, County: Miami, Ecoregion: Eastern Corn Belt Plains. This reach of the Great Miami River is designated for the following uses under Ohio's WQS (OAC 3745-1-21): Exceptional Warmwater Habitat (EWH), Agricultural Water Supply, Industrial Water Supply, and Primary Contact Recreation and Public Water Supply.

Use designations define the goals and expectations of a waterbody. These goals are set for aquatic life protection, recreation use and water supply use, and are defined in the Ohio WQS (OAC 3745-1-07). The use designations for individual waterbodies are listed in rules -08 through -32 of the Ohio WQS. Once the goals are set, numeric WQS are developed to protect these uses. Different uses have different water quality criteria.

Use designations for aquatic life protection include habitats for coldwater fish and macroinvertebrates, warmwater aquatic life and waters with exceptional communities of warmwater organisms. These uses all meet the goals of the federal CWA. Ohio WQS also include aquatic life use designations for waterbodies which cannot meet the CWA goals because of human-caused conditions that cannot be remedied without causing fundamental changes to land use and widespread economic impact. The dredging and clearing of some small streams to support agricultural or urban drainage is the most common of these conditions. These streams are given Modified Warmwater or Limited Resource Water designations.

Recreation uses are defined by the depth of the waterbody and the potential for wading or swimming. Uses are defined for bathing waters, swimming/canoeing (Primary Contact Recreation) and wading only (Secondary Contact which are generally waters too shallow for swimming or canoeing).

Water supply uses are defined by the actual or potential use of the waterbody. Public Water Supply designations apply near existing water intakes so that waters are safe to drink with standard treatment. Most other waters are designated for agricultural water supply and industrial water supply.

FACILITY DESCRIPTION

The Troy WWTP was constructed in 1975 and last upgraded in 2001. The average design flow is 7.0 million gallons per day (MGD). Troy WWTP serves the cities of Troy and portions of Miami County, a total population of approximately 26,000. Troy WWTP has the following treatment processes which are shown on Figure 3:

- Screw pumps
- Bar screen
- Grit removal
- Scum removal
- Flow equalization
- Primary clarification
- Conventional activated sludge aeration
- Secondary clarification
- Ultraviolet disinfection
- Post aeration

When flow rates exceed the maximum hydraulic capacity of primary and secondary treatment units (20 MGD), excess flows are stored in the 2 MG equalization basin and returned to the headworks when influent rates subside. When the basin is full, excess flows are diverted to the facility's bypass, monitored at station 602, and blended with secondary treatment effluent prior to UV disinfection and subsequent monitoring at station 001.

The collection system is 100% separate sanitary sewers.

The City of Troy has an approved pretreatment program. Two, non-categorical industrial users discharge approximately 0.15 MGD average daily flow into the sanitary sewer system. Three, categorical industrial users discharge 0.08 MGD average daily flow as well.

The City's potable water comes from municipal well water.

Troy WWTP utilizes the following sewage sludge treatment processes:

- Gravity thickening
- Mechanical dewatering

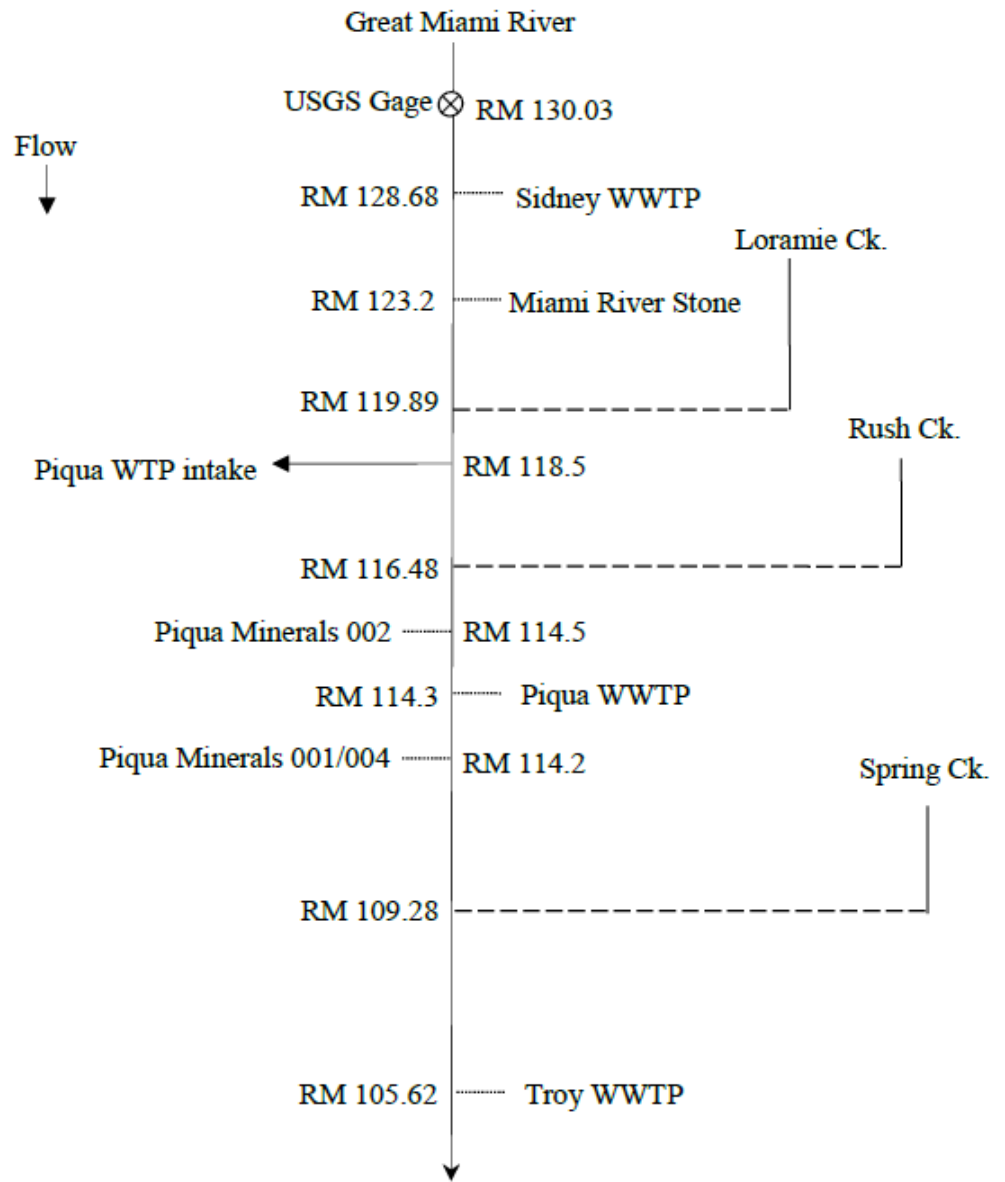
Treated sludge is disposed in a municipal landfill. The city also has the option to land apply treated sludge at agronomic rates.

Basis of the Modification

The City of Troy has applied for a Permit to Install to make improvements to their secondary treatment units and expand capacity from 7 to 9 MGD. The specific improvements involve replacement of existing blowers, diffusers, aeration piping and the creation of an unaerated selector zone within the existing tank volume with concrete baffles and mixers. A third aeration tank (same size as two existing) is also being added. Improvements to the clarifier drives and pumps are also involved. The application included lower concentration limits of parameters that have existing loading limits. The city does not wish to request higher loading limits; concentration limits in the NPDES permit will be lowered to keep the existing load limits for Total Suspended Solids, Ammonia-Nitrogen and Carbonaceous Biological Oxygen Demand (5-day). Table 1 shows the proposed final concentration limits for these parameters. A schedule of compliance is included to meet the final effluent limits for outfall 001.

Other modifications to the NPDES will include extending the pretreatment local limits evaluation to August 2024 to coincide with completion of the expansion/improvements. Under the pretreatment program requirements in Part II of the permit, the water quality-based parameters listing for local limits development have been recalculated based on the expanded design flow. In Part II, the Group 4 Tracking Requirement for Barium is changed to include the proper PEL for Barium after the plant expansion is completed. Lastly, as a result of the plant upgrade, the wastewater treatment plant will be classified as a Class IV treatment works upon construction completion. This reclassification is reflected in a change to Part II Operator Certification conditions.

Figure 1. Great Miami River Study Area



RM = River mile
WTP = Water Treatment Plant
WWTP = Waste Water Treatment Plant
USGS = United States Geological Service

Figure 2. Location of Troy WWTP.

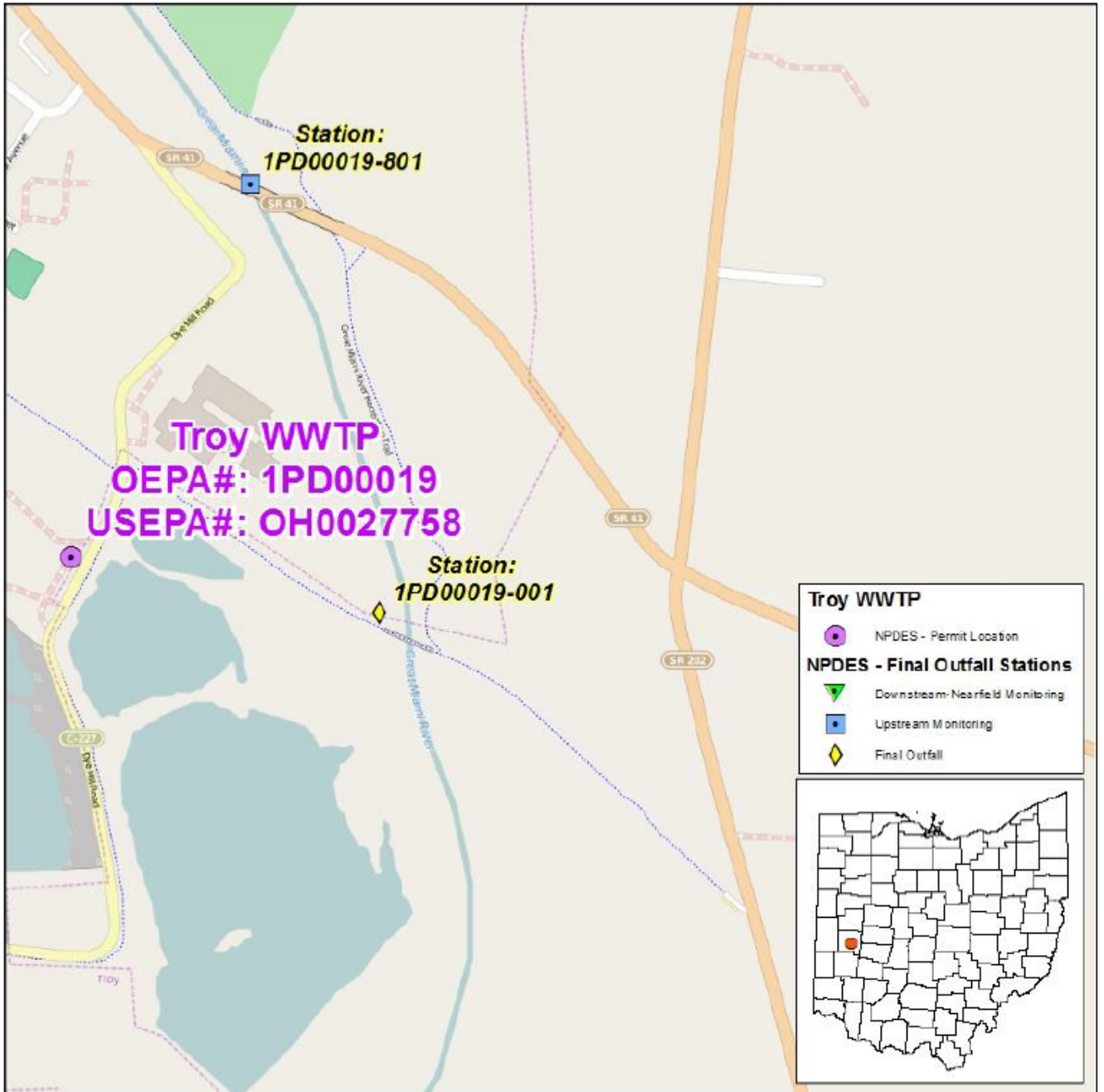


Figure 3. Diagram of Wastewater Treatment System.

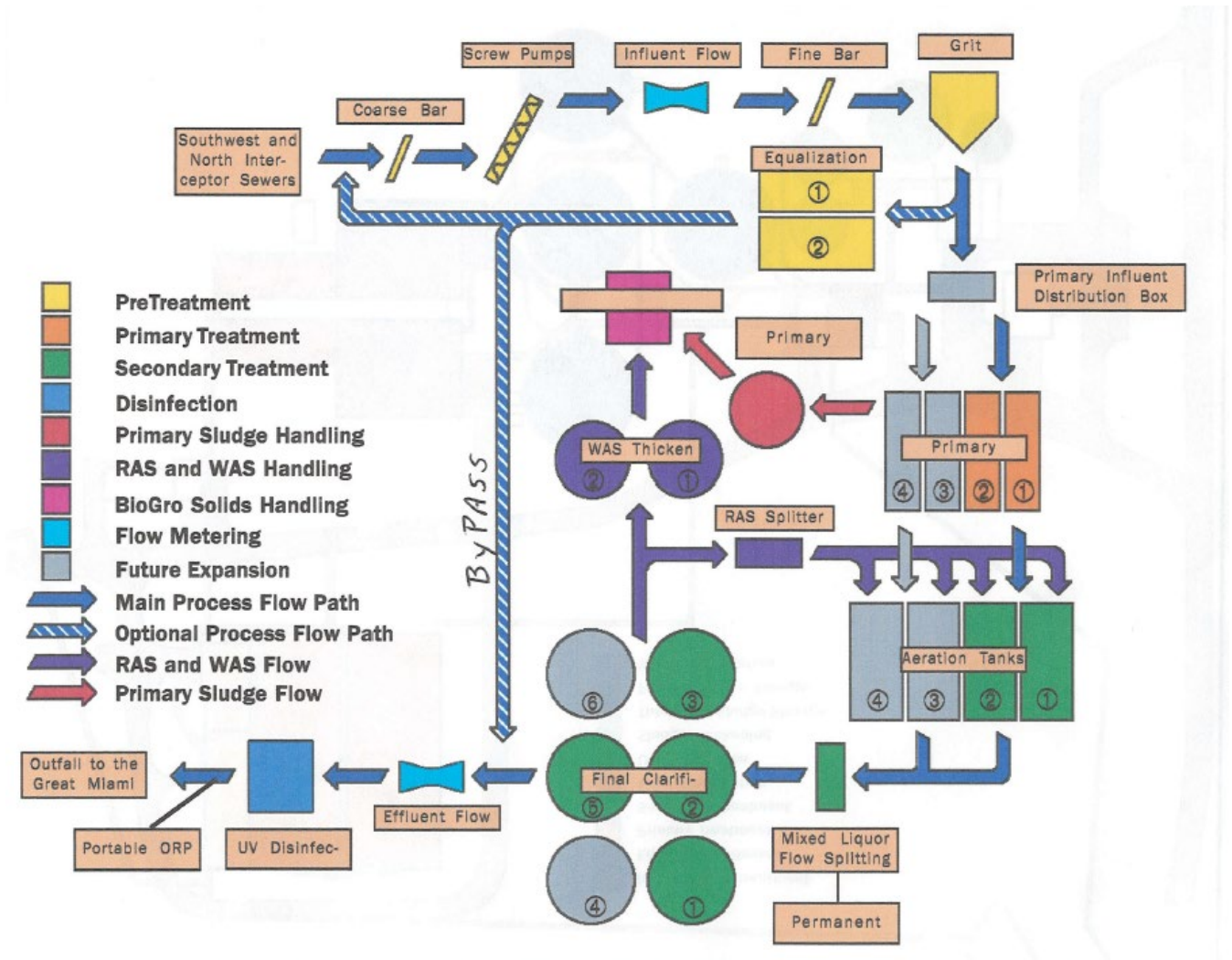


Table 1. Modified Effluent Limits for Outfall 001

Parameter	Units	Concentration		Loading (kg/day) ^a		Basis ^b
		30 Day Average	Daily Maximum	30 Day Average	Daily Maximum	
Water Temperature	°C	----- Monitor -----				M ^c
Dissolved Oxygen	mg/L	--	6.0 ^e	--	--	WQS
Total Suspended Solids	mg/L	21.0	31.5 ^d	715	1060 ^d	PD
Oil & Grease	mg/L	--	10	--	--	WQS
Ammonia						
June-September	mg/L	1.5	2.25 ^d	50.3	74.2 ^d	PD
Mar. - May, Oct. - Nov.	mg/L	6.0	9.0 ^d	204	307 ^d	PD
Dec. - Feb.	mg/L	10.0	15.0 ^d	341	523 ^d	PD
Total Kjeldahl Nitrogen	mg/L	----- Monitor -----				M
Nitrate+Nitrite	mg/L	----- Monitor -----				M
Phosphorus	mg/L	----- Monitor -----				PMR
Orthophosphate, Dissolved	mg/L	----- Monitor -----				PMR
Barium	µg/L	----- Monitor -----				RP
Nickel	µg/L	----- Monitor -----				M
Zinc	µg/L	----- Monitor -----				M
Cadmium	µg/L	----- Monitor -----				M
Lead	µg/L	----- Monitor -----				M
Chromium	µg/L	----- Monitor -----				M
Copper	µg/L	----- Monitor -----				RP
Hex. Chromium (dissolved)	µg/L	----- Monitor -----				M
<i>E. coli</i>	#/100 ml	126	284 ^d	--	--	WQS
Flow Rate	MGD	----- Monitor -----				M ^c
Mercury	ng/L	----- Monitor -----				M
Cyanide, Free	µg/L	----- Monitor -----				M
Acute Toxicity						
<i>Ceriodaphnia dubia</i>	TU _a	----- Monitor -----				WET
<i>Pimephales promelas</i>	TU _a	----- Monitor -----				WET
Chronic Toxicity						
<i>Ceriodaphnia dubia</i>	TU _c	----- Monitor -----				WET
<i>Pimephales promelas</i>	TU _c	----- Monitor -----				WET
pH	SU	6.5 - 9.0		--	--	WQS
Total Filterable Residue	mg/L	----- Monitor -----				M
Carbonaceous Biochemical Oxygen Demand (5 day)						
Mar. – Nov.	mg/L	10.9	16.35 ^d	371	556 ^d	PD
Dec. – Feb.	mg/L	17.9	26.85 ^d	609	901 ^d	PD

^a Effluent loadings based on average design discharge flow of 7.0 MGD.

^b **Definitions:**
M = Division of Surface Water NPDES Permit Guidance 1: Monitoring frequency requirements for Sanitary Discharges
PD = Plant Design (OAC 3745-33-05(E))
PMR=Phosphorus Monitoring Requirements at OAC 6111.03
RP = Reasonable Potential for requiring monitoring requirements in permits (OAC 3745-33-07(A))
WET = Minimum testing requirements for whole effluent toxicity [OAC 3745-33-07(B)(11)] toxicity in NPDES permits [OAC 3745-33-07(B)]
WQS = Ohio Water Quality Standards (OAC 3745-1)

- ^c Monitoring of flow and other indicator parameters is specified to assist in the evaluation of effluent quality and treatment plant performance.
- ^d 7 day average limit.
- ^e Minimum.