Ohio EPA Permit No.: 2PD00020*OD
Application No: OH0025925

Action Date: February 5, 2024
Effective Date: March 1, 2024
Expiration Date: February 28, 2029

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 Kenton

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from the City of Kenton wastewater treatment works, located at 230 Gilmore Rd, Kenton, Ohio, Hardin County, and discharging to Scioto 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.

Anne M. Vogel
Director

Total Pages: 36

PART I, A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outfall: 2PD00020001. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 001 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	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	Multiple Grab	Summer
00300 - Dissolved Oxygen - mg/l	-	5.0	-	-	-	-	-	1/Day	Multiple Grab	Winter
00530 - Total Suspended Solids - mg/l	-	-	18.0	12.0	-	164	109	3/Week	24hr Composite	All
00552 - Oil and Grease, Hexane Extr Method - mg/l	10.0	-	-	-	-	-	-	1 / 2 Weeks	Grab	All
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	3.0	2.0	-	27.2	18.2	3/Week	24hr Composite	Summer
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	14.7	8.8	-	133.5	79.9	3/Week	24hr Composite	Winter
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
00981 - Selenium, 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

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
01113 - Cadmium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly
01114 - Lead, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly
01118 - Chromium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly
01119 - Copper, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly
01220 - Chromium, Dissolved Hexavalent - ug/l	-	-	-	-	-	-	-	1/Month	Grab	All
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	June
61426 - Chronic Toxicity, Ceriodaphnia dubia - TUc	-	-	-	-	-	-	-	1/Year	24hr Composite	June
61427 - Acute Toxicity, Pimephales promelas - TUa	-	-	-	-	-	-	-	1/Year	24hr Composite	June
61428 - Chronic Toxicity, Pimephales promelas - TUc	-	-	-	-	-	-	-	1/Year	24hr Composite	June
61941 - pH, Maximum - S.U.	9.0	-	-	-	-	-	-	1/Day	Multiple Grab	All
61942 - pH, Minimum - S.U.	-	6.5	-	-	-	-	-	1/Day	Multiple Grab	All
70300 - Residue, Total Filterable - mg/l	-	-	-	-	-	-	-	1/2 Weeks	24hr Composite	All
80082 - CBOD 5 day - mg/l	-	-	13.0	8.7	-	118	77.0	3/Week	24hr Composite	Summer
80082 - CBOD 5 day - mg/l	-	-	20.3	13.3	-	209	136	3/Week	24hr Composite	Winter

Notes for Station Number 2PD00020001:
* Effluent loadings based on average design flow of 2.4 MGD.
a. Sampling for common parameters - See Part II, Item L.

b. Mercury - See Part II, Item S.
c. Orthophosphate - See Part II, Item T.
d. Free cyanide - See Part II, Item R.
e. Dissolved hexavalent chromium - See Part II, Item V.
f. Biomonitoring - See Part II, Item X.

PART I, B. SSO LIMITATIONS AND MONITORING REQUIREMENTS

1. SSO Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee shall monitor at Station Number 2PD00020300, 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		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
74062 - Overflow Occurrence - No./Month	-	-	-	-	-	-	-	1/Month	Total	All

Notes for Station Number 2PD00020300:

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 LIMITATIONS AND MONITORING REQUIREMENTS

2. Sludge Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee shall monitor the treatment works' final sludge at Station Number 2PD00020581, 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		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	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.

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
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 2PD00020581:

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

i. 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.

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

k. 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.

l. See Part II, Items M, N, O, and P.

PART I, B. SLUDGE LIMITATIONS AND MONITORING REQUIREMENTS

3. Sludge Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee shall monitor the treatment works' final sludge at Station Number 2PD00020586, 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		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
51129 - Sludge Fee Weight - dry tons	-	-	-	-	-	-	-	1/Year	Total	December

Notes for Station Number 2PD00020586:

a. Monitoring is required when sewage sludge is removed from the permittee's facility for disposal in a solid waste landfill. The total Sludge Fee Weight of sewage sludge disposed of in a 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 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 M, N, O, and P.

PART I, B. INFLUENT MONITORING REQUIREMENTS

4. Influent Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee shall monitor the treatment works' influent wastewater at Station Number 2PD00020601, and report to the Ohio EPA in accordance with the following table. Samples of influent used for determination of net values or percent removal must be taken the same day as those samples of effluent used for that determination. See Part II, OTHER REQUIREMENTS, for location of influent sampling.

Table - Influent Monitoring - 601 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00530 - Total Suspended Solids - mg/l	-	-	-	-	-	-	-	3/Week	24hr Composite	All
61941 - pH, Maximum - S.U.	-	-	-	-	-	-	-	1/Day	Multiple Grab	All
61942 - pH, Minimum - S.U.	-	-	-	-	-	-	-	1/Day	Multiple Grab	All
80082 - CBOD 5 day - mg/l	-	-	-	-	-	-	-	3/Week	24hr Composite	All

Notes for Station Number 2PD00020601:

a. Sampling for common parameters - See Part II, Item L.

PART I, B. BYPASS LIMITATIONS AND MONITORING REQUIREMENTS

5. Bypass Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee shall monitor the treatment plant's bypass when discharging, at Station Number 2PD00020602, 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		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00051 - Bypass Occurrence - No./Day	-	-	-	-	-	-	-	When Disch.	24hr Total	All
00052 - Bypass Total Hours Per Day - Hrs/Day	-	-	-	-	-	-	-	When Disch.	24hr Total	All
00530 - Total Suspended Solids - mg/l	-	-	-	-	-	-	-	When Disch.	Grab	All
51428 - Bypass Volume - MGAL	-	-	-	-	-	-	-	When Disch.	24hr Total	All
80082 - CBOD 5 day - mg/l	-	-	-	-	-	-	-	When Disch.	Grab	All

Notes for Station Number 2PD00020602:

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 of this permit, the permittee shall monitor the receiving stream, upstream of the point of discharge at Station Number 2PD00020801, 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		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	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	June
61435 - 96-Hr. Acute Toxicity Pimephales promela - % Affected	-	-	-	-	-	-	-	1/Year	Grab	June
61438 - 7-Day Chronic Toxicity Ceriodaphnia dubia - % Affected	-	-	-	-	-	-	-	1/Year	Grab	June
61441 - 7-Day Chronic Toxicity Pimephales promelas - % Affected	-	-	-	-	-	-	-	1/Year	Grab	June

Notes for Station Number 2PD00020801:

a. Sampling for common parameters - See Part II, Item L.

b. 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 of this permit, the permittee shall monitor the receiving stream, downstream of the point of discharge, at Station Number 2PD00020901, 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		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	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
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 2PD00020901:

a. Sampling for common parameters - See Part II, Item L.

PART I, C. - SCHEDULE OF COMPLIANCE

Milestone Summary Report

Section	Report	Event Code	Due Date
Downtown Sanitary Sewer Project	1st Report Construction Progress	3599	August 1st, 2024
System Wide Sanitary Sewer System Evaluation	Final Plan Submitted	1299	January 1st, 2024
System Wide Sanitary Sewer System Evaluation	End Construction	4599	January 1st, 2024
System Wide Sanitary Sewer System Evaluation	Infiltration Report	11599	January 1st, 2025
Downtown Sanitary Sewer Project	End Construction	4599	August 1st, 2025
Downtown Sanitary Sewer Project	Final Plan Submitted	1299	August 1st, 2025
Downtown Sanitary Sewer Project	Begin Construction	3099	February 1st, 2026
Downtown Sanitary Sewer Project	End Construction	4599	February 1st, 2027

1. Downtown Sanitary Sewer Project

The permittee shall continue to implement infrastructure improvements to the downtown sanitary and storm sewer collection systems as expeditiously as possible, but not later than the dates developed in accordance with the following schedule:

a. As soon as possible, but no later than August 1st, 2024, the permittee start construction Phase 2B, including the installation of a sanitary sewer along Main street and the alley to the north of Columbus Street, as well as storm sewer replacement on Main Street and Detroit Street. The permittee shall submit a written notice to Ohio EPA Northwest District Office within 10 days of starting construction. (Event Code 3599)

b. As soon as possible, but no later than August 1st, 2025, the permittee shall complete construction of Phase 2B. The permittee shall submit a written notice to Ohio EPA Northwest District Office within ten days of completing construction. (Event Code 4599)

c. As soon as possible, but no later than Augst 1st, 2025, the permittee shall submit to Ohio EPA a permit to install (PTI) application and detailed plans for Phase 2C, which includes the lining of sanitary sewer lines behind Main and Detroit streets, the separation of storms drains in those streets, and the replacement of water and storm lines along Franklin and Columbus Streets. (Event Code 1299)

d. As soon as possible, but no later than February 1st, 2026, the permittee shall begin construction of Phase 2C. The permittee shall submit a written notice to Ohio EPA Northwest District Office within 10 days of starting construction. (Event Code 3099)

e. As soon as possible, but no later than February 1st, 2027, the permittee shall complete construction of Phase 2C. The permittee shall submit a written notice to Ohio EPA Northwest District Office within ten days of completing construction. (Event Code 4599)

2. System Wide Sanitary Sewer System Evaluation

The permittee's collection system receives significant volumes of inflow and infiltration (I/I), which contribute to effluent violations. The permittee shall continue to implement a program to reduce I/I to its

separate sanitary sewer system as expeditiously as practicable but not later than the dates in the following schedule. The permittee shall also continue the evaluation of their downtown area.

a. As soon as possible, but no later than January 1st, 2024, the permittee shall submit for acceptance a plan to evaluate the entire sewer collection system. The plan shall include, at a minimum, the following items: (Event Code 1299)

i. A plan to develop a map that will identify the locations and characteristics of all sanitary, combined, and storm sewers in the service area. Manholes, catch basins, outfalls, and pump stations should be identified.

ii. A plan for determining sources of excessive flow in the sewer system. (i.e. smoke testing, CCTV, home inspections, acoustic sewer evaluation, visual inspection of manholes, and flow monitoring)

iii. A schedule to complete the evaluation of the entire collection system within 2 years.

iv. A list of known problem areas in the collection system, including identification of known areas of combined sewers, excessive I/I, and structural deficiencies.

v. A detailed historical summary of all I/I work (investigation and removal) that has been done to date.

b. As soon as possible, but not later than January 1st, 2024, the permittee shall complete the remaining cleaning/televising of the 24" trunk line. The permittee shall notify Ohio EPA, Northwest District Office of their decision to either line or replace the trunk line. (Event code 4599)

c. As soon as possible, but no later than January 1st, 2025, the permittee shall complete the sanitary sewer system evaluation and submit to Ohio EPA Northwest district office a report of their evaluation. This report shall include the data collected for item 2a, and any other relevant information as it pertains to I/I in their collection system. The permittee shall also submit any information regarding future I/I projects that they plan to undertake. (Event Code 11599)

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. 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 notification can be submitted either electronically via the Ohio eBusiness Center website (https://ebiz.epa.ohio.gov/login.html) or hard copy. The appropriate form can be found at the following website:

https://epa.ohio.gov/static/Portals/28/documents/opcert/Operator%20of%20Record%20Notification%20Form.pdf?ver=2018-09-11-102530-423

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
2PD00020001	Final effluent (Lat: 40 N 38' 10"; Long: 83W 35' 57")
2PD00020300	Sanitary Sewer Overflows (See Part II, Item D)
2PD00020581	Sludge removed from the plant for land application
2PD00020586	Sludge disposed to a solid waste landfill
2PD00020601	Raw influent
2PD00020602	Secondary bypass from storm flow retention tank
2PD00020801	Upstream station approximately 100 feet upstream of effluent discharge
2PD00020901	Downstream station approximately 100 feet downstream of effluent discharge

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 (DMR)

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

b) Annual Report

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

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

(ii) A table that lists the date that an overflow occurred, the unique ID of the overflow, the name of affected receiving waters (if any), and the estimated volume of the overflow (in millions of gallons). The

annual report may summarize information regarding overflows of less than approximately 1,000 gallons.

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

Not later than March 31 of each year, you must submit one copy of the annual report for the previous calendar year. 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 Ohio EPA Northwest 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. Multiple grab samples shall be comprised of at least three grab samples collected at intervals of at least three hours during the period that the plant is staffed on each day for sampling. Samples shall be collected at such times and locations, and in such fashion, as to be representative of the facility's overall performance. The critical value shall be reported.

I. 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).

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. Sampling for these parameters at station 2PD00020001, 2PD00020601, 2PD00020801, and 2PD00020901 shall occur the same day.

M. 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 and 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.

N. 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.

O. 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/STREAMS, Division of Surface Water NPDES Permit Applications service.

P. 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 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, using the edition which is current on the issuance date of the permit. 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.

Q. The permittee is authorized to dispose of sewage sludge in a sanitary landfill or by transfer to another NPDES permit holder in emergency situations only. Station 588 for transfer to another NPDES permit holder is included in the authorized list in Part II, Item B of this permit, however, effluent tables are not included in Part 1.B. If this station must be used in an emergency situation, the permittee must report the total amount of sludge taken to another facility on the permittee's Annual Sludge Report. The Discharge Monitoring Report (DMR) should not be used to report under this paragraph.

R. Monitoring for Free Cyanide (low-level)

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 use one of these approved methods.

S. Monitoring for Mercury (low-level)

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

T. 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.

U. Outfall Signage

The permittee shall maintain a permanent marker on the stream bank at each outfall that is regulated under this NPDES permit. This includes final outfalls, bypasses, and combined sewer overflows. The sign shall include, at a minimum, 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 outfall is a combined sewer outfall, the sign shall indicate that untreated human sewage may be discharged from the outfall during wet weather and that harmful bacteria may be present in the water. When an existing sign is replaced or reset, the new sign shall comply with the requirements of this section.

V. Method Detection Limits

The permittee shall use analytical procedures approved under 40 CFR 136 with method detection limits (MDLs) less than or equal to those listed below to comply with the monitoring requirements for the following parameters:

Parameter	MDL (µg/L)
Dissolved Hexavalent Chromium	6.0

W. NPDES Application Supplemental Data Submittal Requirements

a. Pursuant to Title 40 of the Code of Federal Regulations (40 CFR), Section 122.21, the permittee must sample and analyze for a list of 101 parameters, including hardness, metals, volatile organic compounds (VOCs), acid-extractable compounds, and base-neutral compounds, as part of its next NPDES permit renewal application. The permittee must provide effluent data from a minimum of three samples taken within four and one-half years prior to the date of the permit application. The complete list of parameters is contained in Table 2 of "Appendix J to Part 122 - NPDES Permit Testing Requirements for Publicly Owned Treatment Works (§122.21(j))."

b. The permittee must collect samples of effluent and analyze such samples for pollutants in accordance with analytical methods approved under 40 CFR Part 136, unless an alternative is specified in the existing NPDES permit. Except for specified pollutants (e.g. VOCs and free cyanide), 24-hour composite

samples must be used. Samples must be representative of any seasonal variation in the discharge. Existing data may be used, if available, in lieu of sampling done solely for the purpose of the application.

c. The permittee shall use sufficiently sensitive analytical methods that are capable of detecting and measuring the pollutants at, or below, the respective water quality criteria or existing permit effluent limits.

d. The required analytical data shall be submitted on a form approved by the Director of Ohio EPA.

X. Biomonitoring Program Requirements

The permittee shall continue to implement an effluent biomonitoring program to determine the toxicity of the effluent from outfall 2PD00020001.

General Requirements

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

Testing Requirements

1. Chronic Bioassays

For the duration of the permit, the permittee shall conduct chronic toxicity tests, as specified in Part I,A, using water fleas (Ceriodaphnia dubia) and fathead minnows (Pimephales promelas) on effluent samples from outfall 2PD00020001. These tests shall be conducted as specified in Section 3 of the biomonitoring guidance.

2. Acute Bioassays

For the duration of the permit, the permittee shall conduct definitive acute toxicity tests, as specified in Part I,A, using water fleas (Ceriodaphnia dubia) and fathead minnows (Pimephales promelas) on effluent samples from outfall 2PD00020001. These tests shall be conducted as specified in Section 2 of the biomonitoring guidance. Acute toxicity tests need not be performed for months in which chronic toxicity tests are conducted. Acute endpoints, as described in Section 2.H. of the biomonitoring guidance, shall be derived from the chronic test.

3. Testing of Ambient Water

In conjunction with the acute and chronic toxicity tests, upstream control water shall be collected at a point outside the zone of effluent and receiving water interaction at station 2PD00020801. 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 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

TUa = Acute Toxicity Units = 100/LC50

TUc = Chronic Toxicity Units = 100/IC25

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

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

Y. Stormwater Compliance

To comply with industrial storm water regulations, the permittee submitted a form for "No Exposure Certification" which was signed on 9/18/2023. Compliance with the industrial storm water regulations must be re-affirmed every five years. No later than 9/17/2028,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 water fowl;

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

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

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

E. In amounts that are conducive to the growth of aquatic weeds or algae to the extent that such 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

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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

FACT SHEET

Regarding an NPDES Permit to Discharge to Waters of the State of Ohio
for Kenton Wastewater Treatment Plant (WWTP)

Public Notice No.: 193684
Public Notice Date: December 27, 2023
Comment Period Ends: January 26, 2024

Ohio EPA Permit No.: 2PD00020*OD
Application No.: OH0025925

Name and Address of Applicant:
City of Kenton
111 West Franklin Street
Kenton, OH 43326

Name and Address of Facility Where Discharge Occurs:
City of Kenton WWTP
230 Gilmore Road
Kenton, OH 43326
Hardin County

Receiving Water: Scioto 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 (CFR), 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 (Ohio EPA), 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 (CWA) and Ohio Water Pollution Control Law (Ohio Revised Code [ORC] 6111). Decisions to award variances to Water Quality Standards (WQS) or promulgated effluent guidelines for economic or technological reasons will also be justified in the Fact Sheet where necessary.

Antidegradation provisions in Ohio Administrative Code (OAC) Chapter 3745-1 describe the conditions under which water quality may be lowered in surface waters. 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.

SUMMARY OF PERMIT CONDITIONS

The effluent limits and/or monitoring requirements proposed for all parameters are the same as in the current permit, except those listed below.

Monitoring for whole effluent toxicity, *Ceriodaphnia dubia* is proposed to be reduced from 2/year to 1/year. Limits for *Ceriodaphnia dubia* are proposed to be removed due to the whole effluent toxicity reasonable potential analysis placing them in category 4. Annual chronic toxicity monitoring with the determination of acute endpoints is proposed for the life of the permit. Monitoring for *Pimephales promelas* is proposed to remain at 1/year due to the whole effluent toxicity reasonable potential analysis placing them in category 4. Table 10 shows only non-detections for toxicity for *Pimephales promelas*. This satisfies the minimum testing requirement of Ohio Administrative Code (OAC) 3754-33-07(B)(11) and will adequately characterize toxicity in the plant's effluent.

Water temperature, dissolved oxygen, and pH are proposed to be removed from upstream monitoring station 2PD00020801. E. coli monitoring is proposed to be changed from 1/month to 1 / 2 weeks, and the monitoring months changed from summer to June – August at upstream monitoring station 2PD00020801. The increased monitoring over a shorter duration will facilitate impairment assessment in the receiving stream.

Monitoring for total filterable residue is proposed to be changed from 1/Quarter to 1 / 2 weeks to better characterize total filterable residue in Kenton WWTP's effluent.

Monitoring for whole effluent toxicity, *Ceriodaphnia dubia*, is proposed to be changed from 2/year to 1/year at upstream monitoring station 2PD00020801, to match the monitoring frequency at 2PD00020001.

Dissolved oxygen is proposed to be removed from downstream monitoring station 2PD00020901. E. coli monitoring frequency is proposed to be changed from 1/month to 1 / 2 weeks, and the monitoring months changed from summer to June – August at downstream monitoring station 2PD00020901. Monitoring for total phosphorus is proposed to be changed from 1/week to 1/month at downstream monitoring station 2PD00020901.

A schedule of compliance for a downtown sanitary sewer project is included in Part I.C of the permit, which details the following requirements: continuation of replacing water and storm lines in the downtown area, along with lining sanitary sewer lines.

To ensure that data is obtained that allows Ohio EPA to make water quality-related decisions regarding dissolved hexavalent chromium a special condition is proposed in Part II of the permit that provides guidance on the analytical method detection limits (MDLs) the permittee should use in analyzing for these contaminants.

In Part II of the permit, special conditions are included that address sanitary sewer overflow (SSO) reporting; operator certification, minimum staffing and operator of record; whole effluent toxicity (WET) testing;; and outfall signage.

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PROCEDURES FOR PARTICIPATION IN THE FORMULATION OF FINAL DETERMINATIONS

The draft action shall be issued as a final action unless the Director revises the draft after consideration of the record of a public meeting or written comments, or upon disapproval by the Administrator of the U.S. Environmental Protection Agency.

Within thirty days of the date of the Public Notice, any person may request or petition for a public meeting for presentation of evidence, statements or opinions. The purpose of the public meeting is to obtain additional evidence. Statements concerning the issues raised by the party requesting the meeting are invited. Evidence may be presented by the applicant, the state, and other parties, and following presentation of such evidence other interested persons may present testimony of facts or statements of opinion.

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 emailed to HClerk@epa.ohio.gov or mailed to:

Legal Records Section
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio 43216-1049

Interested persons are invited to submit written comments upon the discharge permit. Comments should be submitted by email to epa.dswcomments@epa.ohio.gov (preferred method) or delivered 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 Processing Unit
P.O. Box 1049
Columbus, Ohio 43216-1049

The Ohio EPA 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.

For additional information about this fact sheet or the draft permit, contact James Morris, (614) 644-2146, James.Morris@epa.ohio.gov.

INFORMATION REGARDING CERTAIN WATER QUALITY BASED EFFLUENT LIMITS

This draft permit may contain proposed water-quality-based effluent limits (WQBELs) for parameters that **are not** priority pollutants. (See the following link for a list of the priority pollutants: https://epa.ohio.gov/static/Portals/35/pretreatment/Pretreatment_Program_Priority_Pollutant_Detection_Limits.pdf.) In accordance with ORC 6111.03(J)(3), the Director established these WQBELs after considering, to the extent consistent with the Federal Water Pollution Control Act, evidence relating to the technical feasibility and economic reasonableness of removing the polluting properties from those wastes and to evidence relating to conditions calculated to result from that action and their relation to benefits to the people of the state and to

accomplishment of the purposes of this chapter. This determination was made based on data and information available at the time the permit was drafted, which included the contents of the timely submitted NPDES permit renewal application, along with any and all pertinent information available to the Director.

This public notice allows the permittee to provide to the Director for consideration during this public comment period additional site-specific pertinent and factual information with respect to the technical feasibility and economic reasonableness for achieving compliance with the proposed final effluent limitations for these parameters. The permittee shall email to epa.dswcomments@epa.ohio.gov (preferred method) or deliver or mail this information to:

Ohio Environmental Protection Agency
Attention: Division of Surface Water
Permits Processing Unit
P.O. Box 1049
Columbus, Ohio 43216-1049

Should the applicant need additional time to review, obtain or develop site-specific pertinent and factual information with respect to the technical feasibility and economic reasonableness of achieving compliance with these limitations, a written request for any additional time shall be sent to the above address no later than 30 days after the Public Notice Date on Page 1.

Should the applicant determine that compliance with the proposed WQBELs for parameters other than the priority pollutants is technically and/or economically unattainable, the permittee may submit an application for a variance to the applicable WQS used to develop the proposed effluent limitation in accordance with the terms and conditions set forth in OAC 3745-33-07(D). The permittee shall submit this application to the above address no later than 30 days after the Public Notice Date.

Alternately, the applicant may propose the development of site-specific WQS pursuant to OAC 3745-1-39. The permittee shall submit written notification regarding their intent to develop site specific WQS for parameters that are not priority pollutants to the above address no later than 30 days after the Public Notice Date.

LOCATION OF DISCHARGE/RECEIVING WATER USE CLASSIFICATION

Kenton WWTP discharges to the Scioto River at River Mile 211.40. Figure 1 shows the approximate location of the facility.

This segment of the Scioto River is described by Ohio EPA River Code: 02-001. A Hydrologic Unit Code: 05060001-04-01, County: Hardin, Ecoregion: Eastern Corn Belt. The Scioto River is designated for the following uses under Ohio's WQS (OAC 3745-1-09): Warmwater Habitat, Agricultural Water Supply, Industrial Water Supply, and Primary Contact Recreation.

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

Kenton WWTP was constructed in 1955 and last upgraded in 2000. The average design flow is 2.4 million gallons per day (MGD) and the peak hydraulic capacity is 12 MGD. Kenton WWTP serves the City of Kenton. Kenton WWTP has the following treatment processes (Figure 2):

- Bar Screen
- Influent Pumping
- Comminution
- Grit Removal
- Pre-Aeration
- Oxidation Ditch
- Secondary Clarification
- Ultraviolet Disinfection
- Post Aeration

Kenton WWTP has an internal bypass, monitored as station 602. When secondary treatment capacity is exceeded, excess flow is sent to a stormwater retention tank. Stored wastewater can be rerouted back to the influent pump station when influent flow rates recede. When the stormwater tank is full it overflows, bypassing treatment in the oxidation ditch. Bypass flow is then mixed with fully treated effluent at the UV system for disinfection and prior to monitoring at station 001, and then receives post aeration treatment before being discharged to the Scioto River.

The City of Kenton has 100% separate sewers.

The City of Kenton does not have an approved pretreatment program. The City of Kenton has 25 non-categorical users that discharge 0.05 MGD of flow.

The City of Kenton's potable water comes from groundwater wells.

Kenton WWTP utilizes the following sewage sludge treatment processes:

- Gravity Thickening
- Aerobic Digestion
- Polymer addition
- Belt Press
- Land Application

Table 1 shows the last five years of sludge removed from Kenton WWTP. Treated sludge is land applied.

DESCRIPTION OF EXISTING DISCHARGE

Table 2 presents the effluent violations for Kenton WWTP during the previous five years. The Total Suspended Solids (TSS) violations were caused by high flow events resulting in bypass of flow and subsequent loading violations for TDS due to the high volume of effluent being discharged into Scioto River. The other violations were not caused by any known process error.

Table 3 presents the average annual effluent flow rate for Kenton WWTP for the previous five years. Kenton WWTP estimates there is an infiltration/inflow (I/I) rate to the collection system of 0.3 MGD. Kenton is in the process of restoring their downtown collection system to reduce I/I.

No SSOs were reported over the past five years.

Table 4 presents data characterizing bypass activity at Kenton WWTP for the previous five years. Bypasses are reported at station 602.

Table 5 presents data characterizing the seasonal total phosphorus load from Kenton WWTP during the previous five years.

Table 6 presents a summary of unaltered Discharge Monitoring Report (DMR). Data are presented for the period January 2017 through April 2022, and current permit limits are provided for comparison.

Table 7 summarizes the chemical specific data for outfall 001 by presenting the average and maximum PEQ values.

Table 8 summarizes the results of acute and chronic Whole Effluent Toxicity (WET) tests of the final effluent, using the water flea (*Ceriodaphnia dubia*) and fathead minnow (*Pimephales promelas*) as test organisms.

ASSESSMENT OF IMPACT ON RECEIVING WATERS

Pursuant to Section 303(d) of the Clean Water Act, each state is required to develop and submit a list to US EPA of its impaired and threatened waters (e.g. stream/river segments, lakes). For each water on the list, the state identifies the pollutant(s) causing the impairment, when known. The Gander Run-Scioto River (upper) watershed assessment unit, which includes the Scioto River in the vicinity of Kenton WWTP, is listed as impaired for recreational use on Ohio's 303(d) list.

The Total Maximum Daily Load (TMDL) program focuses on identifying and restoring polluted rivers, streams, lakes and other surface water bodies. A TMDL is a written, quantitative assessment of water quality problems in a water body and contributing sources of pollution. It specifies the amount a pollutant needs to be reduced to meet water quality standards (WQS), allocates pollutant load reductions, and provides the basis for taking actions needed to restore a water body.

A draft Total Maximum Daily Load (TMDL) report for the Upper Scioto River was submitted for public comment in July 2014.

An assessment of the impact of a permitted point source on the immediate receiving waters includes an evaluation of the available chemical/physical, biological, and habitat data which have been collected by Ohio EPA pursuant to the Five-Year Basin Approach for Monitoring and NPDES Reissuance. Other data may be used provided it was collected in accordance with Ohio EPA methods and protocols as specified by the Ohio WQS and Ohio EPA guidance documents. Other information which may be evaluated includes but is not limited to: NPDES permittee self-monitoring data; effluent and mixing zone bioassays conducted by Ohio EPA, the permittee, or U.S. EPA.

In evaluating this data, Ohio EPA attempts to link environmental stresses and measured pollutant exposure to the health and diversity of biological communities. Stresses can include pollutant discharges (permitted and unpermitted), land use effects, and habitat modifications. Indicators of exposure to these stresses include whole effluent toxicity tests, fish tissue chemical data, and fish health biomarkers (for example, fish blood tests).

Use attainment is a term which describes the degree to which environmental indicators are either above or below criteria specified by the Ohio WQS (OAC 3745-1). Assessing use attainment status for aquatic life uses primarily relies on the Ohio EPA biological criteria (OAC 3745-1-07; Table 7-1). These criteria apply to rivers and streams outside of mixing zones. Numerical biological criteria are based on measuring several characteristics of the fish and macroinvertebrate communities; these characteristics are combined into multimetric biological indices including the Index of Biotic Integrity and modified Index of Well-Being, which indicate the response of the fish community, and the Invertebrate Community Index, which indicates the response of the macroinvertebrate community. Numerical criteria are broken down by ecoregion, use designation, and stream or river size. Ohio has five ecoregions defined by common topography, land use, potential vegetation and soil type.

Three attainment status results are possible at each sampling location -full, partial, or non-attainment. Full attainment means that all of the applicable indices meet the biocriteria. Partial attainment means that one or more of the applicable indices fails meet the biocriteria. Nonattainment means that either none of the applicable indices meet the biocriteria or one of the organism groups indicates poor or very poor performance. An aquatic life use attainment table (see Table 9) is constructed based on the sampling results and is arranged from upstream to downstream and includes the sampling locations indicated by river mile, the applicable biological

indices, the use attainment status (i.e., full, partial, or non), the Qualitative Habitat Evaluation Index, and comments and observations for each sampling location.

The Scioto River in the study area covered by this report was evaluated by Ohio EPA staff for aquatic life and recreational use potential during the 2009 and 2011 field seasons. This assessment included the collection of water chemistry and biological sampling at numerous sites in the upper Scioto River. A summary of the results from this assessment for the interactive segment covered in the report can be found in Table 11.

The attainment status of the Scioto River watershed is reported in the final technical support document: *Biological and Water Quality Study of the Upper Scioto River Watershed*, OEPA, 2012.

Gander Run – Scioto River is impaired for recreational use due to the following: bacteria from point source discharges and agriculture. The draft TMDL recommends reducing the number of bypasses, combined sewer overflows, and sanitary sewer overflows to reduce E. coli inputs into the Scioto River from point sources. Given that Kenton WWTP has had no effluent violations for E. coli, and that the current limits for E. coli are protective of water quality standards, it is unlikely that Kenton WWTP is contributing to impairments in the Gander Run – Scioto River watershed. Biological and water quality surveys of the Scioto River in 2009 and 2011 showed full attainment of the WWH use designation both upstream and downstream of the Kenton WWTP and Durez discharges. Kenton WWTP continues to complete actions related to collection system improvements and I&I. Bypasses flows receive disinfection prior to discharge through the plant's final outfall. The number of bypasses at the wastewater treatment plant have been reduced (Table 4).

The Draft TMDL is available through the Ohio EPA, Division of Surface Water website at:

https://epa.ohio.gov/static/Portals/35/tmdl/UpperScioto_MainReport_PNdraft.pdf

A copy of the *Biological and Water Quality Study of the Upper Scioto River Watershed* published in 2012 is available through the Ohio EPA, Division of Surface Water website at:

https://epa.ohio.gov/static/Portals/35/documents/UpperSciotoTSD2012.pdf

A copy of the 2022 *Ohio Integrated Water Quality Monitoring and Assessment Report* is available through the Ohio EPA, Division of Surface Water website at:

https://epa.ohio.gov/static/Portals/35/tmdl/2022intreport/Full-2022-IR.pdf

DEVELOPMENT OF WATER-QUALITY-BASED EFFLUENT LIMITS

Determining appropriate effluent concentrations is a multiple-step process in which parameters are identified as likely to be discharged by a facility, evaluated with respect to Ohio water quality criteria, and examined to determine the likelihood that the existing effluent could violate the calculated limits.

Parameter Selection

Effluent data for the Kenton WWTP were used to determine what parameters should undergo WLA. The parameters discharged are identified by the data available to Ohio EPA, DMR data submitted by the permittee, compliance sampling data collected by Ohio EPA, and any other data submitted by the permittee, such as priority pollutant scans required by the NPDES application or by pretreatment, or other special conditions in the NPDES permit. The sources of effluent data used in this evaluation are as follows:

Self-monitoring data (DMR)	January 2017 through April 2022

Priority pollutant scans	2022

The priority pollutant scans for Kenton WWTP did not have any detections of pollutants except for zinc. Those values were incorporated into the PEQ calculations but individual results are not displayed.

Statistical Outliers and Other Non-representative Data

The data were examined, and no values were removed from the evaluation.

This data is evaluated statistically, and PEQ values are calculated for each pollutant. Average PEQ (PEQ_{avg}) values represent the 95th percentile of monthly average data, and maximum PEQ (PEQ_{max}) values represent the 95th percentile of all data points (see Table 7). See Modeling Guidance #1 for more information on PEQ calculations, available through the Ohio EPA, Division of Surface Water website at: https://www.epa.ohio.gov/portals/35/guidance/model1.pdf

The PEQ values are used according to Ohio rules to compare to applicable WQS and allowable WLA values for each pollutant evaluated. Initially, PEQ values are compared to the applicable average and maximum WQS. If both PEQ values are less than 25 percent of the applicable WQS, the pollutant does not have the reasonable potential to cause or contribute to exceedances of WQS, and no WLA is done for that parameter. If either PEQ_{avg} or PEQ_{max} is greater than 25 percent of the applicable WQS, a WLA is conducted to determine whether the parameter exhibits reasonable potential and needs to have a limit or if monitoring is required (see Table 10).

Wasteload Allocation

For those parameters that require a WLA, the results are based on the uses assigned to the receiving waterbody in OAC 3745-1. Dischargers are allocated pollutant loadings/concentrations based on the Ohio WQS (OAC 3745-1). Most pollutants are allocated by a mass-balance method because they do not break down in the receiving water. By rule, mixing zones are not authorized for pollutants, such as mercury, which have been designated as bioaccumulative chemicals of concern (BCCs). For BCCs, the WLA is set equal to the respective WQS value.

The methodology employed generally depends on whether the facility is considered a direct discharger to a (1) free-flowing receiving water/stream or (2) non-flowing receiving water/Lake.

For free flowing streams, WLAs for both average and maximum criteria are performed using the following general equation:

Discharger WLA = (Downstream Flow x WQS) - (Upstream Flow x Background Concentration).

Discharger WLAs are divided by the discharge flow so that the allocations are expressed as concentrations.

WLAs for direct discharges to lakes are performed using the following equation for average criteria:

Discharger WLA = (11 x WQS) – (10 x Background Concentration).

The following dischargers in the Scioto River were considered interactive (see Figure 3):

- Kenton WWTP
- Durez Corporation

The Kenton WWTP and the Durez Corporation were allocated together for most parameters due to the size of the plant discharges, the flows of the Scioto River and the relatively close proximity of the two plants. The

exception was ammonia-N WLA, which was done separately for each facility because ammonia-N is considered to be a non-conservative parameter.

The available assimilative capacity was distributed among them using the conservative substance wasteload allocation (CONSWLA) water quality model for conservative parameters. CONSWLA is the model Ohio EPA typically uses in multiple discharger situations. CONSWLA model inputs for flow are fixed at their critical low levels and inputs for effluent flow are fixed at their design or 50th percentile levels. Background concentrations are fixed at a representative value (generally a 50th percentile). A mass balancing method is then used to allocate effluent concentrations that maintain WQS under these conditions. This technique is appropriate when data bases are unavailable to generate statistical distributions for inputs and if the parameters modeled are conservative.

The applicable waterbody uses for this facility's discharge and the associated stream design flows are as follows:

Aquatic life (Warmwater Habitat)		
Toxics (metals, organics, etc.)	Average	Annual 7Q10
	Maximum	Annual 1Q10
Ammonia	Average	Summer 30Q10
		Winter 30Q10
Agricultural Water Supply		Harmonic mean flow
Human Health (nondrinking)		Harmonic mean flow

Allocations are developed using a percentage of stream design flow as specified in Table 11, and allocations cannot exceed the Inside Mixing Zone Maximum (IMZM) criteria.

Whole Effluent Toxicity Wasteload Allocation

Whole effluent toxicity (WET) is the total toxic effect of an effluent on aquatic life measured directly with a toxicity test. Acute WET measures short term effects of the effluent while chronic WET measures longer term and potentially more subtle effects of the effluent.

WQS for WET are expressed in Ohio's narrative "free from" WQS rule [OAC 3745-1-04(D)]. These "free froms" are translated into toxicity units (i.e. TUa and TUc) by the associated WQS Implementation Rule (OAC 3745-2-09). The translation results in a numeric value of 0.3 TUa and 1.0 TUc. WLAs can then be calculated using these values as if they were water quality criteria.

There are two separate reasonable potential procedures in Ohio - one for the Lake Erie watershed and one for the Ohio River watershed. Dischargers in the Ohio River watershed are assessed using OAC 3745-33-07(B). Dischargers in the Lake Erie watershed are assessed in accordance with the "Great Lakes Water Quality Initiative Implementation Procedures" contained in 40 CFR Part 132, Appendix F, Procedure 6.

For Kenton WWTP, the WLA values for outfall 001 are 0.5 TUa and 1.64 TUc.

The chronic toxicity unit (TUc) is defined as 100 divided by the estimate of the effluent concentration which causes a 25% reduction in growth or reproduction of test organisms (IC25):

$$TUc = 100/IC25$$

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

TUc = 100/geometric mean of No Observed Effect Concentration and Lowest Observed Effect Concentration

The acute toxicity unit (TUa) is defined as 100 divided by the concentration in water having 50% chance of causing death to aquatic life (LC50) for the most sensitive test species:

$$TUa = 100/LC50$$

This equation applies outside the mixing zone for all designated waters. Based on the above, a value of 1.0 TUa is the lowest value that can be calculated using the equation. TUa values between 0.2 and 1.0 are based on an interpolation of toxic effects where an LC50 cannot be identified.

When the acute WLA is less than 1.0 TUa, it may be defined as a ratio of the stream dilution to the effluent flow:

Acute Dilution Ratio (downstream flow to discharger flow)	Allowable Effluent Toxicity (percent effects in 100% effluent)
up to 2 to 1	30
greater than 2 to 1 but less than 2.7 to 1	40
2.7 to 1 to 3.3 to 1	50

$$\text{Acute Dilution Ratio} = \frac{1Q10 + [\text{WWTP flow rate}]}{[\text{WWTP flow rate}]} = \frac{1.81 \text{ cfs} + 3.71 \text{ cfs}}{3.71 \text{ cfs}} = 1.48$$

The acute WLA for Kenton WWTP can be expressed as 30 percent mortality in 100 percent effluent based on the dilution ratio of 1.48 to 1. If the acute dilution ratio is less than 3.3 to 1.0, and there is evidence that effluent values between 0.3 TUa and 1.0 TUa cause or contribute to violations of WQS, the permittee may be required to investigate and remediate toxicity in this range.

REASONABLE POTENTIAL/EFFLUENT LIMITS/MANAGEMENT DECISIONS

After appropriate effluent limits are calculated, the reasonable potential of the discharger to violate the WQS must be determined. Each parameter is examined and placed in a defined "group". Parameters that do not have a WQS or do not require a WLA based on the initial screening are assigned to either group 1 or 2. For the allocated parameters, the preliminary effluent limits (PEL) based on the most restrictive average and maximum WLAs are selected from Table 12. The average PEL (PEL_{avg}) is compared to the average PEQ (PEQ_{avg}) from Table 7, and the PEL_{max} is compared to the PEQ_{max}. Based on the calculated percentage of the allocated value [($PEQ_{avg} \div PEL_{avg}$) X 100, or ($PEQ_{max} \div PEL_{max}$) X 100)], the parameters are assigned to group 3, 4, or 5. The groupings are listed in Table 13.

The final effluent limits are determined by evaluating the groupings in conjunction with other applicable rules and regulations. Table 14 presents the final effluent limits and monitoring requirements proposed for Kenton WWTP outfall 001 and the basis for their recommendation. Unless otherwise indicated, the monitoring frequencies proposed in the permit are continued from the existing permit.

Ammonia

The current ammonia limits have been evaluated use the WLA procedures and are protective of WQS for ammonia toxicity. The limits are based on plant design.

Dissolved Oxygen, Total Suspended Solids, 5-day Carbonaceous Oxygen Demand
The limits proposed for dissolved oxygen, total suspended solids, and 5-day carbonaceous biochemical oxygen demand (CBOD5) are all based on plant design criteria. The TSS and CBOD5 limits are more stringent than the Secondary Treatment Standards in 40 CFR Part 133.

Oil and Grease, pH, *Escherichia coli*
Limits proposed for oil and grease, pH, and *Escherichia coli* are based on WQS (OAC 3745-1-35 and 37). Primary contact recreation *E. coli* standards apply to the Scioto River.

Dissolved Hexavalent Chromium, Selenium
The Ohio EPA risk assessment (Table 13) places dissolved hexavalent chromium, and selenium in group 4. This placement, as well as the data in Table 6 and Table 7, support that these parameters do not have the reasonable potential to contribute to WQS exceedances, and limits are not necessary to protect water quality. Monitoring for Group 4 pollutants (where PEQ exceeds 50 percent of the WLA) is required by OAC 3745-33-07(A)(2). Monitoring for selenium is proposed on a monthly basis due to it being placed in group 4. Monitoring for dissolved hexavalent chromium is proposed to be changed from 1/quarter to 1/month due to it being placed in group 4.

Arsenic, Chloroform, Copper, Total Filterable Residue, Mercury, Strontium
The Ohio EPA risk assessment (Table 13) places arsenic, chloroform, copper, total filterable residue, mercury, and strontium in groups 2 and 3.This placement, as well as the data in Table 6 and Table 7, support that these parameters do not have the reasonable potential to contribute to WQS exceedances, and limits are not necessary to protect water quality. Monitoring is proposed to document that these pollutants continue to remain at low levels.

Nitrate + Nitrite and Total Kjeldahl Nitrogen (TKN)
Based on best technical judgment, monitoring is proposed for nitrate + nitrite and total kjeldahl nitrogen. The purpose of the monitoring is to maintain a data set tracking nutrient levels in the Scioto River.

Dissolved Orthophosphate and Total Phosphorus
Monitoring for dissolved orthophosphate (as P) and total phosphorus is required by ORC 6111.03. This monitoring will further develop nutrient datasets that are used in stream and watershed assessments and studies. Because Ohio EPA monitoring, as well as other in-stream monitoring, for dissolved orthophosphate is taken by grab sample, grab samples are proposed for orthophosphate to maintain consistent data. The grab samples must be filtered within 15 minutes of collection using a 0.45-micron filter. The filtered sample must be analyzed within 48 hours.

Whole Effluent Toxicity Reasonable Potential
Based on evaluating the WET data presented in Table 8, Attachment 1, and other pertinent data under the provisions of OAC 3745-33-07(B), the Kenton WWTP is placed in Category 4 with respect to WET. While this indicates that the plant's effluent does not currently pose a toxicity problem, annual toxicity testing is proposed consistent with the minimum monitoring requirements at OAC 3754-33-07(B)(11). Annual chronic toxicity monitoring with the determination of acute endpoints is proposed for the life of the permit Monitoring for acute and chronic *Ceriodaphnia dubia* is proposed to be reduced from twice a year to once a year. Monitoring for acute and chronic *Pimephalas promelas is proposed to remain at once a year.*

Additional Monitoring Requirements
Monitoring for water temperature, dissolved oxygen, and pH is proposed to be removed at upstream monitoring station 2PD00020801. Monitoring for dissolved oxygen is proposed to be removed from downstream monitoring station 2PD00020901.

Monitoring for E. *Coli* is proposed to be changed from 1/month to 1 / 2 weeks, and the monitoring months for *E. Coli* is proposed to be changed from summer to June – August at upstream monitoring station 2PD00020801 and downstream monitoring station 2PD00020901.

Monitoring for chronic and acute toxicity for *Ceriodaphnia dubia* is proposed to be changed from 2/year to 1/year at downstream station 2PD00020901 because of the Kenton WWTP being placed in Category 4 with respect to WET.

Additional monitoring requirements proposed at the final effluent, influent and upstream/downstream stations are included for all facilities in Ohio and vary according to the type and size of the discharge. In addition to permit compliance, this data is used to assist in the evaluation of effluent quality and treatment plant performance and for designing plant improvements and conducting future stream studies.

Sludge
Limits and monitoring requirements proposed for the disposal of sewage sludge by the following management practices are based on OAC 3745-40: land application, removal to sanitary landfill or transfer to another facility with an NPDES permit.

OTHER REQUIREMENTS
Compliance Schedule

A compliance schedule to reduce inflow and infiltration (I/I) coming into the collection system from downtown Kenton is included in Part 1, Item C of this permit.

Sanitary Sewer Overflow Reporting
Provisions for reporting SSOs are again proposed in this permit. These provisions include: the reporting of the system-wide number of SSO occurrences on monthly operating reports; telephone notification of Ohio EPA and the local health department, and 5-day follow up written reports for certain high risk SSOs; and preparation of an annual report that is submitted to Ohio EPA and made available to the public. Many of these provisions were already required under the "Noncompliance Notification", "Records Retention", and "Facility Operation and Quality Control" general conditions in Part III of Ohio NPDES permits.

Operator Certification and Operator of Record
Operator certification requirements have been included in Part II of the permit in accordance with rules effective on August 15, 2018 (OAC 3745-7). These rules require the Kenton WWTP to have a Class III wastewater treatment plant operator in charge of the sewage treatment plant operations discharging through outfall 001. These rules also require the permittee to designate one or more operator of record to oversee the technical operation of the treatment works and sewerage system.

Method Detection Limit Reporting
When submitting monitoring results in eDMR, the permittee must report all detected concentration values above the method detection limit (MDL), even if that value is below the quantification level, as indicated in Permit Guidance 9: *Limits below Quantification*. A detection above the MDL indicates the presence of a pollutant with strong confidence, which must be considered in reasonable potential analyses. Per OAC 3745-33-07(C)(2)(c), for the purpose of assessing compliance, any value reported below the quantification level shall be considered in compliance with an effluent limit.

Outfall Signage

Part II of the permit includes requirements for the permittee to place and maintain a sign at each outfall to the Scioto River providing information about the discharge. Signage at outfalls is required pursuant to OAC 3745-33-08(A).

NPDES Renewal Application Supplemental Effluent Data
The permittee must submit supplemental effluent data as part of the next NPDES permit renewal application. A minimum of three samples must be tested for 101 parameters, each collected within four and one-half years of the application submission date. The complete list of parameters to be analyzed is contained in Table 2 of "Appendix J to Part 122 - NPDES Permit Testing Requirements for Publicly Owned Treatment Works (§122.21(j))." Existing effluent data may be used, if available, in lieu of sampling performed solely for the purpose of the renewal application. See Part II of the permit for details.

Part III
Part III of the permit details standard conditions that include monitoring, reporting requirements, compliance responsibilities, and general requirements.

Stormwater Compliance
To comply with industrial storm water regulations, the permittee submitted a form for "No Exposure Certification" which was signed on 9/18/2023. The certification number is 2GR00777. Compliance with the industrial storm water regulations must be re-affirmed every five years. No later than 9/17/2028, the permittee must submit a new form for "No Exposure Certification" or make other provisions to comply with the industrial storm water regulations.

Figure 1. Location of Kenton WWTP

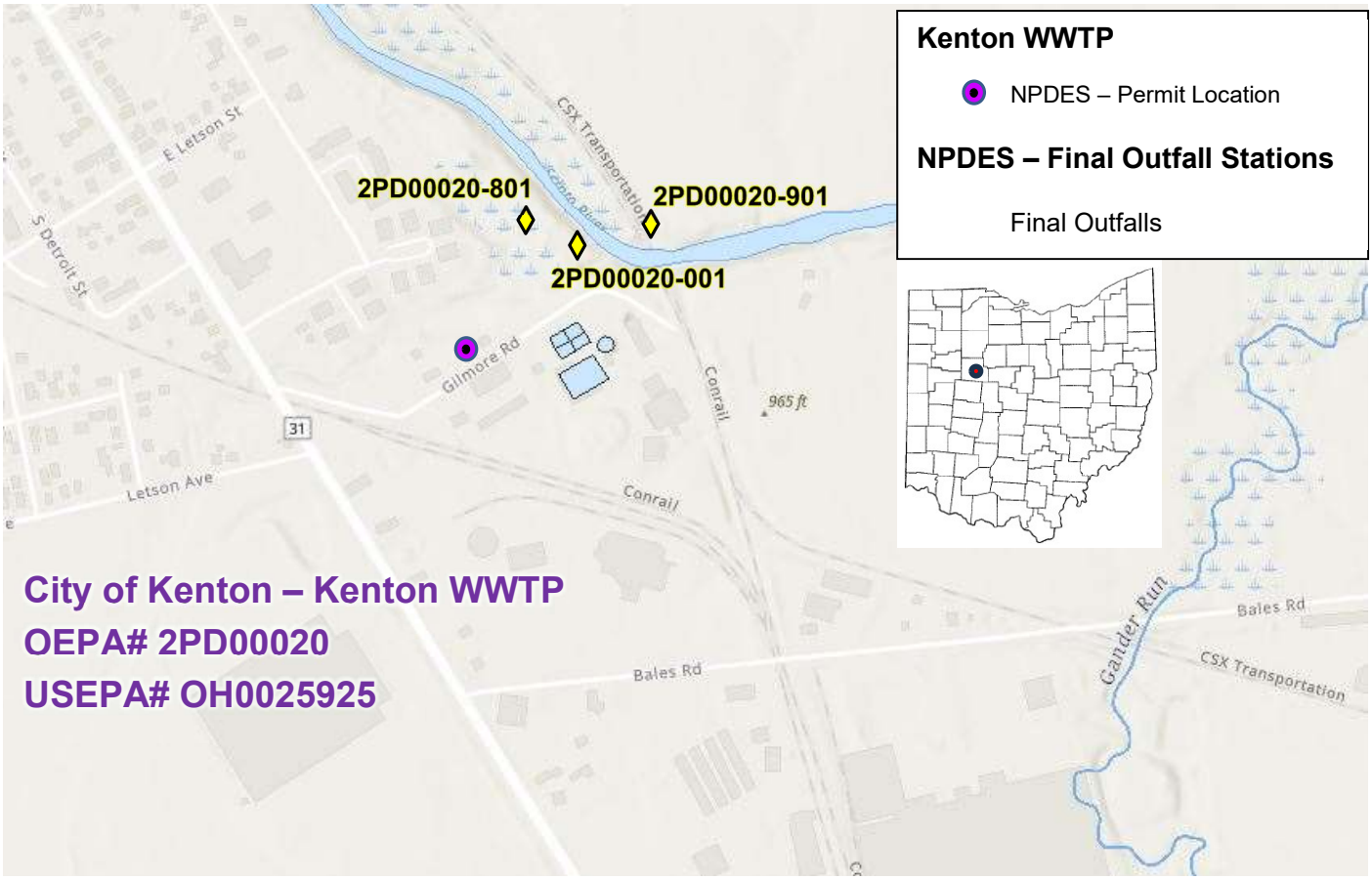

Figure 2. Diagram of Wastewater Treatment System

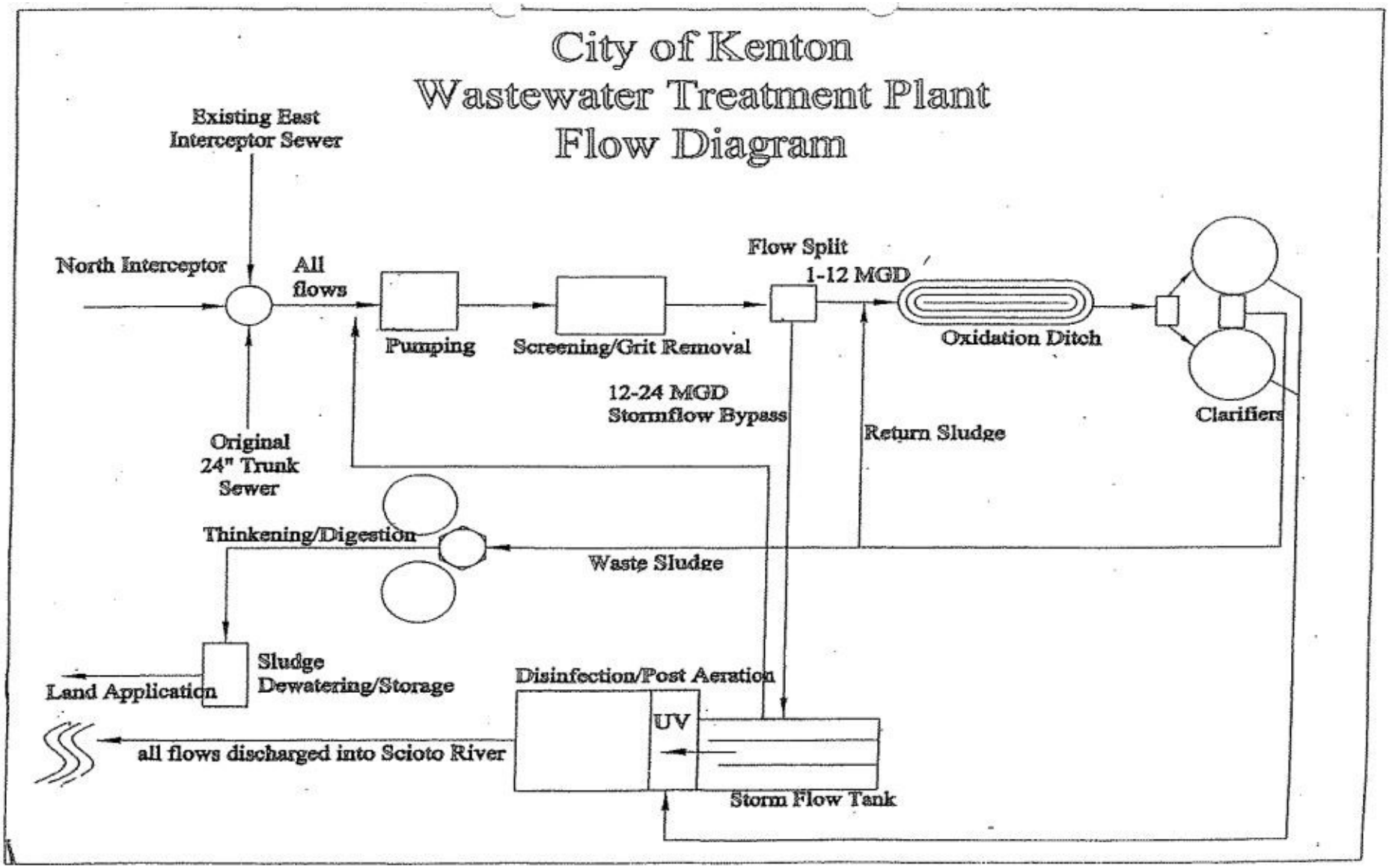

Figure 3. Scioto River Study Area

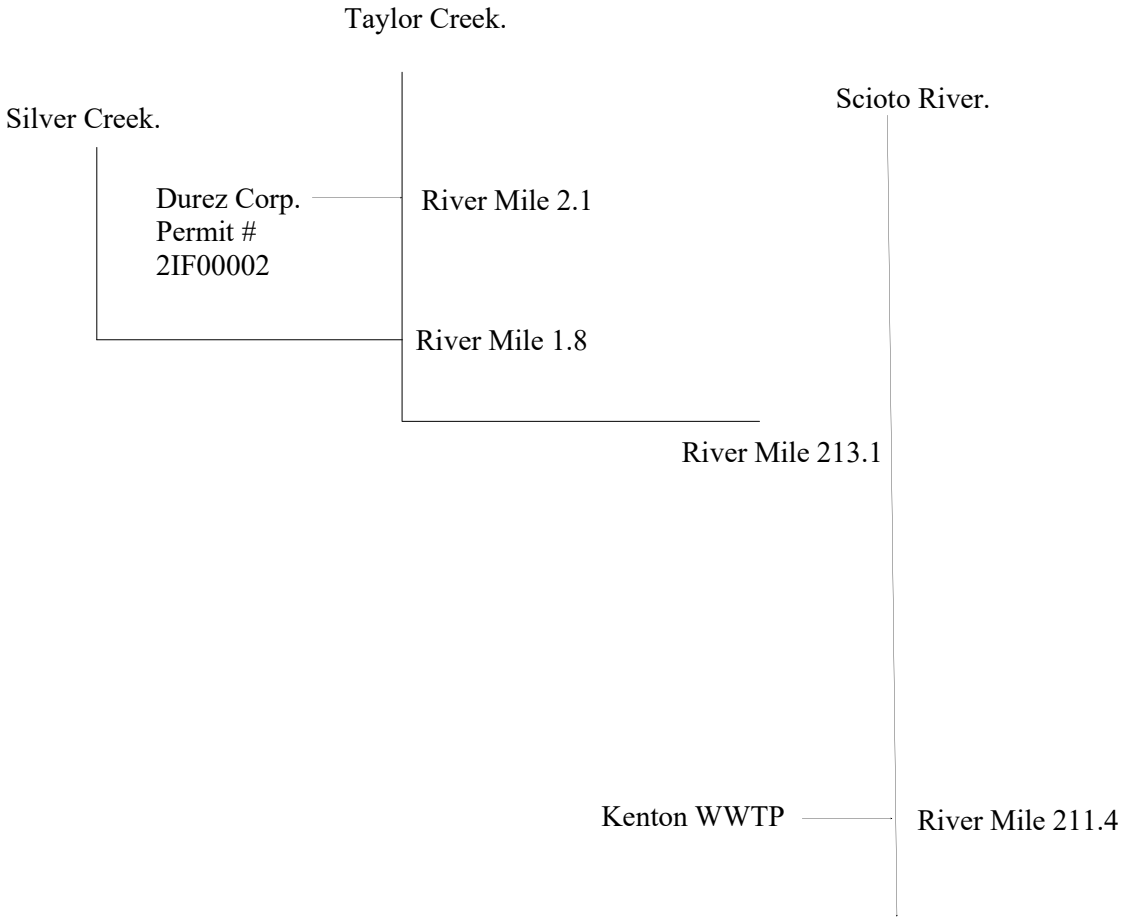

Table 1. Sewage Sludge Removal

Year	Dry Tons Removed
2017	466
2018	862
2019	742
2020	428
2021	294
2022	346

Table 2. Effluent Violations for Outfall 001

Parameter	2017	2018	2019	2020	2021	2022	Total
CBOD 5 day	2	0	1	0	0	0	**3**
Oil and Grease, Hexane	0	1	0	0	0	0	**1**
Total Suspended Solids	8	8	2	1	1	3	**23**
Total	**10**	**9**	**3**	**1**	**1**	**3**	**27**

2022 is through the month of December.

Table 3. Average Annual Effluent Flow Rates

	Annual Flow (MGD)		
Year	50th Percentile	95th Percentile	Maximum
2017	3.1	8.2	22.9
2018	4.2	9.3	24.3
2019	3.8	8.8	17.8
2020	3.4	6.3	13.9
2021	3.0	5.9	27.1
2022	3.0	5.9	13.3

MGD = million gallons per day.
*2022 is through the month of December.

Table 4. Bypass Discharges

Outfall	Year	Number of days	Total Volume (Million Gallons)	Median Volume (Million Gallons)	Median TSS (mg/L)	Median CBOD5 (mg/L)
602	2017	13	38.1	2	66	14.4
602	2018	18	55.6	2.5	64	17.9
602	2019	15	35.3	1.9	50.5	53.3
602	2020	5	11.1	2.42	89.5	66.5
602	2021	9	20.8	1.3	113	220
602	2022	3	10.6	4.5	185	112

*2022 is through the month of December.

Table 5. Calculated Seasonal Total Phosphorus Loadings

Year	# samples	Median Phosphorus (mg/L)	Median Flow (MGD)	Median Loading (kg/day)
2017 [a]	24	1.49	2.92	16.3
2018	24	1.26	2.84	13.8
2019	24	1.84	2.71	20.4
2020	24	2.29	2.26	17
2021	24	2.24	2.31	18.6
2022 [b]	24	1.67	2.38	14.2

Seasonal months: May through October
[a] = data set begins on 5/1/2017
[b] = data set ends on 8/31/2022
MGD = million gallons per day

Table 6. Effluent Characterization Using Self-Monitoring Data

			Current Limits			Percentiles		
Outfall	**Parameter**	**Unit**	**30 Day**	**Daily**	**# Obs**	**50th**	**95th**	**Data Range**
001	Water Temperature	°C	Monitoring Only		1718	14	23	6 - 24
	Dissolved Oxygen - Summer	mg/L	--	6.0[m]	769	9	8.5*	7 - 11
	Dissolved Oxygen - Winter	mg/L	--	5.0[m]	798	10.9	9.4*	7.7 - 13.1
	Total Suspended Solids	kg/day	109	164[w]	959	20.8	165	5.38 - 2710
	Total Suspended Solids	mg/L	12.0	18.0[w]	959	2	8	1 - 66
	Oil and Grease	mg/L	--	10.0	151	< 5	< 5	0 - 11
	Nitrogen, Ammonia - Summer	kg/day	18.2	27.2[w]	431	< 1.64	< 1.64	0 - 18.7
	Nitrogen, Ammonia - Summer	mg/L	2.0	3.0[w]	431	< .2	< .2	0 - 2.16
	Nitrogen, Ammonia - Winter	kg/day	79.9	133.5[w]	466	< 1.81	2.59	0 - 88
	Nitrogen, Ammonia - Winter	mg/L	8.8	14.7[w]	466	< .2	.22	0 - 4.23
	Nitrogen Kjeldahl, Total	mg/L	Monitoring Only		75	< .5	.836	0 - 3.93
	Nitrite Plus Nitrate, Total	mg/L	Monitoring Only		75	9.76	17.9	3.04 - 20.4
	Phosphorus, Total	mg/L	Monitoring Only		300	1.3	2.7	.1 - 3.47
	Orthophosphate, Dissolved	mg/L	Monitoring Only		75	.99	2.74	.014 - 3.05
	Selenium, TR**	µg/L	Monitoring Only		8	--	--	< 4
	Nickel, TR**	µg/L	Monitoring Only		25	--	--	< 8

			Current Limits			Percentiles		
Outfall	**Parameter**	**Unit**	**30 Day**	**Daily**	**# Obs**	**50th**	**95th**	**Data Range**
	Strontium, Total (Sr)	µg/L	Monitoring Only		8	4600	6720	3600 - 6970
	Zinc, TR**	µg/L	Monitoring Only		25	17	27.4	12 - 36
	Cadmium, TR**	µg/L	Monitoring Only		25	--	--	< 3
	Lead, TR**	µg/L	Monitoring Only		25	--	--	< 10
	Chromium, TR**	µg/L	Monitoring Only		25	--	--	< 7
	Copper, TR**	µg/L	Monitoring Only		25	--	--	< 8
	Chromium, Dissolved Hexavalent**	µg/L	Monitoring Only		25	< 10	< 10	0 - 11
	E. coli	#/100 mL	126	284[w]	427	1	101	0 - 5200
	Flow Rate	MGD	Monitoring Only		2281	2.93	7.47	1.42 - 27.1
	Mercury, Total	ng/L	Monitoring Only		25	2.16	4.12	.771 - 8.52
	Cyanide, Free (Low-Level)	µg/L	Monitoring Only		18	--	--	< 3
	Phosphorus, Total (Seasonal)	mg/L	Monitoring Only		20	1010000	1020000	1010000 - 1020000
	Acute Toxicity, Ceriodaphnia dubia - July	TUa	Monitoring Only		2	--	--	< .2
	Acute Toxicity, Ceriodaphnia dubia - Quarterly	TUa	Monitoring Only		13	< .2	.08	0 - .2
	Acute Toxicity, Ceriodaphnia dubia - Semi-annual	TUa	--	1.0	9	< .2	.12	0 - .2
	Chronic Toxicity, Ceriodaphnia dubia - July	TUc	Monitoring Only		2	.55	1.05	0 - 1.1
	Chronic Toxicity, Ceriodaphnia dubia - Quarterly	TUc	Monitoring Only		13	< 1	1.28	0 - 1.4
	Chronic Toxicity, Ceriodaphnia dubia - Semi-annual	TUc	1.5	--	9	< 1	1.32	0 - 1.4
	Acute Toxicity, Pimephales promelas	TUa	Monitoring Only		6	--	--	< .2
	Chronic Toxicity, Pimephales promelas	TUc	Monitoring Only		6	--	--	< 1
	pH, Maximum	S.U.	--	9.0	1567	7.9	8.1	7.3 - 8.5
	pH, Minimum	S.U.	--	6.5[m]	1567	7.8	7.3*	7 - 8.2

			Current Limits			Percentiles		
Outfall	**Parameter**	**Unit**	**30 Day**	**Daily**	**# Obs**	**50th**	**95th**	**Data Range**
	Residue, Total Filterable	mg/L	Monitoring Only		25	617	713	426 - 717
	CBOD 5 day - Summer	kg/day	77.0	118[w]	431	17.8	48.5	3.01 - 263
	CBOD 5 day - Summer	mg/L	8.7	13.0[w]	431	1.8	3.25	.3 - 5.5
	CBOD 5 day - Winter	kg/day	136	209[w]	465	33.1	122	1.72 - 308
	CBOD 5 day - Winter	mg/L	13.3	20.3[w]	465	2.8	4.48	.3 - 7.8

Dates between 1/1/2017 – 4/1/2023
* = For pH minimum and dissolved oxygen, 5th percentile shown in place of 95th percentile.
** = The total number of observations may not be included in the calculations used for the projected effluent quality shown in table 7.
TR = Total Recoverable
w = weekly average
m = Minimum limit

Table 7. Projected Effluent Quality for Outfall 001

Parameter	Units	Number of Samples	Number >MDL	PEQ Average	PEQ Maximum
Self-Monitoring (DMR) Data					
Ammonia (summer)	mg/L	239	2	1.104	1.512
Ammonia (winter)	mg/L	202	16	1.155	1.582
Cadmium – TR [A**]	µg/L	24	0	--	--
Chromium - TR [A**]	µg/L	3	3	4.818	6.6
Chromium, Dissolved Hexavalent **	µg/L	21	1	10.44	14.3
Copper - TR [A**]	µg/L	24	3	7.592	10.4
Cyanide – free	µg/L	17	0	--	--
Lead - TR [A**]	µg/L	3	3	1.752	2.4
Mercury - TR (BCC)	ng/L	21	21	4.511	7.13
Nickel - TR [A**]	µg/L	3	3	5.913	8.1
Nitrate-N + Nitrite-N	mg/L	63	63	15.37	21.14
Nitrogen Kjeldahl, Total	mg/L	63	11	1.034	1.542
Phosphorus	mg/L	252	252	2.522	3.728
Selenium - TR [A**]	µg/L	3	3	4.818	6.6
Strontium**	µg/L	8	8	9667	13243
Total Filterable Residue	mg/L	21	21	695	779
Zinc - TR [A**]	µg/L	24	24	26.83	35.48
Priority Pollutant Scans [B]					
Arsenic - TR	µg/L	3	1	1.971	2.7
Chloroform	µg/L	3	1	0.876	1.2

[A] DMR data combined with Priority Pollutant Scans data

[B] Arsenic and chloroform were the only parameters detected in the priority pollutant scans that were not already being monitored for. Detections for other parameters from the priority pollutant scans are included in the samples used for the PEQ's shown above.

TR = Total Recoverable

PEQ = projected effluent quality

DMR = Discharge Monitoring Report

MDL = analytical laboratory method detection limit

BCC = Bioaccumulative Chemical of Concern

MDL = analytical method detection limit

PEQ = projected effluent quality

* Per OAC 3745-2-04(E)(3), ammonia PEQ is based on data collected during the following months:

Summer – June through September

Winter – December through February

** = The total number of observations shown in table 6 may not be included in the calculations used for the projected effluent quality shown in table 7.

Table 8. Summary of Acute and Chronic Toxicity Results

	Ceriodaphnia Dubia		*Pimephales promelas*	
Date	**TU_a**	**TU_c**	**TU_a**	**TU_c**
7/1/2017	AA	1.1	AA	AA
7/1/2018	AA	AA	AA	AA
12/1/2018	AA	AA	NT	NT
3/1/2019	AA	AA	NT	NT
6/1/2019	AA	AA	AA	AA
8/1/2019	AA	AA	NT	NT
12/1/2019	AA	AA	NT	NT
3/10/2020	AA	AA	NT	NT
6/4/2020	AA	AA	AA	AA
8/1/2020	AA	AA	NT	NT
12/1/2020	0.2	1.2	NT	NT
6/1/2021	AA	AA	AA	AA
12/1/2021	AA	1.4	NT	NT
6/1/2022	AA	1.1	AA	AA
12/1/2022	AA	AA	NT	NT

NT = not tested
AA = non-detection; analytical method detection limit of 0.2 TU_a, 1.0 TU_c
TU_a = acute toxicity unit
TU_c = chronic toxicity unit

Table 9. Use Attainment Table

Location	Year Sampled	River Mile	Use Designation	Attainment Status
Scioto River at CR 106	2009	216.7	WWH	Full
Scioto River upstream Kenton WWTP	2011	211.5	WWH	Full
Scioto River at CR175	2011	210.1	WWH	Full
Taylor Creek at TR180	2009	4.43	WWH	Full
Taylor Creek at SR67	2011	0.76	WWH	Full

* The attainment status of the Scioto River watershed is reported in the final technical support document: Biological and Water Quality Study of the Upper Scioto River Watershed, OEPA, 2012.
WWH = Warmwater Habitat

Table 10. Water Quality Criteria in the Study Area

Parameter	Units	Outside Mixing Zone Criteria				
		Average			Maximum Aquatic Life	Inside Mix Zone Maximum
		Human Health	Agri-culture	Aquatic Life		
Ammonia (summer)	mg/L	--	--	1.2	--	--
Ammonia (winter)	mg/L	--	--	3.3	--	--
Arsenic - TR	µg/L	--	100	150	340	680
Cadmium - TR	µg/L	--	50	7.3	22	43
Chloroform	µg/L	4700 [C]	--	140	1300	2600
Chromium - TR	µg/L	--	100	270	5600	11000
Chromium, Dissolved Hexavalent	µg/L	--	--	11	16	31
Copper - TR	µg/L	1300	500	30	52	100
Cyanide - free	µg/L	22000	--	12	46	92
Lead - TR	µg/L	--	100	37	710	1400
Mercury - TR (BCC)	ng/L	12	10000	910	1700	3400
Nickel - TR	µg/L	4600	200	170	1500	3000
Nitrate-N + Nitrite-N	mg/L	--	100	--	--	--
Nitrogen Kjeldahl, Total	mg/L	--	--	--	--	--
Phosphorus	mg/L	--	--	--	--	--
Selenium - TR	µg/L	11000	50	5	62	120
Strontium	µg/L	--	--	110000	280000	560000
Total Filterable Residue	mg/L	--	--	1500	--	--
Zinc - TR	µg/L	69000	25000	390	390	780

[C] = Carcinogen
BCC = Bioaccumulative Chemical of Concern
TR = Total Recoverable

Table 11. Instream Conditions and Discharger Flow

Parameter	Units		Value	Basis
Upstream flows:				
Scioto R. above Kenton				
1Q10	cfs	annual	1.81	USGS gage #03217500, 1927-2021 data
7Q10	cfs	annual	2.14	USGS gage #03217500, 1927-2021 data
30Q10	cfs	summer	2.76	USGS gage #03217500, 1927-2021 data
	cfs	winter	7.45	USGS gage #03217500, 1926-2021 data
Harmonic Mean Flow	cfs	annual	14.52	USGS gage #03217500, 1926-2021 data
Taylor Ck. above Durez				
1Q10	cfs	annual	0.17	USGS gage #03217500, 1927-2021 data
7Q10	cfs	annual	0.21	USGS gage #03217500, 1927-2021 data
30Q10	cfs	summer	0.26	USGS gage #03217500, 1927-2021 data
	cfs	winter	0.71	USGS gage #03217500, 1926-2021 data
Harmonic Mean Flow	cfs	annual	1.39	USGS gage #03217500, 1926-2021 data
Kenton WWTP Outfall 001 flow rate	cfs / (MGD)	design	3.71 / (2.40)	NPDES permit application
Durez Corporation Outfall 001 flow rate	cfs / (MGD)	average	0.22 / (0.14)	NPDES permit application
Mixing Assumption	%	average	100	Stream-to-discharge ratio
(Scioto R.)	%	maximum	100	Stream-to-discharge ratio
Instream Hardness				
Kenton WWTP	mg/l	annual	410	Kenton 901; 43 values, 2018-22
Durez Corporation	mg/l	annual	331	STORET; 36 values, 2009-2010
Background Water Quality for the study area:				
Ammonia	mg/l	summer	0	DMR, 801; 20 values, 2017-22
Ammonia	mg/l	winter	0	DMR, 801; 17 values, 2017-22
Arsenic-TR	µg/l	annual	2.2	STORET; 23 values, 8<MDL, 2009-10
Cadmium	µg/l	annual	0.1	STORET; 27 values, 25<MDL, 2009-10
Chloroform	µg/L	annual	0	STORET; 1 value, 2009
Chromium	µg/l	annual	1	STORET; 27 values, 22<MDL, 2009-10
Chromium VI - Diss	µg/l	annual	0	No representative data available.
Copper	µg/l	annual	3	STORET; 27 values, 2009-10
Cyanide, free	µg/l	annual	0	No representative data available.
Lead	µg/l	annual	1	STORET; 27 values, 23<MDL, 2009-10
Nickel	µg/l	annual	5.8	STORET; 27 values, 2009-10
Nitrate-N + Nitrite-N	mg/L	annual	1.61	STORET; 5 values, 3<MDL, 2009
Selenium	µg/l	annual	1	STORET; 27 values, 24<MDL, 2009-10
Strontium	µg/l	annual	4610	STORET; 27 values, 2009-10
Total Filterable Residue	mg/l	annual	578	STORET; 32 values, 2009-10
Zinc	µg/l	annual	5	STORET; 27 values, 19<MDL, 2009-10

DMR = Discharge Monitoring Report

MDL = method detection limit
NPDES = National Pollutant Discharge Elimination System
STORET = United States Environmental Protection Agency Storage and Retrieval Data Warehouse
USGS = United States Geological Survey

Table 12. Summary of Effluent Limits to Maintain Applicable Water Quality Criteria

Parameter	Units	Outside Mixing Zone Criteria				Inside Mixing Zone Maximum
		Average			Maximum Aquatic Life	
		Human Health	Agri-Supply	Aquatic Life		
Ammonia (summer)	mg/L	--	--	2.66	--	--
Ammonia (winter)	mg/L	--	--	14.16	--	--
Arsenic - TR [B]	µg/L	--	462	231	496	680
Cadmium - TR [B]	µg/L	--	235[A]	11	32	43
Chloroform [B]	µg/L	22077 [A]	--	217	1899	2600
Chromium - TR [B]	µg/L	--	466	419	8223	11000
Chromium, Dissolved Hexavalent	µg/L	--	--	18	25	31
Copper - TR	µg/L	6425 [A]	2464 [A]	45	75	100
Cyanide – free [B]	µg/L	108936 [A]	--	19	67	92
Lead - TR	µg/L	--	491	57	1045	1400
Mercury - TR (BCC)	ng/L	12	10000 [A]	910	1700	3400
Nickel - TR [B]	µg/L	22755 [A]	968	262	2199	3000
Nitrate-N + Nitrite-N	mg/L	--	466	--	--	--
Selenium - TR	µg/L	54465 [A]	244 [A]	7.2	90	120
Strontium [B]	µg/L	--	--	168405	408069	560000
Total Filterable Residue	mg/L	--	--	2013	--	--
Zinc - TR	µg/L	341643 [A]	123770 [A]	604	571	780

[A] Allocation must not exceed the Inside Mixing Zone Maximum.

[B] Parameter would not require a WLA based on reasonable potential procedures, but allocation requested by permit staff.

TR = Total Recoverable

BCC = Bioaccumulative Chemical of concern

Table 13. Parameter Assessment

Group 1: Due to a lack of numeric criteria, the following parameters could not be evaluated at this time.

Nitrogen Kjeldahl, Total

Group 2: PEQ < 25% of WQS or all data below minimum detection limit; WLA not required. No limit recommended, monitoring optional.

Arsenic - TR	Cadmium - TR	Chloroform
Chromium - TR	Cyanide - free	Lead - TR
Nickel - TR	Nitrate-N + Nitrite-N	Strontium
Zinc - TR		

Group 3: PEQmax < 50% of maximum PEL and PEQavg < 50% of average PEL. No limit recommended, monitoring optional.

Ammonia (winter)	Copper	Mercury - TR (BCC)
Total Filterable Residue		

Group 4: PEQmax > 50% but <100% of the maximum PEL or PEQavg > 50% but < 100% of the average PEL. Monitoring is appropriate.

Ammonia (summer)	Chromium, Dissolved Hexavalent	Selenium - TR

Group 5: Maximum PEQ > 100% of the maximum PEL or average PEQ > 100% of the average PEL,or either the average or maximum PEQ is between 75 and 100% of the PEL and certain conditions that increase the risk to the environment are present. Limit recommended.

No parameters fit the criteria of this group.

PEL = preliminary effluent limit
PEQ = projected effluent quality
WLA = wasteload allocation
WQS = water quality standard

Table 14. Final Effluent Limits for Outfall 001

Parameter	Units	Concentration		Loading (kg/day)[a]		Basis[b]
		Daily Maximum	30 Day Average	Daily Maximum	30 Day Average	
Water Temperature	°C	- - - - - - - - - - Monitor - - - - - - - - - -				M[c]
Dissolved Oxygen (Summer)	mg/L	6.0[m]	--	--	--	PD
Dissolved Oxygen (Winter)	mg/L	5.0[m]	--	--	--	PD
TSS	mg/L	18.0[d]	12	164[d]	109	PD
Oil & Grease	mg/L	10	--	--	--	WQS
Ammonia (summer)	mg/L	3.0 [d]	2.0	27.2 [d]	18.2	PD
Ammonia (winter)	mg/L	14.7 [d]	8.8	133.5[d]	79.9	PD
Total Kjeldahl Nitrogen	mg/L	- - - - - - - - - - Monitor - - - - - - - - - -				BTJ
Nitrate plus Nitrite	mg/L	- - - - - - - - - - Monitor - - - - - - - - - -				BTJ
Phosphorus	mg/L	- - - - - - - - - - Monitor - - - - - - - - - -				PMR
Orthophosphate	mg/L	- - - - - - - - - - Monitor - - - - - - - - - -				PMR
Selenium	µg/L	- - - - - - - - - - Monitor - - - - - - - - - -				WLA
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 - - - - - - - - - -				M
Dissolved Hexavalent Chromium	µg/L	- - - - - - - - - - Monitor - - - - - - - - - -				WLA
E. coli	#/100 mL	284 [d]	126	--	--	WQS
Flow Rate	MGD	- - - - - - - - - - Monitor - - - - - - - - - -				M[c]
Mercury	ng/L	- - - - - - - - - - Monitor - - - - - - - - - -				M
Free Cyanide	µg/L	- - - - - - - - - - Monitor - - - - - - - - - -				M
Acute Toxicity, *Ceriodaphnia dubia*	TUa	- - - - - - - - - - Monitor - - - - - - - - - -				WET
Chronic Toxicity, *Ceriodaphnia dubia*	TUc	- - - - - - - - - - Monitor - - - - - - - - - -				WET
Acute Toxicity, *Pimephales promelas*	TUa	- - - - - - - - - - Monitor - - - - - - - - - -				WET
Chronic Toxicity, *Pimephales promelas*	TUc	- - - - - - - - - - Monitor - - - - - - - - - -				WET
Total Filterable Residue	mg/L	- - - - - - - - - - Monitor - - - - - - - - - -				M
pH, maximum	SU	9.0	--	--	--	WQS
pH, minimum	SU	6.5[m]	--	--	--	WQS
CBOD5 (summer)	mg/L	13.0[d]	8.7	118[d]	77	PD
CBOD5 (winter)	mg/L	20.3[d]	13.3	209[d]	136	PD

[a] Effluent loadings based on average design discharge flow of 2.4 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 (ORC 6111.03)
WLA = Wasteload Allocation procedures (OAC 3745-2)

WQS = Ohio Water Quality Standards (OAC 3745-1)
WET = Minimum testing requirements for whole effluent toxicity [OAC 3745-33-07(B)(11)]

[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.

[m] minimum limit

Attachment 1. Whole Effluent Toxicity Reasonable Potential Analysis

The reasonable potential analyses in below was only performed for *Ceriodaphnia dubia,* acute as TUa Cd and chronic toxicity TUc Cd. Monitoring for *Pimephales promelas* only produced non detects. As such, they are automatically placed in group 4 and no further analysis is required.

Hazard Category Summary

	Ceriodaphnia dubia	
	Acute	**Chronic**
Effluent Toxicity	4	4
	4	

Hazard Categories: 1: Toxicity adequately documented 3: Toxicity possible
2: Toxicity strongly suspected 4: No toxicity

	Ceriodaphnia dubia	
	Acute	**Chronic**
WLA	0.5	1.64
# of tests	15	15
Maximum value	0.2	1.4
Percent of tests >WLA	0	0
Geometric mean	0	0.51
Average Exceedance (Geomean * Percent of tests >WLA)	0	0
Average Exceedance / WLA	0	0

Attribute Evaluated	**Hazard Category 1**	**Hazard Category 2**	**Hazard Category 3**	**Hazard Category 4**
Degree of Toxicity	Adequately Documented	Strongly Suspected	Possible	None
(1) Minimum number of tests	3 TUa Cd TUc Cd	1	0 or 1	0 or 1
(2) Percent of tests >WLA	>30	20 to 30	10 to 20	10 TUc Cd TUa Cd
(3) Average Exceedance/WLA[1]				
(a) Acute[2]	> 0.3	≥ 0.3	≥ 0.2	< 0.2 TUa Cd
(b) Chronic	> 0.3	≥ 0.3	≥ 0.2	< 0.2 TUc Cd

[1] Compare (per cent exceedances x geometric mean TU) to table factor.
[2] Use 0.3 x WLA for situations where AIM exists.

Addendum 1. Acronyms

ABS	Anti-backsliding
BPJ	Best professional judgment
CFR	Code of Federal Regulations
CMOM	Capacity Management, Operation, and Maintenance
CONSWLA	Conservative substance wasteload allocation
CSO	Combined sewer overflow
CWA	Clean Water Act
DMR	Discharge Monitoring Report
DMT	Dissolved metal translator
IMZM	Inside mixing zone maximum
LTCP	Long-term Control Plan
MDL	Analytical method detection limit
MGD	Million gallons per day
NPDES	National Pollutant Discharge Elimination System
OAC	Ohio Administrative Code
Ohio EPA	Ohio Environmental Protection Agency
ORC	Ohio Revised Code
ORSANCO	Ohio River Valley Water Sanitation Commission
PEL	Preliminary effluent limit
PEQ	Projected effluent quality
PMP	Pollution Minimization Program
PPE	Plant performance evaluation
SSO	Sanitary sewer overflow
TMDL	Total Daily Maximum Load
TRE	Toxicity reduction evaluation
TU	Toxicity unit
U.S. EPA	United States Environmental Protection Agency
WET	Whole effluent toxicity
WLA	Wasteload allocation
WPCF	Water Pollution Control Facility
WQBEL	Water-quality-based effluent limit
WQS	Water Quality Standards
WWTP	Wastewater Treatment Plant