

Ohio EPA Permit No.: 2PE00000*OD
Application No: OH0026069

Action Date: June 2, 2023
Effective Date: July 1, 2023
Expiration Date: June 30, 2028

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 Lima WWTP

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from the City of Lima WWTP wastewater treatment works, located at 1200 Fort Amanda Road, Lima, Ohio, Allen County, and discharging to the Ottawa River at River Mile 37.6 in accordance with the conditions specified in Parts I, II, III, IV, V, and VI of this permit.

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

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



Anne M. Vogel
Director

Total Pages: 79

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: 2PE00000001. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 001 - Final

Effluent Characteristic Parameter	Discharge Limitations							Monitoring Requirements		
	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
00045 - Total Precipitation - Inches	-	-	-	-	-	-	-	1/Day	24hr Total	All
00300 - Dissolved Oxygen - mg/l	-	5.0	-	-	-	-	-	1/Day	Continuous	All
00530 - Total Suspended Solids - mg/l	-	-	20	14	-	1402	982	3/Week	24hr Composite	All
00552 - Oil and Grease, Hexane Extr Method - mg/l	10	-	-	-	-	-	-	1/Week	Grab	All
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	2.4	1.6	-	168	112	5/Week	24hr Composite	Summer
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	2.6	1.7	-	182	119	5/Week	24hr Composite	Winter
00625 - Nitrogen Kjeldahl, Total - mg/l	-	-	-	-	-	-	-	1 / 2 Weeks	24hr Composite	All
00630 - Nitrite Plus Nitrate, Total - mg/l	-	-	-	-	-	-	-	1 / 2 Weeks	24hr Composite	All
00665 - Phosphorus, Total (P) - mg/l	-	-	1.5	1.0	-	105	70	2/Week	24hr Composite	All
00671 - Orthophosphate, Dissolved (as P) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
01074 - Nickel, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01094 - Zinc, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01113 - Cadmium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All

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			
01114 - Lead, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01118 - Chromium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01119 - Copper, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01147 - Selenium, Total (Se) - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01220 - Chromium, Dissolved Hexavalent - ug/l	-	-	-	-	-	-	-	1/Month	Grab	All
31648 - E. coli - #/100 ml	-	-	284	126	-	-	-	1/Day	Grab	Summer
39100 - Bis(2-ethylhexyl) Phthalate - ug/l	-	-	-	-	-	-	-	1/Month	Composite	All
50047 – Flow, Peak Rate – MGD	-	-	-	-	-	-	-	When Disch.	24hr Total	All
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	24hr Total	All
50060 - Chlorine, Total Residual - mg/l	0.019	-	-	-	-	-	-	1/Day	Multiple Grab	Summer
50092 - Mercury, Total (Low Level) - ng/l	1700	-	-	3.5	0.12	-	0.00025	1/Month	Grab	All
51173 - Cyanide, Free (Low-Level) - ug/l	-	-	-	-	-	-	-	1/Month	Grab	All
61425 - Acute Toxicity, Ceriodaphnia dubia - TUa	1.0	-	-	-	-	-	-	1/Quarter	24hr Composite	Quarterly
61426 - Chronic Toxicity, Ceriodaphnia dubia - TUc	-	-	-	1.0	-	-	-	1/Quarter	24hr Composite	Quarterly
61427 - Acute Toxicity, Pimephales promelas - TUa	-	-	-	-	-	-	-	1/Year	24hr Composite	August
61428 - Chronic Toxicity, Pimephales promelas - TUc	-	-	-	-	-	-	-	1/Year	24hr Composite	August
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/Month	24hr Composite	All
80082 - CBOD 5 day - mg/l	-	-	10	7	-	701	491	3/Week	24hr Composite	All

Notes for Station Number 2PE00000001:

*Effluent loadings are based on the average daily design flow is 18.5 MGD.

- a. Free cyanide - See Part II, Item U.
- b. Orthophosphate - See Part II, Item V.
- c. Bis(2-ethylhexyl) phthalate - See Part II, Item W.
- d. Mercury - See Part II, Item Y, Z, and AA.
- e. Selenium- See Part II, Item AB.
- f. Biomonitoring - See Part II, Item AC.
- g. Peak Flow Rate – See Part II, Item AE.

Part I, A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outfall: 2PE00000603. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Internal Monitoring Station - 603 - 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			
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	When Disch.	24hr Total	All

PART I, A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

3. 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: 2PE00000604. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Internal Monitoring Station - 604 - 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	65	-	-	45	-	-	-	When Disch.	Composite	All
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	When Disch.	24hr Total	All
80082 - CBOD 5 day - mg/l	65	-	-	45	-	-	-	When Disch.	Composite	All
82517 - Duration of Discharge - Hours	-	-	-	-	-	-	-	When Disch.	24hr Total	All

Notes for Station Number 2PE00000604:

- a. This station represents flow that receives biological treatment from only the nitrification towers, which is approved as equivalent to secondary treatment. Use of this station shall be limited to wet weather events in which the influent flow rate exceeds the hydraulic capacity of the activated sludge treatment system.
- b. "When discharging" means monitoring and reporting for the respective parameters are required when biological treatment is provided by only the nitrification towers (i.e. in peak wet weather mode). Monitoring at this station shall exclude any flows that receive biological treatment from the activated sludge treatment system (i.e. in dry weather mode or wet weather mode).
- c. TSS and CBOD5 - Sampling shall commence no later than two (2) hours after a discharge has begun to occur at this station. Samples are not required for discharges lasting less than two (2) hours. The two-hour delay does not apply to flow rate or duration monitoring.
- d. A Discharge Monitoring Report (DMR) for this station must be submitted every month. If there are no discharges during the entire month, select the "No Discharge" check box on the data entry form and PIN the eDMR.

Part I, B. CSO MONITORING LIMITATIONS AND MONITORING REQUIREMENTS

1. CSO Monitoring. The following monitoring table, which is for combined sewer overflow (CSO) 2PE00000002, is identical to the monitoring tables for CSOs 2PE00000003, 2PE00000004, 2PE00000005, and 2PE00000006. 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 these five CSO stations, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of CSO sampling.

Table - CSO Monitoring - 002 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
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	-	-	-	-	-	-	-	When Disch.	Total	All
74063 - Overflow Volume - Million Gallons	-	-	-	-	-	-	-	When Disch.	24hr Total	All

Notes for Station Numbers 2PE00000002, 2PE00000003, 2PE00000004, 2PE00000005, and 2PE00000006:

- Subject to the terms and conditions of this permit, including the General Effluent Limitations in Part III, Item 2, the permittee is authorized to discharge from this station only during wet weather periods when the flow in the sewer system exceeds the capacity of the sewer system.
- A Discharge Monitoring Report (DMR) for this station must be submitted every month. If this station is monitored during a particular month and there are no discharges during the entire month, select the "No Discharge" check box on the data entry form and PIN the eDMR.
- If this station is not monitored during a particular month: (1) Leave the data area blank; (2) Enter "Monitoring not required" in the Remarks section; and (3) PIN the eDMR.
- Data for Overflow Occurrence and Overflow Volume may be estimated if a measuring device is not available.
- Overflow Occurrences: If a discharge from this station occurs intermittently during a day, starting and stopping several times, count "1" occurrence 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 total occurrences for the month on Day 1 of the DMR.
- Overflow Volume shall be reported on each day there is a discharge through this station.
- Combined Sewer Overflows - See Part II, Items D, E, and F.

Part I, B. CSO MONITORING LIMITATIONS AND MONITORING REQUIREMENTS

2. CSO Monitoring. The following monitoring table, which is for CSO 2PE00000002, is identical to the monitoring tables for CSOs 2PE00000007, 2PE00000008, 2PE00000009, 2PE00000011, 2PE00000012, 2PE00000013, 2PE00000014, 2PE00000015, 2PE00000016, 2PE00000033, 2PE00000035, 2PE00000037, and 2PE00000038. During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee shall monitor these thirteen CSO stations, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of CSO sampling.

Table - CSO Monitoring - 007 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
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	-	-	-	-	-	-	-	When Disch.	Total	All

Notes for Station Numbers 2PE00000007, 2PE00000008, 2PE00000009, 2PE00000011, 2PE00000012, 2PE00000013, 2PE00000014, 2PE00000015, 2PE00000016, 2PE00000033, 2PE00000035, 2PE00000037, and 2PE00000038:

- Subject to the terms and conditions of this permit, including the General Effluent Limitations in Part III, Item 2, the permittee is authorized to discharge from this station only during wet weather periods when the flow in the sewer system exceeds the capacity of the sewer system.
- A Discharge Monitoring Report (DMR) for this station must be submitted every month. If this station is monitored during a particular month and there are no discharges during the entire month, select the "No Discharge" check box on the data entry form and PIN the eDMR.
- If this station is not monitored during a particular month: (1) Leave the data area blank; (2) Enter "Monitoring not required" in the Remarks section; and (3) PIN the eDMR.
- Data for Overflow Occurrence may be estimated if a measuring device is not available.
- Overflow Occurrences: If a discharge from this station occurs intermittently during a day, starting and stopping several times, count "1" occurrence 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 total occurrences for the month on Day 1 of the DMR.
- Combined Sewer Overflows - See Part II, Item D, E, and F.

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

3. 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 2PE00000300, 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 2PE00000300:

- 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 H and I.

Part I, B. SLUDGE LIMITATIONS AND MONITORING REQUIREMENTS

4. 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 2PE00000581, 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 Parameter	Discharge Limitations							Monitoring Requirements		
	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	-	-	-	-	-	-	-	1/2 months	Composite	Bimonthly - Even
00627 - Nitrogen Kjeldahl, Total In Sludge - mg/kg	-	-	-	-	-	-	-	1/2 months	Composite	Bimonthly - Even
00668 - Phosphorus, Total In Sludge - mg/kg	-	-	-	-	-	-	-	1/2 months	Composite	Bimonthly - Even
00938 - Potassium In Sludge - mg/kg	-	-	-	-	-	-	-	1/2 months	Composite	Bimonthly - Even
01003 - Arsenic, Total In Sludge - mg/kg	75	-	-	-	-	-	-	1/2 months	Composite	Bimonthly - Even
01028 - Cadmium, Total In Sludge - mg/kg	85	-	-	-	-	-	-	1/2 months	Composite	Bimonthly - Even
01043 - Copper, Total In Sludge - mg/kg	4300	-	-	-	-	-	-	1/2 months	Composite	Bimonthly - Even
01052 - Lead, Total In Sludge - mg/kg	840	-	-	-	-	-	-	1/2 months	Composite	Bimonthly - Even
01068 - Nickel, Total In Sludge - mg/kg	420	-	-	-	-	-	-	1/2 months	Composite	Bimonthly - Even
01093 - Zinc, Total In Sludge - mg/kg	7500	-	-	-	-	-	-	1/2 months	Composite	Bimonthly - Even
01148 - Selenium, Total In Sludge - mg/kg	100	-	-	-	-	-	-	1/2 months	Composite	Bimonthly - Even
31641 - Fecal Coliform in Sludge - MPN/G	2000000	-	-	-	-	-	-	1/2 months	Multiple Grab	Bimonthly - Even
51129 - Sludge Fee Weight - dry tons	-	-	-	-	-	-	-	1/2 months	Total	Bimonthly - Even
70316 - Sludge Weight - Dry Tons	-	-	-	-	-	-	-	1/2 months	Total	Bimonthly - Even

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	-	-	-	-	-	-	1/2 months	Composite	Bimonthly - Even
78465 - Molybdenum In Sludge - mg/kg	75	-	-	-	-	-	-	1/2 months	Composite	Bimonthly - Even

Notes for Station Number 2PE00000581:

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 February, April, June, August, October 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: $\text{dry tons} = \text{gallons} \times 8.34 \text{ (lbs/gallon)} \times 0.0005 \text{ (tons/lb)} \times \text{decimal fraction total solids}$.

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 MPN/g of fecal coliform in the individual sample. The geometric mean of those seven results shall be reported on the DMR. Each fecal coliform sample must be delivered to the analytical lab within six hours after the sample has been collected, in accordance with the requirements for Part 9221 E. or part 9222 D., "Standard Methods for the Examination of Water and Wastewater". This process must be completed prior to sewage sludge being removed from the treatment facility.

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

Part I, B. SLUDGE LIMITATIONS AND MONITORING REQUIREMENTS

5. 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 2PE00000584, 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 - 584 - Final

Effluent Characteristic Parameter	Discharge Limitations							Monitoring Requirements		
	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	-	-	-	-	-	-	-	1/2 months	Composite	Bimonthly - Even
00627 - Nitrogen Kjeldahl, Total In Sludge - mg/kg	-	-	-	-	-	-	-	1/2 months	Composite	Bimonthly - Even
00668 - Phosphorus, Total In Sludge - mg/kg	-	-	-	-	-	-	-	1/2 months	Composite	Bimonthly - Even
00938 - Potassium In Sludge - mg/kg	-	-	-	-	-	-	-	1/2 months	Composite	Bimonthly - Even
01003 - Arsenic, Total In Sludge - mg/kg	75	-	-	41	-	-	-	1/2 months	Composite	Bimonthly - Even
01028 - Cadmium, Total In Sludge - mg/kg	85	-	-	39	-	-	-	1/2 months	Composite	Bimonthly - Even
01043 - Copper, Total In Sludge - mg/kg	4300	-	-	1500	-	-	-	1/2 months	Composite	Bimonthly - Even
01052 - Lead, Total In Sludge - mg/kg	840	-	-	300	-	-	-	1/2 months	Composite	Bimonthly - Even
01068 - Nickel, Total In Sludge - mg/kg	420	-	-	420	-	-	-	1/2 months	Composite	Bimonthly - Even
01093 - Zinc, Total In Sludge - mg/kg	7500	-	-	2800	-	-	-	1/2 months	Composite	Bimonthly - Even
01148 - Selenium, Total In Sludge - mg/kg	100	-	-	100	-	-	-	1/2 months	Composite	Bimonthly - Even
31641 - Fecal Coliform in Sludge - MPN/G	1000	-	-	-	-	-	-	1/2 months	Multiple Grab	Bimonthly - Even
51129 - Sludge Fee Weight - dry tons	-	-	-	-	-	-	-	1/2 months	Total	Bimonthly - Even
70316 - Sludge Weight - Dry Tons	-	-	-	-	-	-	-	1/2 months	Total	Bimonthly - Even

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	-	-	17	-	-	-	1/2 months	Composite	Bimonthly - Even
78465 - Molybdenum In Sludge - mg/kg	75	-	-	75	-	-	-	1/2 months	Composite	Bimonthly - Even

Notes for Station Number 2PE00000584:

- a. Monitoring is required when sewage sludge is removed from the permittee's facility for application to the land or for sale/distribution. The monitoring data shall be reported on the February, April, June, August, October 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 MPN/g of fecal coliform in the individual sample. The geometric mean of those seven results shall be reported on the DMR. Each fecal coliform sample must be delivered to the analytical lab within six hours after the sample has been collected, in accordance with the requirements for Part 9221 E. or part 9222 D., "Standard Methods for the Examination of Water and Wastewater". This process must be completed prior to sewage sludge being removed from the treatment facility.

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

Part I, B. SLUDGE LIMITATIONS AND MONITORING REQUIREMENTS

6. 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 2PE00000586, 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 2PE00000586:

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 Q, R, S, and T.

Part I, B. SLUDGE LIMITATIONS AND MONITORING REQUIREMENTS

7. 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 2PE00000588, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sludge sampling.

Table - Sludge Monitoring - 588 - Final

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

Notes for Station Number 2PE00000588:

- Monitoring is required when sewage sludge is removed from the permittee's facility for transfer to another NPDES permit holder. The total sludge weight or sludge volume transferred to another NPDES permit holder for the entire year shall be reported on the December Discharge Monitoring Report (DMR).
- If no sewage sludge is removed from the permittee's facility for transfer to another NPDES permit holder during the year, select the "No Discharge" check box on the data entry form and PIN the eDMR.
- Sludge weight is a calculated total for the year. To convert from gallons of liquid sewage sludge to dry tons of sewage sludge: dry tons = gallons x 8.34 (lbs/gallon) x 0.0005 (tons/lb) x decimal fraction total solids.
- See Part II, Items Q, R, S, and T.

Part I, B. INFLUENT MONITORING REQUIREMENTS

8. 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 2PE00000601, 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 Parameter	Discharge Limitations							Monitoring Requirements		
	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
00720 - Cyanide, Total - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
01074 - Nickel, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01094 - Zinc, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01113 - Cadmium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01114 - Lead, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01118 - Chromium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01119 - Copper, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01220 - Chromium, Dissolved Hexavalent - ug/l	-	-	-	-	-	-	-	1/Month	Grab	All
50092 - Mercury, Total (Low Level) - ng/l	-	-	-	-	-	-	-	1/Month	Grab	All
61941 - pH, Maximum - S.U.	-	-	-	-	-	-	-	1/Day	Continuous	All
61942 - pH, Minimum - S.U.	-	-	-	-	-	-	-	1/Day	Continuous	All
80082 - CBOD 5 day - mg/l	-	-	-	-	-	-	-	3/Week	24hr Composite	All

Notes for Station Number 2PE00000601:

- a. Sampling for the respective/common parameters shall occur on the same day as Outfall 2PE00000001.
- b. Mercury - See Part II, Item Y.1.c.

Part I, B. UPSTREAM LIMITATIONS AND MONITORING REQUIREMENTS

10. 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 2PE00000801, 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 Parameter	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00610 - Nitrogen, Ammonia (NH ₃) - 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/Quarter	Grab	Quarterly
61435 - 96-Hr. Acute Toxicity Pimephales promela - % Affected	-	-	-	-	-	-	-	1/Year	Grab	August
61438 - 7-Day Chronic Toxicity Ceriodaphnia dubia - % Affected	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly
61441 - 7-Day Chronic Toxicity Pimephales promelas - % Affected	-	-	-	-	-	-	-	1/Year	Grab	August

Notes for Station Number 2PE00000801:

- a. Sampling for the respective/common parameters shall occur on the same day as Outfall 2PE00000001.
- b. Biomonitoring - see Part II, Item AB.

Part I, B. DOWNSTREAM-NEARFIELD LIMITATIONS AND MONITORING REQUIREMENTS

11. Downstream-Nearfield 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 2PE00000901, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - Downstream-Nearfield 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
00625 - Nitrogen Kjeldahl, Total - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
00630 - Nitrite Plus Nitrate, Total - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
00665 - Phosphorus, Total (P) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
00900 - Hardness, Total (CaCO3) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
01147 - Selenium, Total (Se) - ug/l	-	-	-	-	-	-	-	1/Month	Grab	All
31648 - E. coli - #/100 ml	-	-	-	-	-	-	-	1 / 2 Weeks	Grab	June - Aug

Notes for Station Number 2PE00000901:

- a. Sampling for the respective/common parameters shall occur on the same day as Outfall 2PE00000001.
- b. Selenium- See Part II, Item AB.

Part I, C - Schedule of Compliance

Milestone Summary Report			
<u>Section</u>	<u>Report</u>	<u>Event Code</u>	<u>Due Date</u>
Municipal Pretreatment Schedule	Effluent Limits For Pollutants	52599	24 months after the permit effective date

Municipal Pretreatment Schedule

1. The permittee shall evaluate the adequacy of local industrial user limitations to prevent the introduction of pollutants into the POTW which will interfere with the operation of the POTW, pass through the POTW in amounts that exceed water quality standard-based limits, be incompatible with the POTW, or limit wastewater or sludge use options. Technical justification for revising local industrial user limitations to attain compliance with final table limits, along with a pretreatment program modification request, or technical justification for retaining existing local industrial user limitations shall be submitted for acceptance to Ohio EPA, Central Office Pretreatment Unit and to Ohio EPA, Northwest District Office, as soon as possible, but no later than 24 months after the permit effective date. (Event Code 52599)

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

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

<https://epa.ohio.gov/divisions-and-offices/surface-water/permitting/guidance-documents-tools-and-checklists-for-approved-pretreatment-programs>

The report shall include the following:

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

biological processes such as activated sludge, sludge digestion, nitrification, etc. Calculation tables can be found on the Ohio EPA website at:

<https://epa.ohio.gov/divisions-and-offices/surface-water/permitting/guidance-documents-tools-and-checklists-for-approved-pretreatment-programs>

f. If revised industrial user discharge limits are proposed, the method of allocating available pollutant loads to industrial users.

g. If narrative or best management practices (BMPs) are proposed as local limits, information on how they will be implemented. When appropriate, industrial user discharge limits may include narrative local limits requiring industrial users to develop and implement BMPs. These narrative local limits may be used either alone or as a supplement to numeric limits.

h. Supporting data, assumptions, and methodologies used in establishing the information in item 1.a through 1.g above.

i. If new or revised industrial user discharge limits are proposed, the stamp and signature of a licensed Ohio professional engineer.

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

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

4. Sampling Methods

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

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

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

2. Professional Operator of Record

- a. Within three days of a change in a professional operator of record, the permittee shall notify the Director of the Ohio EPA of any such change on a form acceptable to Ohio EPA. The 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
2PE00000001	Final effluent prior to discharge to the Ottawa River (Lat: 40 N 43 ' 25 "; Long: 84 W 07 ' 46 ")
2PE00000002-038	Combined Sewer Overflows, see Part II, Item D
2PE00000300	Collection system sanitary sewer overflows (SSOs)
2PE00000581	Sludge disposal of Class B biosolids via land application
2PE00000584	Sludge disposal of exceptional quality biosolids via land application
2PE00000586	Sludge disposal via hauling to landfill
2PE00000588	Sludge disposal via transfer to another NPDES permit holder
2PE00000601	Influent monitoring
2PE00000603	Internal monitoring station for the secondary effluent pump station
2PE00000604	Internal monitoring station for nitrification tower effluent
2PE00000801	Upstream monitoring
2PE00000901	Downstream monitoring

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. Combined Sewer Outfalls

The permittee is authorized to discharge from the following combined sewer overflows (CSOs) only during wet weather periods when the flow in the sewer system exceeds the capacity of the sewer system. See Part I,B for applicable monitoring and reporting requirements. Also see Part III, Item 11.

CSO Station Number	Description of Location	Receiving Stream
2PE00000002	Collett Street Control Structure (Lat: 40 N 43 ' 56 "; Long: 84 W 07 ' 06 ")	Ottawa River
2PE00000003	Heindel Street Control Structure (Lat: 40 N 43 ' 58 "; Long: 84 W 07 ' 01 ")	Ottawa River

2PE00000004	McDonel Street Control Structure (Lat: 40 N 44 ' 02 "; Long: 84 W 06 ' 37 ")	Ottawa River
2PE00000005	Central Avenue Control Structure (Lat: 40 N 44 ' 10 "; Long: 84 W 06 ' 09 ")	Ottawa River
2PE00000006	Lovers Lane Control Structure (Lat: 40 N 44 ' 25 "; Long: 84 W 05 ' 36 ")	Ottawa River
2PE00000007	South Central Avenue (Lat: 40 N 44 ' 10 "; Long: 84 W 06 ' 08 ")	Ottawa River
2PE00000008	Timerlake Sewer, west of Baxter Street (Lat: 40 N 44 ' 10 "; Long: 84 W 06 ' 09 ")	Ottawa River
2PE00000009	Oxford Avenue at Collett Street (Lat: 40 N 43 ' 41 "; Long: 84 W 07 ' 22 ")	Ottawa River
2PE00000011	Burch Avenue at O'Connor Avenue (Lat: 40 N 45 ' 26 "; Long: 84 W 06 ' 42 ")	Pike Run
2PE00000012	McDonel Street at O'Connor Avenue (Lat: 40 N 45 ' 08 "; Long: 84 W 06 ' 46 ")	Pike Run
2PE00000013	Metcalf Street at O'Connor Avenue (Lat: 40 N 45 ' 26 "; Long: 84 W 06 ' 48 ")	Pike Run
2PE00000014	Metcalf Street at Tremont Avenue (Lat: 40 N 45 ' 15 "; Long: 84 W 06 ' 48 ")	Pike Run
2PE00000015	Metcalf Street at Runyan Avenue (Lat: 40 N 45 ' 22 "; Long: 84 W 06 ' 48 ")	Pike Run
2PE00000016	Metcalf Street at Ashton Avenue (Lat: 40 N 45 ' 19 "; Long: 84 W 06 ' 48 ")	Pike Run
2PE00000033	Nixon Avenue at Kunneke Avenue (Lat: 40 N 43 ' 58 "; Long: 84 W 08 ' 08 ")	Ottawa River
2PE00000034	Judkins Avenue at Kunneke Avenue (Lat: 40 N 43 ' 58 "; Long: 84 W 08 ' 03 ")	Ottawa River
2PE00000035	Lakewood Avenue at Charles Street (Lat: 40 N 44 ' 02 "; Long: 84 W 07 ' 22 ")	Ottawa River
2PE00000037	North Shore Drive at Cole Street (Lat: 40 N 44 ' 39 "; Long: 84 W 08 ' 16 ")	Ottawa River
2PE00000038	West Street at O'Connor Avenue (Lat: 40 N 45 ' 26 "; Long: 84 W 06 ' 31 ")	Pike Run

The City of Lima CSO Public Notification Plan states there are no potentially impacted public access areas.

E. Public Notification Requirements for CSO discharges to the Lake Erie Basin

Each permittee with authorized CSO discharges to the Lake Erie Basin must provide public notification of such discharges in accordance with 40 CFR 122.38(a). At a minimum, such notification shall consist of the following:

1. Signage

The permittee shall ensure that adequate signage, where feasible, is posted at all CSO outfall locations and potentially impacted public access areas, as identified in Part II, Item D. The signage shall adhere to the Outfall Signage requirements of Part II, Item Y.

2. Notification of Local Public Health Department(s) and Other Potentially Affected Public Entities

a. Initial Notification

As soon as possible, but no later than four (4) hours after becoming aware of a CSO discharge, the permittee shall notify the appropriate local Department of Health and other affected public entities, as identified in the Public Notification Plan. Such initial notice shall, at a minimum, include the following information:

- i. The name of the affected water body;
- ii. The location of the discharge and potentially impacted public access areas;
- iii. The date and time that the discharge began;
- iv. The approximate time that the discharge ended or if the discharge is ongoing, and;
- v. A point of contact for the permittee.

b. Supplemental Notification

The permittee shall notify the appropriate local Department of Health and other affected public entities, as identified in the Public Notification Plan, within seven (7) days of becoming aware of a CSO discharge, unless the information has been provided in an earlier notice. Notification shall include:

- i. The volume of the discharge and;
- ii. The approximate time that the discharge ended.

3. Notification of the Public

a. Initial Notification

As soon as possible, but no later than four (4) hours after becoming aware of a CSO discharge, the permittee shall provide initial notification to the public, as identified in the Public Notification Plan. Such initial notice shall include, at a minimum, the following information:

- i. The name of the affected water body;
- ii. The location of the discharge and potentially impacted public access areas;
- iii. The date and time that the discharge began, and;
- iv. The approximate time that the discharge ended or if the discharge is ongoing.

b. Supplemental Notification

The permittee shall provide supplemental notification to the public, as identified in the Public Notification Plan, within seven (7) days of becoming aware of a CSO discharge, unless the information has been provided in an earlier notice. The notification shall include:

- i. The volume of the discharge and;
- ii. The approximate time that the discharge ended.

4. Annual Report

On or prior to May 1st of each year, the permittee shall make available to the public an Annual Report describing the CSO discharges from its discharge point(s) that occurred in the previous calendar year, in accordance with 40 CFR 122.38(b). Upon public availability of the Annual Report, the permittee shall submit instructions on how to access the Annual Report to Ohio EPA Northwest District Office and U.S. EPA. Such notice to US EPA shall be in the form of an email to NPDES_CSO@epa.gov

At a minimum, the Annual Report shall include:

- a. A description of the location and receiving water for each CSO discharge point, and, if applicable, any treatment provided;
- b. The date, location, approximate duration, measured or estimated volume, and cause (e.g., rainfall, snowmelt) of each wet weather CSO discharge that occurred during the past calendar year;
- c. The date, location, duration, volume, and cause of each dry weather CSO discharge that occurred during the past calendar year;
- d. A summary of available monitoring data for CSO discharges from the past calendar year;
- e. A description of any public access areas potentially impacted by each CSO discharge;
- f. Representative precipitation data in total inches to the nearest 0.1 inch that resulted in a CSO discharge, if precipitation was the cause of the discharge;
- g. Permittee contact information; and
- h. A concise summary of implementation of the nine minimum controls and the status of implementation of the CSO long-term control plan (or other plans to reduce or prevent CSO discharges), including:
 - (i) A description of key milestones remaining to complete implementation of the plan; and
 - (ii) A description of the average annual number of CSO discharges anticipated after implementation of the long-term control plan (or other plan relevant to reduction of CSO overflows) is completed

F. CSO Nine Minimum Controls

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

- 1) provide proper operation and maintenance for the collection system and the CSO points;
- 2) provide the maximum use of the collection system for storage of wet weather flow prior to allowing overflows;
- 3) review and modify the pretreatment program to minimize the impact of nondomestic discharges from combined sewer overflows;
- 4) maximize the capabilities of the POTW to treat wet weather flows, and maximize the wet weather flow to the wastewater treatment plant within the limits of the plant's capabilities;
- 5) prohibit dry weather overflows;
- 6) control solid and floatable materials in the CSO discharge;
- 7) conduct required inspection, monitoring and reporting of CSOs;
- 8) implement pollution prevention programs that focus on reducing the level of contaminants in CSOs;
- and
- 9) implements a public notification program for areas affected by CSOs, especially beaches and recreation areas.

G. Subject to the terms and conditions of this permit, the permittee is authorized to discharge from the following outfalls and/or monitoring stations that are limited to storm water associated with industrial activity. See Parts IV, V, and VI for monitoring and reporting requirements.

Station Number	Description of Location	Receiving Stream
2PE00000101	Maintenance building south and east sides	Ottawa River

2PE00000102	(Lat: 84 N 7 ' 54 ", Long: 40 W 43 ' 31 ") Maintenance building north side	Ottawa River
2PE00000103	(Lat: 84 N 7 ' 55 ", Long: 40 W 43 ' 31 ") Adjacent to chlorine disinfection system	Ottawa River
2PE00000104	(Lat: 84 N 7 ' 46 ", Long: 40 W 43 ' 25 ") Adjacent to nitrification towers (east)	Ottawa River
2PE00000105	(Lat: 84 N 7 ' 49 ", Long: 40 W 43 ' 24 ") Adjacent to nitrification towers (west)	Ottawa River
2PE00000106	(Lat: 84 N 7 ' 51 ", Long: 40 W 43 ' 24 ") Adjacent to sludge storage area	Ottawa River
	(Lat: 84 N 7 ' 56 ", Long: 40 W 43 ' 24 ")	

H. 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.

I. The permittee shall maintain in good working order and operate as efficiently as possible the "treatment works" and "sewerage system" as defined in ORC 6111.01 to achieve compliance with the terms and

conditions of this permit and to prevent discharges to the waters of the state, surface of the ground, basements, homes, buildings, etc.

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

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

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

M. The treatment works must obtain at least 85 percent removal of carbonaceous biochemical oxygen demand (five-day) and suspended solids (see Part III, Item 1). Days when flow rate exceeds 30 MGD shall be excluded from the calculation.

N. Limits Below Quantification

The parameters below have had effluent limitations established that are below the Ohio EPA Quantification Level (OEPA QL) for the approved analytical procedure promulgated at 40 CFR 136. OEPA QLs may be expressed as Practical Quantification Levels (PQL) or Minimum Levels (ML). Compliance with an effluent limit that is below the OEPA QL is determined in accordance with ORC Section 6111.13 and OAC Rule 3745-33-07(C). For maximum effluent limits, any value reported below the OEPA QL shall be considered in compliance with the effluent limit. For average effluent limits, compliance shall be determined by taking the arithmetic mean of values reported for a specified averaging period, using zero (0) for any value reported at a concentration less than the OEPA QL, and comparing that mean to the appropriate average effluent limit. An arithmetic mean that is less than or equal to the average effluent limit shall be considered in compliance with that limit. The permittee must utilize the lowest available detection method currently approved under 40 CFR Part 136 for monitoring these parameters.

REPORTING:

All analytical results, even those below the OEPA QL (listed below), shall be reported.

Analytical results are to be reported as follows:

1. Results above the QL: Report the analytical result for the parameter of concern.
2. Results above the MDL, but below the QL: Report the analytical result, even though it is below the QL.
3. Results below the MDL: Analytical results below the method detection limit shall be reported as "below detection" using the reporting code "AA".

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

Parameter	PQL	ML
Chlorine, Total Residual	0.050 mg/L	--

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

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

- 1) comply with all conditions of its NPDES permit,
- 2) obtain a RCRA ID number and comply with certain manifest and reporting requirements under RCRA,
- 3) satisfy corrective action requirements, and
- 4) meet all federal, state, and local pretreatment requirements.

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

Q. 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.

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

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

T. Each day when sewage sludge is removed from the wastewater treatment plant for use or disposal, a representative sample of sewage sludge shall be collected and analyzed for percent total solids. This value of percent total solids shall be used to calculate the total Sewage Sludge Weight (Discharge Monitoring Report code 70316) and/or total Sewage Sludge Fee Weight (Discharge Monitoring Report code 51129) removed from the treatment plant on that day. The results of the daily monitoring and the weight calculations shall be maintained on site for a minimum of five years. The test methodology used shall be from 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.

U. 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.

V. 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.

W. Monitoring for Bis(2-ethylhexyl) phthalate

Composite samples for Bis(2-ethylhexyl) phthalate shall be comprised of at least three manual grab samples collected at intervals of at least 3 hours, during an 8 hour period that the plant is staffed for sampling. The samples shall be collected and composited in glass to eliminate the potential for contamination from plastic containers; and they shall be collected at such times and locations, and in such fashion, as to be representative of the facility's overall performance.

X. 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.

Y. General Mercury Variance

The permittee is granted a renewal of the general mercury variance under the provisions of Rule 3745-01-38(H) of the Ohio Administrative Code. The City of Lima has demonstrated that the facility is currently unable to comply with the monthly average water quality based effluent limit of 1.3 ng/L without construction of expensive end-of-pipe controls more stringent than those required by sections 301(b) and 306 of the Clean Water Act. The City of Lima is currently able to achieve an annual average mercury concentration of 12 ng/L. For general mercury variance purposes, the annual average mercury effluent concentration is defined as the average of the most recent 12 months of effluent data.

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

of mercury that contribute to discharge levels; periodic monitoring of sources and the treatment system; and annual reporting of results.

The plan of study that was part of the permittee's 2015 application for coverage under the general mercury variance included items associated with developing a control strategy and initial implementation of a PMP. By implementing the plan of study and meeting other conditions of its NPDES permit, the permittee has been taking actions consistent with a PMP for mercury. Condition 1.d below, requires the permittee to continue implementing a PMP for mercury.

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

a. The permittee shall comply with the effluent limitations for mercury at outfall 2PE00000001 given in Part I, A. of this permit.

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

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

d. The permittee shall continue implementing a PMP for mercury consistent with the plan of study included in the permittee's mercury variance application submitted in 2022 and any other relevant information submitted by the permittee, including the following activities:

- i. Continue collaboration with Allen County Solid Waste District and Allen County Homeland Security to collect mercury waste from industries, schools, and citizens for proper disposal;
- ii. Continue monitoring of industrial users and issuing violations when necessary;

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

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

g. On or prior to March 15 of each year, the permittee shall submit two copies of an annual PMP report to Ohio EPA, Division of Surface Water, NPDES Permit Unit, P.O. Box 1049, Columbus, OH, 43216-1049. The annual PMP report shall include:

- i. All minimization program monitoring results for the year
- ii. A list of potential sources of mercury
- iii. A summary of all actions taken to meet the effluent limits for mercury
- iv. Any updates of the control strategy, including actions planned to reduce the levels of mercury in the treatment plant's final effluent.

The Ohio EPA Annual Mercury PMP Report and Appendices are available on the Division of Surface Water Permits Program Technical Assistance web page at the following website. Open the Mercury list. <https://epa.ohio.gov/divisions-and-offices/surface-water/guides-manuals/permits-program-technical-assistance>

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

- i. All available mercury influent and effluent data for the most recent 12 month period.
- ii. Data documenting all known significant sources of mercury and the steps that have been taken to reduce or eliminate those sources; and
- iii. A determination of the lowest mercury concentration that currently available data indicate can be reliably achieved through implementation of the PMP.

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

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

- i. Notify Ohio EPA's Northwest District Office not later than 30 days from the date of the exceedance.
- ii. Submit an individual variance application, if a variance is desired, not later than 6 months from the date of the exceedance; or
- iii. Request a permit modification not later than 6 months from the date of the exceedance for a compliance schedule to attain compliance with the water quality-based effluent limits for mercury.

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

c. If the permittee does not comply with either 2.a.ii or 2.a.iii, above, a monthly water-quality based effluent limit for mercury of 1.3 ng/L shall apply at outfall 2PE00000001 beginning 6 months from the date of the exceedance.

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

Z. Permit Reopener for Mercury Variance Revisions

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

AA. Renewal of Mercury Variance

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

1. the certification described under Part II, Item Y.1.h., and all information required under Part II, Item Y.1.h.i. through Part II, Item Y.1.h.iii;
2. a status report on the progress being made implementing the pollutant minimization program (PMP). This information may be included in the annual PMP report required under Part II, Item Y.1.g;

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

AB. Monitoring for Selenium

The permittee shall use EPA Method 200.7, 200.8 with Dynamic Reaction Cell technology, or 200.9 to comply with all selenium monitoring requirements in this permit.

AC. Biomonitoring Program Requirements

The permittee shall continue to implement an effluent biomonitoring program to determine the toxicity of the effluent from outfall 2PE00000001.

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 quarterly chronic toxicity tests using water fleas (*Ceriodaphnia dubia*) and annual chronic toxicity tests using fathead minnows (*Pimephales promelas*) on effluent samples from outfall 2PE00000001. 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 quarterly acute toxicity tests using water fleas (*Ceriodaphnia dubia*) and annual acute toxicity tests using fathead minnows (*Pimephales promelas*) on effluent samples from outfall 2PE00000001. 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 2PE00000801. 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 quarterly or annual bioassay requirement, the permittee shall report results of the tests in accordance with Sections 2.H.1., 2.H.2.a., 3.H.1., and 3.H.2.a. of the biomonitoring guidance, including reporting the results on the monthly DMR and submitting a copy of the complete test report to Ohio EPA, Division of Surface Water. The test report may be submitted electronically using the acute or chronic NPDES Biomonitoring Report Form available through the Ohio EPA eBusiness Center, Division of Surface Water NPDES Permit Applications service. Alternatively, the permittee may submit a hard copy of the report to Ohio EPA, Division of Surface Water, NPDES Permit Unit, P.O. Box 1049, Columbus, OH, 43216-1049.

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

b. Definitions

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 = $100/\text{square root of } (NOEC \times LOEC)$

AE. Pretreatment Program Requirements

The permittee's pretreatment program initially approved on January 14, 1992 and all subsequent modifications approved before the effective date of this permit, shall be an enforceable term and condition of this permit. To ensure that the approved program is implemented in accordance with 40 CFR 403, Chapter 3745-3 of Ohio Administrative Code and Chapter 6111 of the Ohio Revised Code, the permittee shall comply with the following conditions:

1. Legal Authority

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

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

2. Funding

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

3. Industrial User Inventory

The permittee shall identify all industrial users subject to pretreatment standards and requirements and characterize the nature and volume of pollutants in their wastewater. Dischargers determined to be Significant Industrial Users according to OAC 3745-3-01 must be notified of applicable pretreatment

standards and requirements within 30 days of making such a determination. This inventory shall be updated at a frequency to ensure proper identification and characterization of industrial users.

4. Slug Load Control Plans for Significant Industrial Users

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

5. Local Limits

The permittee shall develop and enforce technically based local limits to prevent the introduction of pollutants into the POTW which will interfere with the operation of the POTW, pass through the treatment works, be incompatible with the treatment works, or limit wastewater or sludge use options. The permittee shall use the following waste load allocation values when evaluating local limits for the following pollutants for which a final effluent limit has not been established:

Arsenic 104 ug/L
Cadmium 5.81 ug/L
Chromium, hexavalent 11 ug/L
Chromium, total 102 ug/L
Copper 27 ug/L
Free Cyanide 5.2 ug/L
Lead 50 ug/L
Molybdenum 10416 ug/L
Nickel 130 ug/L
Selenium 5.0 ug/L
Silver 1.3 ug/L
Zinc 330 ug/L

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

6. Control Mechanisms

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

7. Industrial Compliance Monitoring

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

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

8. POTW Priority Pollutant Monitoring

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

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

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

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

9. Enforcement

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

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

10. Reporting

All reports required under this section shall be submitted through Ohio EPA's eBusiness Center/STREAMS, Division of Surface Water NPDES Permit Applications services. The Ohio EPA eBusiness Center can be found in the link: <https://ebiz.epa.ohio.gov/login.html>

a. Quarterly Industrial User Violation Report

On or prior to the 15th day of February, May, August and December, the permittee shall report the industrial users that are in violation of applicable pretreatment standards during the previous quarter. The report shall be prepared in accordance with guidance provided by Ohio EPA and shall include a

description of all industrial user violations and corrective actions taken to resolve the violations.

b. Annual Pretreatment Report

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

11. Record Keeping

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

12. Program Modifications

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

AE. Peak Flow Rate

Lima WWTP shall always be operated to maximize the treatment of wet weather flows from its combined sewer system. For each wet weather event, the treatment plant shall have the capacity to treat 18.5 MGD through the primary and secondary treatment processes. This shall be accomplished by having a Wet Weather Operating Plan (WWOP) containing procedures and guidance for operating unit processes, including any CSO treatment/retention facilities. The goals of the WWOP are to provide operational guidance to plant staff for treating the wet-weather flow, while not appreciably diminishing effluent quality or destabilizing treatment upon return to dry weather operation. The permittee shall make reasonable efforts to schedule equipment maintenance to avoid wet weather service interruptions. Reasonable efforts shall include appropriate staffing levels for maintaining and repairing critical equipment that lacks redundancy as part of the operations component of the WWOP. This includes restoring all equipment to service as quickly as practicable to comply with maximizing flow to the treatment plant.

The permittee shall at all times comply with the concentration limitations contained in this permit. Mass loading limitations included in this permit at Outfall 2PE00000001 are based on the facility's normal operating capacity of 18.5 MGD. Exceedances of the mass loading limitations could occur if the flow to the plant exceeds the normal operating capacity. During periods of excessive or extended wet weather flow treatment, the permittee is authorized to utilize Reporting Code 50047, Peak Flow Rate, in conjunction with Reporting Code 50050, Flow Rate. When the total daily flow exceeds 18.5 MGD, the permittee shall report not less than 18.5 MGD for Reporting Code 50050; Reporting Code 50047 may only be used to report flow in excess of 18.5 MGD. Flow values reported under Reporting Code 50047 will not be utilized in calculating mass loadings.

PART III - GENERAL CONDITIONS

DEFINITIONS

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

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

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

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

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

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

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

"MGD" means million gallons per day.

"mg/l" means milligrams per liter.

"ug/l" means micrograms per liter.

"ng/l" means nanograms per liter.

"S.U." means standard pH unit.

"kg/day" means kilograms per day.

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

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

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

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

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

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

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

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

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

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

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

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

2. GENERAL EFFLUENT LIMITATION

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

- A. In amounts that will settle to form putrescent, or otherwise objectionable, sludge deposits; or that will adversely affect aquatic life or waterfowl;
- B. Of an oily, greasy, or surface-active nature, and of other floating debris, in amounts that will form noticeable accumulations of scum, foam, or sheen;
- C. In amounts that will alter the natural color or odor of the receiving water to such degree as to create a nuisance;
- D. In amounts that either singly or in combination with other substances are toxic to human, animal, or aquatic life;
- E. In amounts that are conducive to the growth of aquatic weeds or algae to the extent that such growth become inimical to more desirable forms of aquatic life, or create conditions that are unsightly, or constitute a nuisance in any other fashion;
- F. In amounts that will impair designated instream or downstream water uses

3. FACILITY OPERATION AND QUALITY CONTROL

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

- A. At all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee necessary to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with conditions of the permit.
- B. The permittee shall effectively monitor the operation and efficiency of treatment and control facilities and the quantity and quality of the treated discharge.
- C. Maintenance of wastewater treatment works that results in degradation of effluent quality shall be scheduled during non-critical water quality periods and shall be carried out in a manner approved by Ohio EPA as specified in the Paragraph in the PART III entitled, "UNAUTHORIZED DISCHARGES".

4. REPORTING

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

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

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

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

2. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

3. In the case of a municipal, state or other public facility, by either the principal executive officer, the ranking elected official or other duly authorized employee.

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

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

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

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

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

5. SAMPLING AND ANALYTICAL METHOD

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

6. RECORDING OF RESULTS

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

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

- B. The person(s) who performed the sampling or measurements;
- C. The date the analyses were performed on those samples;
- D. The person(s) who performed the analyses;
- E. The analytical techniques or methods used; and
- F. The results of all analyses and measurements.

7. RECORDS RETENTION

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

- A. All sampling and analytical records (including internal sampling data not reported);
- B. All original recordings for any continuous monitoring instrumentation;
- C. All instrumentation, calibration and maintenance records;
- D. All plant operation and maintenance records;
- E. All reports required by this permit; and
- F. Records of all data used to complete the application for this permit for a period of at least three years, or five years for sewage sludge, from the date of the sample, measurement, report, or application.

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

8. AVAILABILITY OF REPORTS

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

9. DUTY TO PROVIDE INFORMATION

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

10. RIGHT OF ENTRY

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

- A. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.
- B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.
- C. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.
- D. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

11. UNAUTHORIZED DISCHARGES

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

B. Notice

- 1. Anticipated Bypass - If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- 2. Unanticipated Bypass - The permittee shall submit notice of an unanticipated bypass as required in paragraph 12.B (24 hour notice).

C. Prohibition of Bypass

- 1. Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - c. The permittee submitted notices as required under paragraph 11.B.
- 2. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 11.C.1.

12. NONCOMPLIANCE NOTIFICATION

A. Exceedance of a Daily Maximum Discharge Limit

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

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

Southeast District Office: sedo24hournpdes@epa.ohio.gov
Southwest District Office: swdo24hournpdes@epa.ohio.gov
Northwest District Office: nwdo24hournpdes@epa.ohio.gov
Northeast District Office: nedo24hournpdes@epa.ohio.gov
Central District Office: cdo24hournpdes@epa.ohio.gov
Central Office: co24hournpdes@epa.ohio.gov

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

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

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

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

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

- a. The name of the permittee, and a contact name and telephone number;
- b. The limit(s) that has been exceeded;
- c. The extent of the exceedance(s);
- d. The cause of the exceedance(s);
- e. The period of the exceedance(s) including exact dates and times;
- f. If uncorrected, the anticipated time the exceedance(s) is expected to continue; and,
- g. Steps taken to reduce, eliminate or prevent occurrence of the exceedance(s).

B. Other Permit Violations

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

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

Southeast District Office: sedo24hournpdes@epa.ohio.gov
Southwest District Office: swdo24hournpdes@epa.ohio.gov
Northwest District Office: nwdo24hournpdes@epa.ohio.gov
Northeast District Office: nedo24hournpdes@epa.ohio.gov
Central District Office: cdo24hournpdes@epa.ohio.gov
Central Office: co24hournpdes@epa.ohio.gov

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

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

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

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

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

- a. The name of the permittee, and a contact name and telephone number;
 - b. The time(s) at which the discharge occurred, and was discovered;
 - c. The approximate amount and the characteristics of the discharge;
 - d. The stream(s) affected by the discharge;
 - e. The circumstances which created the discharge;
 - f. The name and telephone number of the person(s) who have knowledge of these circumstances;
 - g. What remedial steps are being taken; and,
 - h. The name and telephone number of the person(s) responsible for such remedial steps.
2. The permittee shall report noncompliance that is the result of any spill or discharge which may endanger human health or the environment within thirty (30) minutes of discovery by calling the 24-Hour Emergency Hotline toll-free at (800) 282-9378. The permittee shall also report the spill or discharge by e-mail or telephone within twenty-four (24) hours of discovery in accordance with B.1 above.
- C. When the telephone option is used for the noncompliance reports required by A and B, the permittee shall submit to the appropriate Ohio EPA district office a confirmation letter and a completed noncompliance report within five (5) days of the discovery of the noncompliance. This follow up report is not necessary for the e-mail option which already includes a completed noncompliance report.

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

1. The compliance event which has been or will be violated;
2. The cause of the violation;
3. The remedial action being taken;
4. The probable date by which compliance will occur; and,
5. The probability of complying with subsequent and final events as scheduled.

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

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

13. RESERVED

14. DUTY TO MITIGATE

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

15. AUTHORIZED DISCHARGES

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

16. DISCHARGE CHANGES

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

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

B. For publicly owned treatment works:

1. Any proposed plant modification, addition, and/or expansion that will change the capacity or efficiency of the plant;
2. The addition of any new significant industrial discharge; and
3. Changes in the quantity or quality of the wastes from existing tributary industrial discharges which will result in significant new or increased discharges of pollutants.

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

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

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

1. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis of any toxic pollutant which is not limited in the permit. If that discharge will exceed the highest of the "notification levels" specified in 40 CFR Sections 122.42(a)(1)(i) through 122.42(a)(1)(iv).
2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" specified in 122.42(a)(2)(i) through 122.42(a)(2)(iv).

17. TOXIC POLLUTANTS

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

18. PERMIT MODIFICATION OR REVOCATION

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

1. Violation of any terms or conditions of this permit;
2. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
3. Change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

B. Pursuant to rule 3745-33-04, Ohio Administrative Code, the permittee may at any time apply to the

Ohio EPA for modification of any part of this permit. The filing of a request by the permittee for a permit modification or revocation does not stay any permit condition. The application for modification should be received by the appropriate Ohio EPA district office at least ninety days before the date on which it is desired that the modification become effective. The application shall be made only on forms approved by the Ohio EPA.

19. TRANSFER OF OWNERSHIP OR CONTROL

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

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

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

At 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.

Part IV. STORMWATER CONTROL MEASURES AND POLLUTION PREVENTION PROGRAMS

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

A. Control Measures.

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

B. Control Measure Selection and Design Considerations.

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

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

C. Control Measures/Best Management Practices (BMPs)

1. Minimize Exposure. You shall minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff by either locating these industrial materials and activities inside or protecting them with storm resistant coverings (although

significant enlargement of impervious surface area is not recommended). In minimizing exposure, you should pay particular attention to the following:

- a. Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas;
- b. Locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas);
- c. Clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants;
- d. Use drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible;
- e. Use spill/overflow protection equipment;
- f. Drain fluids from equipment and vehicles prior to on-site storage or disposal;
- g. Perform all cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also that capture any overspray; and
- h. Ensure that all washwater drains to a proper collection system (i.e., not the stormwater drainage system).

If the discharge of vehicle and equipment washwater is not authorized under Part I of this permit, these wastewaters must be discharged to sanitary sewer in accordance with applicable industrial pretreatment requirements or disposed of otherwise in accordance with applicable law.

Note: Industrial materials do not need to be enclosed or covered if stormwater runoff from affected areas will not be discharged to receiving waters or if discharges are authorized under Part I of this permit.

2. Good Housekeeping. You shall keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals, keeping materials orderly and labeled, and storing materials in appropriate containers.
3. Maintenance. You shall regularly inspect, test, maintain, and repair all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater discharged to receiving waters. You shall maintain all control measures that are used to achieve the control measures/best management practices (BMPs) required by this permit in effective operating condition. Nonstructural control measures shall also be diligently maintained (e.g., spill response supplies available, personnel appropriately trained). If you find that your control measures need to be replaced or repaired, you shall make the necessary repairs or modifications as expeditiously as practicable.
4. Spill Prevention and Response Procedures. You shall minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur. At a minimum, you shall implement:
 - a. Procedures for plainly labeling containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides," etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;

- b. Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;
 - c. Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of your stormwater pollution prevention team (Part IV.J.1); and
 - d. Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies. Where a leak, spill or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period, you shall notify the Ohio EPA in accordance with the requirements of Part III Item 12 of this permit as soon as you have knowledge of the discharge. Contact information shall be in locations that are readily accessible and available.
5. Erosion and Sediment Controls. You shall stabilize exposed areas and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants. Among other actions you shall take to meet this limit, you shall place flow velocity dissipation devices at discharge locations and within outfall channels where necessary to reduce erosion and/or settle out pollutants. In selecting, designing, installing, and implementing appropriate control measures, you are encouraged to consult with the current edition of Ohio's Rainwater and Land Development manual (<https://epa.ohio.gov/divisions-and-offices/surface-water/guides-manuals/rainwater-and-land-development>), U.S. EPA's internet-based resources relating to BMPs for erosion and sedimentation, including the sector-specific Industrial Storm Water Fact Sheet Series, (<https://www.epa.gov/npdes/stormwater-discharges-industrial-activities-fact-sheets-and-guidance>), National Menu of Storm Water BMPs (<https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater-documents>), and National Management Measures to Control Nonpoint Source Pollution from Urban Areas (<https://www.epa.gov/nps/urban-runoff-national-management-measures>).
6. Management of Runoff. You shall divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff, to minimize pollutants in your discharges. In selecting, designing, installing, and implementing appropriate control measures, you are encouraged to consult with the current edition of Ohio's Rainwater and Land Development manual (<https://epa.ohio.gov/divisions-and-offices/surface-water/guides-manuals/rainwater-and-land-development>), U.S. EPA's internet-based resources relating to runoff management, including the sector-specific Industrial Storm Water Fact Sheet Series, (<https://www.epa.gov/npdes/stormwater-discharges-industrial-activities-fact-sheets-and-guidance>), National Menu of Storm Water BMPs (<https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater-documents>), and National Management Measures to Control Nonpoint Source Pollution from Urban Areas (<https://www.epa.gov/nps/urban-runoff-national-management-measures>).
7. Salt Storage Piles or Piles Containing Salt. You shall enclose or cover storage piles of salt, or piles containing salt, used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces. You shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile.

8. Sector Specific Control Measures/Best Management Practices (BMPs). You shall achieve any additional control measures/best management practices (BMPs) stipulated in the relevant sector-specific section(s) of Part IV.K. of this permit.
9. Employee Training. You shall train all employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of your Pollution Prevention Team. Training shall cover both the specific control measures used to achieve the conditions in this Part, and monitoring, inspection, planning, reporting, and documentation requirements in other parts of this permit. Ohio EPA requires that training be conducted at least annually (or more often if employee turnover is high).
10. Non-Stormwater Discharges. You shall eliminate non-stormwater discharges not authorized in Part I and Part II of this NPDES permit. The following are additional non-stormwater discharges authorized under this permit:
 - a. Discharges from fire-fighting activities (not planned exercises);
 - b. Fire hydrant flushings;
 - c. Potable water, including water line flushings;
 - d. Uncontaminated condensate from air conditioners, coolers/chillers, and other compressors and from the outside storage of refrigerated gases or liquids;
 - e. Irrigation drainage;
 - f. Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;
 - g. Pavement wash waters where no detergents or hazardous cleaning products are used (e.g., bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols, etc.), and the wash waters do not come into contact with oil and grease deposits, sources of pollutants associated with industrial activities (see Part IV.J.2), or any other toxic or hazardous materials, unless residues are first cleaned up using dry clean-up methods (e.g., applying absorbent materials and sweeping, using hydrophobic mops/rags) and you have implemented appropriate control measures to minimize discharges of mobilized solids and other pollutants (e.g., filtration, detention, settlement);
 - h. Routine external building washdown/power wash water that does not use detergents or hazardous cleaning products (e.g., those containing bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols, etc.);
 - i. Uncontaminated ground water or spring water;
 - j. Foundation or footing drains where flows are not contaminated with process materials; and
 - k. Incidental windblown mist from cooling towers that collect on rooftops or adjacent portions of your facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdowns or drains).
11. Waste, Garbage and Floatable Debris. You shall ensure that waste, garbage, and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting them before they are discharged.

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

D. Corrective Actions

1. Conditions Requiring Review and Revision to Eliminate Problem. If any of the following conditions occur, you shall review and revise the selection, design, installation, and implementation of your control measures to ensure that the condition is eliminated and will not be repeated in the future:
 - a. An unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by this or another NPDES permit) occurs at your facility;
 - b. A discharge violates a numeric effluent limit;
 - c. You become aware, or Ohio EPA determines, that your control measures are not stringent enough for the discharge to meet applicable water quality standards;
 - d. An inspection or evaluation of your facility by an Ohio EPA official or local MS4 operator determines that modifications to the control measures are necessary to meet the control measures/best management practices (BMPs) in this permit; or
 - e. You find in your routine facility inspection or quarterly visual assessment that your control measures are not being properly operated and maintained.
2. Conditions Requiring Review to Determine if Modifications Are Necessary. If any of the following conditions occur, you shall review the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the Part IV.A conditions in this permit:
 - a. Construction or a change in design, operation, or maintenance at your facility significantly changes the nature of pollutants discharged in stormwater from your facility, or significantly increases the quantity of pollutants discharged; or
 - b. The average of your four quarterly sampling results exceeds an applicable benchmark (see Part V.B.7). If less than four benchmark samples have been taken, but the results are such that an exceedance of the four quarter average is mathematically certain (i.e., if the sum of quarterly samples results to date is more than four times the benchmark level) this is considered a benchmark exceedance, triggering this review.
3. Corrective Action Deadlines. You shall document your discovery of any of the conditions listed in Part IV.D.1 and Part IV.D.2 within 24 hours of making such discovery. Subsequently, within 30 days of such discovery, you shall document any corrective action(s) to be taken to eliminate or further investigate the deficiency, or if no corrective action is needed, the basis for that determination. Specific documentation required within 24 hours and 30 days is detailed in Part IV.D.4. If you determine that changes are necessary following your review, any modifications to your control measures shall be made before the next storm event if possible, or as soon as practicable following that storm event. These time intervals are not grace periods, but are schedules considered reasonable for documenting your findings and for making repairs and improvements. They are included in this permit to ensure that the conditions prompting the need for these repairs and improvements are not allowed to persist indefinitely.
4. Corrective Action Report. Within 24 hours of discovery of any condition listed in Part IV.D.1 and Part IV.D.2, you shall document the following information:

- Identification of the condition triggering the need for corrective action review;
- Description of the problem identified; and
- Date the problem was identified.

Within 30 days of discovery of any condition listed in Part IV.D.1 and Part IV.D.2, you shall document the following information and submit the report to the appropriate Ohio EPA District Office):

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

In addition to your corrective action report, you shall also include this documentation in an annual report as required in Part V. A.2 and retain onsite with your SWPPP.

5. Effect of Corrective Action. If the event triggering the review is a permit violation (e.g., non-compliance with an effluent limit), correcting it does not remove the original violation. Additionally, failing to take corrective action in accordance with this section is an additional permit violation. Ohio EPA will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations.
6. Substantially Identical Outfalls. If the event triggering corrective action is linked to an outfall that represents other substantially identical outfalls, your review shall assess the need for corrective action for each outfall represented by the outfall that triggered the review. Any necessary changes to control measures that affect these other outfalls shall also be made before the next storm event if possible, or as soon as practicable following that storm event.

E. Inspections

Beginning on the effective date of this permit, you shall conduct the inspections in Part IV.E.1 and Part IV.E.2 at your facility.

1. Routine Facility Inspections.

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

routine facility inspection shall be conducted during a period when a stormwater discharge is occurring.

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

- i. The inspection date and time;
- ii. The name(s) and signature(s) of the inspector(s);
- iii. Weather information and a description of any discharges occurring at the time of the inspection;
- iv. Any previously unidentified discharges of pollutants from the site;
- v. Any control measures needing maintenance or repairs;
- vi. Any failed control measures that need replacement;
- vii. Any incidents of noncompliance observed; and
- viii. Any additional control measures needed to comply with the permit requirements.

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

b. Exceptions to Routine Facility Inspections:

Inactive and Unstaffed Sites: The requirement to conduct routine facility inspections on a quarterly basis does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to stormwater. Such a facility is only required to conduct an annual site inspection in accordance with the requirements of Part IV.E.1. To invoke this exception, you shall maintain a statement in your SWPPP pursuant to Part IV.F indicating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in 40 CFR 122.26(g)(4)(iii). The statement shall be signed and certified in accordance with Part III.28. If circumstances change and industrial materials or activities become exposed to stormwater or your facility becomes active and/or staffed, this exception no longer applies and you shall immediately resume quarterly facility inspections. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to stormwater, then you shall include the same signed and certified statement as above and retain it with your records pursuant to Part IV.J.5.

Ohio EPA's Encouraging Environmental Excellence (E3) Program: If your facility has been recognized under the Gold and Platinum levels by Ohio EPA's Encouraging Environmental Excellence (E3) Program, you only need to conduct routine facility inspections for two quarters each year. If Part IV.K of this permit requires your facility to conduct routine facility inspections on a monthly basis, you only need to conduct routine facility inspections on a quarterly basis.

2. Quarterly Visual Assessment of Stormwater Discharges.

a. Quarterly Visual Assessment Procedures

Once each calendar quarter for the entire permit term you shall collect a stormwater sample from the outfalls listed in Part II, Item G and conduct a visual assessment of each of these samples. These samples are not required to be collected consistent with 40 CFR Part 136 procedures but should be collected in such a manner that the samples are representative of the stormwater discharge. The visual assessment shall be made:

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

b. Quarterly Visual Assessment Documentation

You shall document the results of your visual assessments and maintain this documentation onsite with your SWPPP. You are not required to submit your visual assessment findings to Ohio EPA, unless specifically requested to do so. At a minimum, your documentation of the visual assessment shall include:

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

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

c. Exceptions to Quarterly Visual Assessments

The following are exceptions to quarterly visual assessments:

- Adverse Weather Conditions: When adverse weather conditions prevent the collection of samples during the quarter, you shall take a substitute sample during the next qualifying storm event. Documentation of the rationale for no visual assessment for the quarter shall be included with your SWPPP records. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make sampling impractical, such as drought or extended frozen conditions.
- Areas Subject to Snow: In areas subject to snow, at least one quarterly visual assessment shall capture snowmelt discharge, as described in Part IV.E.2.
- Substantially identical outfalls: If your facility has two or more outfalls that you believe discharge substantially identical effluents, as documented in your SWPPP, you may conduct quarterly visual assessments of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s) provided that you perform visual assessments on a rotating basis of each substantially identical outfall throughout the period of your coverage under this permit. If stormwater contamination is identified through visual assessment performed at a substantially identical outfall, you shall assess and modify your control measures as appropriate for each outfall represented by the monitored outfall.
- Inactive and unstaffed sites: The requirement for a quarterly visual assessment does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to stormwater. To invoke this exception, you shall maintain a statement in your SWPPP indicating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in 40 CFR 122.26(g)(4)(iii). The statement shall be signed and certified in accordance with Part III.28 of this permit. If circumstances change and industrial materials or activities become exposed to stormwater or your facility becomes active and/or staffed, this exception no longer applies, and you shall immediately resume quarterly visual assessments. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to stormwater, then you shall include the same signed and certified statement as above and retain it with your records.
- Ohio EPA's Encouraging Environmental Excellence (E3) Program: If your facility has been recognized under the Gold and Platinum levels by Ohio EPA's Encouraging Environmental Excellence (E3) Program, you only need to conduct quarterly visual assessment of stormwater discharges for two quarters each year.

F. Stormwater Pollution Prevention Plan (SWPPP)

A stormwater pollution prevention plan (SWPPP) shall be developed to address each outfall that discharges to waters of the state that contains stormwater associated with industrial activity. Stormwater pollution prevention plans shall be prepared in accordance with good engineering practices. The SWPPP shall identify potential sources of pollution which may reasonably be

expected to affect the quality of stormwater discharges associated with industrial activity from the facility. The SWPPP shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in stormwater discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Facilities must implement the provisions of the stormwater pollution prevention plan required under this part as a condition of this permit.

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

G. Deadlines to Update the SWPPP

The permittee shall continue to implement and be in compliance with the SWPPP required by the previous permit. Within six months of the effective date of this permit, the permittee shall update the SWPPP as necessary to address any new or reviewed requirements of this permit.

H. Signature Requirements and SWPPP Availability.

1. Your plan shall be signed and dated in accordance with Part III, Item 28, and be retained on-site at the facility which generates the stormwater discharge.
2. You shall retain a copy of the current SWPPP required by this permit at the facility, and it shall be immediately available to Ohio EPA; a local agency approving stormwater management plans; and the operator of an MS4 receiving discharges from the site. Ohio EPA may provide access to portions of your SWPPP to a member of the public upon request. Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from those staff cleared for CBI review within Ohio EPA. Your current SWPPP or certain information from your current SWPPP shall be made available to the public, except any confidential business information (CBI) or restricted information, but you shall clearly identify those portions of the SWPPP that are being withheld from public access. See 40 CFR Part 2 for relevant definitions of CBI: <https://www.govinfo.gov/content/pkg/CFR-2013-title40-vol1/pdf/CFR-2013-title40-vol1-part2-subpartB.pdf>
3. All stormwater pollution prevention plans required under this permit are considered reports that shall be available to the public under Section 308(b) of the Act. Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from those staff cleared for CBI review within Ohio EPA. An interested party wishing a copy of a discharger's SWPPP will have to contact the Ohio EPA to obtain a copy.

I. Required SWPPP Modifications.

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

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

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

J. Contents of SWPPP.

The plan shall include, at a minimum, the following items:

1. Stormwater Pollution Prevention Team. You shall identify the staff members (by name or title) that comprise the facility's stormwater pollution prevention team as well as their individual responsibilities. Your stormwater pollution prevention team is responsible for assisting the facility manager in developing and revising the facility's SWPPP as well as maintaining control measures and taking corrective actions where required. Each member of the stormwater pollution prevention team shall have ready access to either an electronic or paper copy of applicable portions of this permit and your SWPPP.
2. Site Description. Your SWPPP shall include the following:
 - a. *Activities at the Facility*. Provide a description of the nature of the industrial activities at your facility;
 - b. *General location map*. Provide a general location map (e.g. U.S. Geologic Survey (USGS) quadrangle map) with enough detail to identify the location of your facility and all receiving waters for your stormwater discharges.
 - c. *Site map*. Provide a site map showing:
 - The size of the property in acres;
 - The location and extent of significant structures and impervious surfaces;
 - Directions of stormwater flow (use arrows);
 - Locations of all existing structural control measures;
 - Locations of all receiving waters in the immediate vicinity of your facility;
 - Locations of all stormwater conveyances including ditches, pipes and swales;
 - Locations of potential pollutant sources identified under Part IV J. 2.b;
 - Locations where significant spills or leaks identified under Part IV J. 2.b. have occurred;
 - Locations of all stormwater monitoring points;
 - Locations of stormwater inlets and outfalls, with a unique identification code for each outfall (e.g. Outfall 001, Outfall 002, etc), indicating any outfalls that are considered substantially identical to another outfall, and an approximate outline of the areas draining to each outfall;
 - Municipal separate storm sewer systems, where your stormwater discharges to them;
 - Locations and descriptions of all non-stormwater discharges identified under Part IV. C. 10;
 - Locations of the following activities where such activities are exposed to precipitation
 - o Fueling stations;

- o Vehicle and equipment maintenance and/or cleaning areas;
 - o Loading/unloading areas;
 - o Locations used for the treatment, storage, or disposal of wastes;
 - o Liquid storage tanks;
 - o Processing and storage areas;
 - o Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
 - o Transfer areas for substances in bulk;
 - o Machinery; and
 - o Locations and sources of run-on to your site from adjacent property that contains significant quantities of pollutants.
3. Summary of Potential Pollutant Sources. You shall document at your facility where industrial materials or activities are exposed to stormwater and from which allowable non-stormwater discharges are released. Industrial materials or activities, include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; and intermediate products, by-products, final product or waste product. Material handling activities include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For each area identified, the description shall include, at a minimum:
- a. **Activities in the Area.** This includes a list of industrial activities exposed to stormwater (e.g., material storage; equipment fueling, maintenance, and cleaning; cutting steel beams).
 - b. **Pollutants.** A list of the pollutant(s) or pollutant constituents (e.g, crankcase oil, zinc, sulfuric acid, and cleaning solvents) associated with each identified activity. The pollutant list shall include all significant materials that have been handled, treated, stored, or disposed, and that have been exposed to stormwater in the three years prior to the date you prepare or amend your SWPPP.
 - c. **Spills and Leaks.** You shall document where potential spills and leaks could occur that could contribute pollutants to stormwater discharges, and the corresponding outfall(s) that would be affected by such spills and leaks. You shall document all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance, in the three years prior to the date you prepare or amend your SWPPP.

Note: Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC Section 9602. This permit does not relieve you of the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 relating to spills or other releases of oil or hazardous substances.
 - d. **Non-Stormwater Discharges.** You shall document that you have evaluated for the presence of non-stormwater discharges, except for those listed in Part I and Part IV.C.10, and that all unauthorized discharges have been eliminated. Documentation of your evaluation shall include:

- The date of any evaluation;
 - A description of the evaluation criteria used;
 - A list of the outfalls or onsite drainage points that were directly observed during the evaluation;
 - The different types of non-stormwater discharge(s) and source locations; and
 - The action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified. For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an NPDES permit application was submitted for an unauthorized cooling water discharge.
- e. Salt Storage. You shall document the location of any storage piles containing salt used for deicing or other commercial or industrial purposes.
- f. Sampling Data. A summary of existing discharge sampling data describing pollutants in stormwater discharges from the facility.
4. Description of Control Measures. You shall document the location and type of control measures you have installed and implemented at your site to achieve the control measures/best management practices (BMPs) in Part IV.C, and where applicable, in Part IV.K. You shall describe how you addressed the control measure selection and design considerations in Part IV.B. This documentation shall describe how the control measures at your site address both the pollutant sources identified in Part IV.J.2 and any stormwater run-on that commingles with any discharges covered under this permit.
5. Schedules and Procedures.
- a. Pertaining to Control Measures used to Comply with the Control Measures/Best Management Practices (BMPs). The following shall be documented in your SWPPP:
- i. Good Housekeeping (See Part IV.C.2) – A schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers.
 - ii. Maintenance (See Part IV.C.3) – Preventative maintenance procedures, including regular inspections, testing, maintenance, and repair of all industrial equipment and systems, and control measures, to avoid situations that may result in leaks, spills, and other releases, and any back-up practices in place should a runoff event occur while a control measure is off-line;
 - iii. Spill Prevention and Response Procedures (See Part IV.C.4) – Procedures for preventing and responding to spills and leaks. You may reference the existence of other plans for Spill Prevention Control and Countermeasure (SPCC) developed for the facility under Section 311 of the CWA or BMP programs otherwise required by an NPDES permit for the facility, provided that you keep a copy of that other plan onsite (hard copy or electronic) and make it available for review consistent with Part IV.J.5; and
 - iv. Employee Training (See Part IV.C.9) – A schedule for all types of necessary training.
- b. Pertaining to Monitoring and Inspection. Where applicable, you shall document in your SWPPP your procedures for conducting analytical stormwater monitoring. You shall document in your SWPPP your procedures for performing, as appropriate, the two types of

inspections specified by this permit, including: 1) Routine facility inspections (See Part IV.E.1) and 2) Quarterly visual assessment of stormwater discharges (See Part IV.E.2).

For each type of monitoring, your SWPPP shall document:

- Locations where samples are collected, including any determination that two or more outfalls are substantially identical;
- Parameters for sampling and the frequency of sampling for each parameter;
- Schedules for monitoring at your facility (see Part 6.1.6);
- Any numeric control values (benchmarks, effluent limitations guidelines, or other requirements) applicable to discharges from each outfall; and
- Procedures (e.g., responsible staff, logistics, laboratory to be used, etc.) for gathering storm event data.

For each type of inspection performed, your SWPPP shall identify:

- Person(s) or positions of person(s) responsible for inspection;
- Schedules for conducting inspections; and
- Specific items to be covered by the inspection, including schedules for specific outfalls.

If you are invoking the exception for inactive and unstaffed sites relating to routine facility inspections and quarterly visual assessments, you shall include in your SWPPP the information to support this claim as required by Parts V.E. If you are invoking the exception for inactive and unstaffed sites for benchmark monitoring, you shall include in your SWPPP the information to support this claim.

You shall document the following in your SWPPP if you plan to use the substantially identical outfall exception for your quarterly visual assessment requirements in Part IV.E.2 or your benchmark monitoring requirements in Part V:

- Location of each of the substantially identical outfalls;
- Description of the general industrial activities conducted in the drainage area of each outfall;
- Description of the control measures implemented in the drainage area of each outfall;
- Description of the exposed materials located in the drainage area of each outfall that are likely to be significant contributors of pollutants to stormwater discharges;
- An estimate of the runoff coefficient of the drainage areas (low = under 40%; medium = 40 to 65%; high = above 65%); and
- Why the outfalls are expected to discharge substantially identical effluents.

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

- A copy of this permit (an electronic copy easily available to SWPPP personnel is also acceptable);
- Descriptions and dates of any incidences of significant spills, leaks, or other releases that resulted in discharges of pollutants to surface waters of the State, through stormwater or

otherwise; the circumstances leading to the release and actions taken in response to the release; and measures taken to prevent the recurrence of such releases (see Part IV.C.4);

- Records of employee training, including date training received (see Part IV.C.9);
- Documentation of maintenance and repairs of control measures, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair/replacement, and for repairs, date(s) that the control measure(s) returned to full function, and the justification for any extended maintenance/repair schedules (see Part IV.C.3);
- All inspection reports, including the Routine Facility Inspection Reports (see Part IV.E.1) and the Quarterly Visual Assessment Reports (see Part IV.E.2);
- Description of any deviations from the schedule for visual assessments and/or monitoring, and the reason for the deviations (e.g., adverse weather or it was impracticable to collect samples within the first 30 minutes and/or from a 72-hour (3 day) storm interval) (see Parts IV.E.2.a, Part V.B.4 & 7);
- Description of any corrective action taken at your site, including triggering event and dates when problems were discovered and modifications occurred;
- Documentation of any benchmark exceedances and how they were responded to, including either (1) corrective action taken, (2) a finding that the exceedance was due to natural background pollutant levels, or (3) a finding that no further pollutant reductions were technologically available and economically practicable and achievable in light of best industry practice consistent with Part V.B.7;
- Documentation to support any determination that pollutants of concern are not expected to be present above natural background levels if you discharge directly to impaired waters, and that such pollutants were not detected in your discharge or were solely attributable to natural background sources (see Part V.B.7); and
- Documentation to support your claim that your facility has changed its status from active to inactive and unstaffed with respect to the requirements to conduct routine facility inspections (see Part IV.E.1), quarterly visual assessments (see Part IV.E.2), and/or benchmark monitoring (see Part V.B.7).

Where your SWPPP refers to procedures in other facility documents, such as a Spill Prevention, Control and Countermeasure (SPCC) Plan or an Environmental Management System (EMS) developed for a National Environmental Performance Track facility, copies of the relevant portions of those documents shall be kept with your SWPPP.

K. Sector-Specific Requirements

Sector T - Treatment Works.

You shall comply with the following sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Part VI. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

1. Limitations on Coverage.

- a. Prohibition of Non-Storm Water Discharges. Sanitary and industrial wastewater and equipment and vehicle washwater are not authorized by this permit.

2. Additional Control Measures/Best Management Practices (BMPs).

- a. Control Measures. (See also Part IV.C) In addition to the other control measures, consider the following: routing contaminated storm water to the treatment works; or covering exposed materials (i.e., from the following areas: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station).
- b. Employee Training. (See also Part IV.C.9) At a minimum, training shall address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and controls; fueling procedures; general good housekeeping practices; and proper procedures for using fertilizer, herbicides, and pesticides.

3. Additional SWPPP Requirements.

- a. Drainage Area Site Map. (See also Part IV.J.2.a.) Document in your SWPPP where any of the following may be exposed to precipitation or surface runoff: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and storage areas for process chemicals, petroleum products, solvents, fertilizers, herbicides, and pesticides.
- b. *Potential Pollutant Sources.* (See also Part IV.J.3.) Document in your SWPPP the following additional sources and activities that have potential pollutants associated with them, as applicable: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and access roads and rail lines.
- c. *Wastewater and Washwater Requirements.* Keep a copy of all your current NPDES permits issued for wastewater and industrial, vehicle and equipment washwater discharges or, if an NPDES permit has not yet been issued, a copy of the pending application(s) with your SWPPP. If the washwater is handled in another manner, the disposal method shall be described and all pertinent documentation shall be retained onsite.

4. Additional Inspection Requirements.

(See also Part IV.E.) Include the following areas in all inspections: access roads and rail lines; grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station.

Part V. MONITORING AND REPORTING REQUIREMENTS

A. Reporting and Recordkeeping

1. Reporting Benchmark Monitoring Data to Ohio EPA. Reserved.
2. Annual Report. You shall complete an annual report using the Annual Reporting Form provided by Ohio EPA at the following:
<https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fepa.ohio.gov%2Fstatic%2FPortals%2F35%2Fpermits%2FOHR000006%2FARForm.docx&wdOrigin=BROWSELINK>

You are not required to submit your annual report to Ohio EPA unless specifically requested. The timeframe to complete the report is at the discretion of the permittee but the same schedule to complete shall be maintained throughout this permit term. You shall keep the completed annual reports with your SWPPP.

Part VI. DEFINITIONS AND ACRONYMS

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

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

Co-located Industrial Activities - Any industrial activities, excluding your primary industrial activity(ies), located on-site that are defined by the stormwater regulations at 122.26(b)(14)(i)-(ix) and (xi). An activity at a facility is not considered co-located if the activity, when considered separately, does not meet the description of a category of industrial activity covered by the stormwater regulations or identified by the SIC code list in the Industrial Multi-Sector General Permit OHR000007, Appendix D.

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

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

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

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

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

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

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

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

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

Federal Facility - any buildings, installations, structures, land, public works, equipment, aircraft, vessels,

and other vehicles and property, owned by, or constructed or manufactured for the purpose of leasing to, the federal government.

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

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

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

Industrial Stormwater - stormwater runoff from industrial activity.

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

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

(ii) Designed or used for collecting or conveying stormwater;

(iii) Which is not a combined sewer; and

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

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

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

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

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

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

Ohio EPA - the Ohio Environmental Protection Agency.

Operator - any entity with a stormwater discharge associated with industrial activity that meets either of the following two criteria:

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

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

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

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

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

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

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

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

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

Run-On - sources of stormwater that drain from land located upslope or upstream from the regulated facility in question.

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

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

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

Stormwater - stormwater runoff, snow melt runoff, and surface runoff and drainage. See 40 CFR 122.26(b)(13).

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

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

facilities include those that are federally, State, or municipally owned or operated that meet the description of the facilities listed in 40 CFR 122.26(b)(14).

Surface Waters of the State - Means all streams, lakes, ponds, marshes, watercourses, waterways, springs, irrigation systems, drainage systems, and all other bodies or accumulations of surface water, natural or artificial, which are situated wholly or partly within, or border upon, this state, or are within its jurisdiction, except those private waters which do not combine or effect a junction with natural surface waters.

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

Water Quality Impaired - See "Impaired Water".

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

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

ABBREVIATIONS AND ACRONYMS

BAT - Best Available Technology Economically Achievable

BOD5 - Biochemical Oxygen Demand (5-day test)

BMP - Best Management Practice

BPJ - Best Professional Judgment

BPT - Best Practicable Control Technology Currently Available

CERCLA - Comprehensive Environmental Response, Compensation and Liability Act

CGP - Construction General Permit

COD - Chemical Oxygen Demand

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

CWT - Centralized Waste Treatment

DMR - Discharge Monitoring Report

U.S. EPA - U. S. Environmental Protection Agency

FWS - U. S. Fish and Wildlife Service

LA - Load Allocations

MDMR - MSGP Discharge Monitoring Report

MGD - Million Gallons per Day

MOS - Margin of Safety

MS4 - Municipal Separate Storm Sewer System

MSDS - Material Safety Data Sheet

MSGP - Multi-Sector General Permit

NAICS - North American Industry Classification System

NMFS - U. S. National Marine Fisheries Service

NOI - Notice of Intent

NOT - Notice of Termination

NPDES - National Pollutant Discharge Elimination System

NRC - National Response Center

NTU - Nephelometric Turbidity Unit

OMB - U. S. Office of Management and Budget

ORW - Outstanding Resource Water

OSM - U. S. Office of Surface Mining

POTW - Publicly Owned Treatment Works

RCRA - Resource Conservation and Recovery Act

RQ - Reportable Quantity

SARA - Superfund Amendments and Reauthorization Act

SIC - Standard Industrial Classification

SMCRA - Surface Mining Control and Reclamation Act

SPCC - Spill Prevention, Control, and Countermeasures

SWPPP - Stormwater Pollution Prevention Plan

TMDL - Total Maximum Daily Load

TSDf - Treatment, Storage, or Disposal Facility

TSS - Total Suspended Solids

USGS - United States Geological Survey

WLA - Wasteload Allocation

WQS - Water Quality Standard

National Pollutant Discharge Elimination System (NPDES) Permit Program

FACT SHEET

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

Public Notice No.: 182901
Public Notice Date: April 28, 2023
Comment Period Ends: May 28, 2023

Ohio EPA Permit No.: **2PE00000*OD**
Application No.: **OH0026069**

Name and Address of Applicant:
City of Lima
50 Town Square
Lima, OH 45804

Name and Address of Facility Where
Discharge Occurs:
Lima WWTP
1200 Fort Amanda Road
Lima, OH 45804
Allen County

Receiving Water: **Ottawa River**

Subsequent Stream Network: **Auglaize River to Maumee River to Lake Erie**

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.

Technology-based effluent limits (TBELs) for secondary treatment are proposed to be applied at outfall 001, regardless of operating mode.

Internal monitoring station 604 is proposed to be authorized as equivalent to secondary treatment. New TBELs associated with biological treatment by the nitrification towers are proposed to be applied at this station while operating in peak wet weather mode only. New monitoring for discharge duration is also proposed.

A new parameter (Peak Flow Rate) and revised loading limits are proposed to facilitate maximization of treatment capacity during wet weather events.

Lower effluent limits for ammonia in both summer and winter are proposed to be protective of the respective wasteload allocations. A review of recent data suggests that the permittee can comply with the new limits.

Lower effluent monthly average limits for mercury are proposed as the permittee continues to work under the general mercury variance.

New monitoring for total precipitation is proposed to evaluate the performance of the treatment plant.

Limits are proposed to be removed for dissolved hexavalent chromium due to a lack of reasonable potential to exceed the wasteload allocation. Monitoring is proposed to continue.

Annual chronic toxicity monitoring of *Pimephales promelas* with the determination of acute endpoints is proposed for the life of the permit. This satisfies the minimum testing requirements of Ohio Administrative Code (OAC) 3754-33-07(B)(11).

In accordance with Ohio Administrative Code (OAC) 3745-33-07, it has been determined that the effluent from Lima WWTP shows acute and chronic toxicity to *Ceriodaphnia dubia*. Limits of 1.0 TUa and 1.0 TUC are proposed to continue.

At internal monitoring station 603, new monitoring for flow rate is proposed. Monitoring for bypass occurrence, duration, and volume is proposed to be removed.

At influent monitoring station 601, monitoring for bis(2-ethylhexyl) phthalate and selenium is proposed to be removed due to lack of reasonable potential to exceed the WLA at outfall 001.

At upstream monitoring station 801, monitoring for water temperature, dissolved oxygen, and pH are proposed to be removed because this data isn't needed for the reasonable potential analysis.

At downstream monitoring station 901, monitoring for dissolved oxygen is proposed to be removed because this data isn't needed for the reasonable potential analysis. Also, monitoring for dissolved hexavalent chromium is proposed to be removed.

Monitoring for bypass station 057 and CSO station 036 is proposed to be removed due to elimination of these stations by wet weather control projects. Monitoring for TSS and CBOD5 at CSOs 002, 003, 004, 005, and 006 is also proposed to be removed.

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; storm water compliance; mercury variance; pretreatment program requirements; 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 sent 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 David Brumbaugh at (614) 644-2138 or david.brumbaugh@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:

http://epa.ohio.gov/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 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

Lima WWTP discharges to Ottawa River at River Mile 37.6. Figure 1 shows the approximate location of the facility.

This segment of the Ottawa River is described by Ohio EPA River Code: 04-200, Hydrologic Unit Code: 04100007-03-06, County: Allen, Ecoregion: Eastern Corn Belt Plains. The Ottawa River is designated for the following uses under Ohio's WQS (OAC 3745-1-11): 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

Lima WWTP was constructed in 1930 and last upgraded in 2016. The average design flow is 18.5 million gallons per day (MGD) and the peak hydraulic capacity is 70 MGD. Lima WWTP serves the City of Lima and portions of Allen County, a total population of approximately 47,000. Lima WWTP has the following treatment processes (Figure 2):

- Bar Screening
- Grit Removal
- Primary Sedimentation
- Activated Sludge, Conventional
- Biological Nitrification Towers
- Ferric Chloride, Polymer Addition
- Secondary Clarification
- Chlorination/Dechlorination

The City of Lima is subject a U.S. EPA Consent Decree (Case No. 3:14 CV2551), entered on January 13, 2015. The Consent Decree requires the City to implement its integrated Long Term Control Plan (LTCP) to control wet weather discharges from the collection system and Lima WWTP. The plan proposes to provide treatment to

WWTP peak wet weather flows up to 70 MGD, reduce combined sewer overflows (CSOs) to five events per typical year, and eliminate sanitary sewer overflows (SSOs), to be completed by 2038. In compliance with the plan, the City has recently completed WWTP improvements and construction of the 13-million gallon Simmons Field Storage Tank, which came online in July 2021. The City of Lima has 40% separate sewers and 60% combined sewers in the collection system.

Lima WWTP has two monitoring stations within the facility, stations 603 and 604. Station 604 is located in the effluent pipe of the nitrification towers and Station 603 is located in the secondary effluent pump station that conveys final clarifier effluent flow to the chlorine contact tanks. This design allows the facility to be operated in different modes (Figure 3), depending on the influent flow rate (rate ranges are approximate).

Implementation of the following operating strategy, detailed in the *WWTP Flow Maximization Plan* (approved by U.S. EPA on March 2, 2022), will maximize treatment capacity at Lima WWTP during wet weather, which is one of the primary goals of the CSO Control Policy (U.S.EPA; April 11, 1994):

- Dry Weather (< 30 MGD) – With the exception of a “seed flow” of primary effluent to the nitrification towers, all influent flow passes through the activated sludge tanks and nitrification towers, which are operated in series, and is monitored at Outfall 001.
- Wet Weather (30-40 MGD) – all flow passes through the activated sludge tanks. Only 30 MGD of the flow is directed to the nitrification towers. The remaining flow (up to 10 MGD) is directed to the chlorine contact tanks via station 603. The two secondary treatment effluent streams are mixed and disinfected at the chlorine contact tanks, and monitored at Outfall 001.
- Peak Wet Weather (40-70 MGD) – flows are split after primary treatment:
 - A majority of the flow (40 MGD) passes through only the activated sludge tanks and is conveyed to the chlorine contact tanks via station 603.
 - The remaining flow (up to 30 MGD) receives biological treatment via the nitrification towers and is monitored at Station 604.

The two effluent streams are mixed at the chlorine contact tank and disinfected prior monitoring at Outfall 001.

The biological treatment provided by the nitrification towers when operating in Peak Wet Weather Mode is proposed to be approved as equivalent to secondary treatment. The effluent limits applied at Station 604 are based on performance criteria memorialized in the Consent Order and are more restrictive than the requirements of 40 CFR 133.105. The *Nitrification Tower Performance Report*, which demonstrates the system’s ability to comply with the performance criteria, was approved by U.S. EPA on March 2, 2022.

Previous versions of NPDES permit 2PE00000 have included monitoring of a headworks bypass, station 057. This bypass was eliminated in the recent WWTP improvements, therefore station 057 has been removed.

The City of Lima has an approved pretreatment program, which regulates 12 industrial users. This includes 11 categorical users that discharge 0.71 MGD of flow and 4 significant non-categorical users that discharge 0.412 MGD of flow. Potable water comes from the City of Lima’s municipal water service, the source for which is groundwater.

Lima WWTP utilizes the following sewage sludge treatment processes (Figure 4):

- Gravity Thickening
- Anaerobic Digestion
- Filter Press Dewatering
- Lime Stabilization

Table 1 shows the last five years of sludge removed from Lima WWTP. Treated sludge is disposed of via land application of exceptional quality biosolids (Station 584) or Class B biosolids (581), hauling to a landfill (586), or transfer to another NPDES permit holder (588).

DESCRIPTION OF EXISTING DISCHARGE

Table 2 presents the effluent violations for Lima WWTP during the previous five years. Several pH violations were the result of a meter calibration issue. Several TSS violations resulted from a malfunction in a nitrification tower distribution arm. Several E. coli violations were caused by lack of sodium hypochlorite when feed lines clogged. In each instance, the issues have been rectified and the violations have not recurred.

Table 3 presents the average annual effluent flow rate for Lima WWTP for the previous five years. Lima WWTP estimates there is an infiltration/inflow (I/I) rate to the collection system of 0.2 MGD. Lima WWTP performs the following activities to minimize I/I: sewer CCTV inspection, cleaning, rehabilitation, lining, and replacement.

Table 4 presents the number of CSOs reported by Lima WWTP during the previous five years. Lima WWTP has 19 known combined sewer overflows (CSOs). CSO 036 has been eliminated and is proposed to be removed.

Table 5 presents data characterizing bypass activity at Lima WWTP for the previous five years. Bypasses were reported at station 603 under the previous permit, which represented flows that received secondary treatment but bypassed the nitrification towers. Increases in volumes observed at this station during the last five years increased considerably as the City initiated implementation of the LTCP and brought the 13-MG storage basin online.

Table 6 presents the number of SSOs reported by Lima WWTP for the previous five years. SSOs are reported at station 300.

Table 7 presents data characterizing the annual total phosphorus load from Lima WWTP during the previous five years.

Table 8 presents chemical specific data compiled from data reported in annual pretreatment reports. Because this data is substantially identical to the application requirements in CFR 122.21(j), the Director has waived the requirement for submittal of supplemental effluent testing data as part of the NPDES renewal application.

Table 9 presents a summary of unaltered Discharge Monitoring Report (DMR). Data are presented for the period October 2017 through March 2022, and current permit limits are provided for comparison.

Table 10 summarizes the chemical specific data for outfall 001 by presenting the average and maximum PEQ values.

Table 11 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 Lima Reservoir- Ottawa River watershed

assessment unit, which includes the Ottawa River in the vicinity of Lima WWTP, is listed as impaired for aquatic life, recreation, human health, and public drinking water uses 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 Total Daily Maximum Load (TMDL) report was approved for the Ottawa River in April 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 12) 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 most recent published data for the Ottawa River is from 2010, which was initially reported in the technical support document (TSD) *Biological and Water Quality Study of the Ottawa River and Principal Tributaries 2010*. The TSD identified aquatic life use impairments due to nutrients, ammonia, low dissolved oxygen, excess algae, and chronic toxicity. Chronic toxicity manifests as a declining number of pollution-sensitive fish species and an increase in the incidence of deformities, eroded fins, lesions, and tumors (DELT) anomalies in the fish community. The likely sources of these impairments include municipal point source discharges, industrial point source discharges, combined sewer overflows, sanitary sewer overflows, and unknown sources.

The 2014 Ottawa River (Lima area) TMDL recommended a phased approach to returning the river to attainment of its designated uses. For Lima WWTP, the major recommendation for Phase 1 is the finalization and implementation of the CSO LTCP. As noted above, the City's LTCP has been approved and implementation is underway. Prior to any additional TMDL recommendations specific to the Ottawa River (Lima area), Ohio EPA will conduct another survey to assess the river's attainment status. If the stream remains impaired, Ohio EPA will complete a new Ottawa River (Lima area) TMDL.

At this time, a Total Maximum Daily Load (TMDL) study is underway for the Maumee River watershed to address shoreline and open water impairments in the Western Basin of Lake Erie caused by cyanobacteria harmful algal blooms. The Ottawa River is tributary to the Maumee River and Lake Erie's Western Basin, therefore nutrient loads from Lima WWTP will be considered in the study. Implementation plans in these reports may include recommendations for load reductions through additional permit limits on industrial and municipal dischargers. As of this writing, the public notice period for the draft Maumee Watershed Nutrient TMDL has been completed and a final version is expected to be proposed this year. This information and more about the TMDL process, as well as the Ottawa River (Lima Area) TMDL, is available through the Ohio EPA, Division of Surface Water website at:

<https://epa.ohio.gov/divisions-and-offices/surface-water/reports-data/maumee-river-watershed>

The full Integrated Report is available through the Ohio EPA, Division of Surface Water website at:

<https://epa.ohio.gov/divisions-and-offices/surface-water/reports-data/ohio-integrated-water-quality-monitoring-and-assessment-report>

The *Biological and Water Quality Study of the Ottawa River and Principal Tributaries, 2010* is available through the Ohio EPA, Division of Surface Water website at:

<https://epa.ohio.gov/divisions-and-offices/surface-water/reports-data/biological-and-water-quality-reports>

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 Lima 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)

October 2017 through March 2022

Pre-treatment Data

2017-21

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 10). 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 13).

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. For free flowing streams, WLAs using this method are calculated using the following general equation: $Discharger\ WLA = (downstream\ flow \times WQS) - (upstream\ flow \times background\ concentration)$. Discharger WLAs are divided by the discharge flow so that the allocations are expressed as concentrations. The following dischargers in the Ottawa River were considered interactive (see Figure 4):

- Lima WWTP
- Husky Lima Refinery
- PCS Nitrogen
- Shawnee #2 WWTP

These facilities were allocated together for most parameters due to the size of the plant discharges, the flows of the Ottawa River, and the relatively close proximity of the facilities. The exception was the ammonia WLA, which was done separately for each facility because ammonia is not considered to be a 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
Wildlife		Annual 90Q10
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 14, and allocations cannot exceed the Inside Mixing Zone Maximum (IMZM) criteria. The data used in the WLA are listed in Table 13 and Table 14. The WLA results to maintain all applicable criteria are presented in Table 16.

Dissolved Metals Translators

A dissolved metals translator (DMT) is the factor used to convert a dissolved metal aquatic life criterion to an effective total recoverable aquatic life criterion with which a total recoverable aquatic life allocation can be calculated as required in the NPDES permit process. Currently, a DMT is based on site- or area-specific field data; each field data sample consists of a total recoverable measurement paired with a dissolved metal measurement.

A DMT study was conducted in the Ottawa River in 2013 by HDR on behalf of PCS Nitrogen and the Lima Refinery. This study developed DMTs for chromium, copper, lead, nickel, and zinc. The study was developed and reviewed by the Ohio EPA prior to sampling and the final results were accepted by the Ohio EPA.

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. TU_a and TU_c) by the associated WQS Implementation Rule (OAC 3745-2-09). The translation results in a numeric value of 0.3 TU_a and 1.0 TU_c. 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.

The WLA calculations for WET are similar to those for aquatic life criteria - using the chronic toxicity unit (TU_c) and 7Q10 flow for the average and the acute toxicity unit (TU_a) and 1Q10 flow for the maximum. WET WLAs are based on meeting the values of 0.3 TU_a and 1.0 TU_c downstream of the discharge, and include any available dilution. These values are the levels of effluent toxicity that should not cause instream toxicity during critical low-flow conditions. WLAs for acute toxicity are capped at 1.0 TU_a unless the discharger demonstrates that an Area-of-Initial-Mixing (AIM) exists under OAC 3745-1-06, or that one of the factors in OAC 3745-33-07(B)(5)-(9) allows a higher TU_a limit to be granted. For the purposes of establishing WET limitations, the values of 1.0 TU_a and 1.0 TU_c are the most restrictive limitations that can be applied in NPDES permits [OAC 3745-33-07(B)(10)].

For Lima WWTP, the WLA values are 0.3 TU_a and 1.0 TU_c.

The chronic toxicity unit (TU_c) 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):

$$TU_c = 100/IC_{25}$$

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):

$$TU_c = 100/\text{geometric mean of No Observed Effect Concentration and Lowest Observed Effect Concentration}$$

The acute toxicity unit (TU_a) 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:

$$TU_a = 100/LC_{50}$$

This equation applies outside the mixing zone for all designated waters.

When the acute WLA is less than 1.0 TU_a , it may be defined as:

Downstream Dilution Ratio (downstream flow to discharger flow)		Allowable Effluent Toxicity (percent effects in 100% effluent)	
up to 2		30	
greater than 2 but less than 2.7		40	
2.7 to 3.3		50	
Downstream Dilution Ratio =	$\frac{1Q_{10} + [WWTP \text{ flow rate}]}{[WWTP \text{ flow rate}]}$	=	$\frac{0.0 \text{ cfs} + 28.62 \text{ cfs}}{28.62 \text{ cfs}} = 1.0$

The acute WLA for Lima WWTP is 30 percent mortality in 100 percent effluent based on the dilution ratio of 1.0.

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 16. The average PEL (PEL_{avg}) is compared to the average PEQ (PEQ_{avg}) from Table 10, and the PEL_{max} is compared to the PEQ_{max} . Based on the calculated percentage of the allocated value [$(PEQ_{avg} \div PEL_{avg}) \times 100$, or $(PEQ_{max} \div PEL_{max}) \times 100$], the parameters are assigned to group 3, 4, or 5. The groupings are listed in Table 17.

The final effluent limits are determined by evaluating the groupings in conjunction with other applicable rules and regulations. Table 18 presents the final effluent limits and monitoring requirements proposed for Lima WWTP outfall 001 and the basis for their recommendation. Table 19 presents the same for internal monitoring Station 604. Unless otherwise indicated, the monitoring frequencies proposed in the permit are continued from the existing permit.

Outfall 001

5-day Carbonaceous Oxygen Demand and Total Suspended Solids

The limits for 5-day carbonaceous biochemical oxygen demand (CBOD5) are plant design limits based on a 1988 wasteload allocation model. Limits for total suspended solids (TSS) are plant design limits which represent the solids removal expected for a facility designed to meet the CBOD5 limits. The TSS and CBOD5 limits are more stringent than the Secondary Treatment Standards in 40 CFR Part 133. Limits for TSS and CBOD5 are proposed to be applied at Outfall 001, regardless of operating mode.

Ammonia

The current ammonia limits, for both summer and winter, have been evaluated using the WLA procedures and are not protective of WQS for ammonia toxicity. Lower limits based on the WLA are proposed. Ammonia limits are dependent upon downstream temperature and pH values. The 75th percentile of downstream temperature and pH data were calculated from station 901 for of the previous five years. Dilution factors and background water quality were also applied to determine the projected effluent limits. A review of data from

the last five years suggests that the permittee is able to comply with the proposed limits, therefore limits are proposed to become effective immediately.

Total Residual Chlorine

The existing daily effluent limit for total residual chlorine is proposed to continue as a plant design value which is based on protection of the inside mixing zone maximum (IMZM) and outside mixing zone maximum (OMZM) PELs. The most stringent daily maximum criterion is applied (OMZM) and is to be met anytime chlorine is being utilized for effluent disinfection. The limit has been evaluated using the WLA procedures and determined to be protective of WQS for chlorine toxicity.

The effluent limit for chlorine is less than the quantification level of 0.050 mg/L. However, a pollutant minimization program is not required because the dosing rate of dechlorination chemicals ensures that the water quality-based effluent limit is being met.

Dissolved Oxygen, *E. coli*, Oil & Grease, and pH

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

Selenium

Selenium wasteloads have been re-allocated between Lima Refinery and Lima WWTP. Consistent with the existing permit, Lima WWTP's allocation is proposed to be reduced from 5 µg/L to 3 µg/L. The Ohio EPA risk assessment (Table 17) places selenium in group 4. This placement, as well as the data in Tables 9 and 10, support that this parameter does 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).

The 2015 *PCS Nitrogen Ohio, L.P. Selenium and Bromide Study* concluded that bromide concentrations above 5 mg/L appear to bias selenium values produced using U.S. EPA Method 200.8. Consistent with the current permit, a Part II condition is proposed, requiring Lima WWTP to use an analytical method that is not susceptible to bromide interference.

Bis(2-ethylhexyl) Phthalate

The Ohio EPA risk assessment (Table 17) places bis(2-ethylhexyl) phthalate in group 4. This placement, as well as the data in Tables 9 and 10, 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).

Cadmium, Chromium, Copper, Dissolved Hexavalent Chromium, Free Cyanide, Lead, Nickel, Total Filterable Residue, and Zinc

The Ohio EPA risk assessment (Table 17) places these parameters in groups 2 and 3. This placement, as well as the data in Tables 9 and 10, 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. Limits for dissolved hexavalent chromium are proposed to be removed but monitoring will continue once per two weeks.

Arsenic, Bromodichloromethane, Chloroform, Dibromochloromethane, Molybdenum, and Silver

The Ohio EPA risk assessment (Table 17) places these parameters in groups 2 and 3. This placement, as well as the data in Tables 9 and 10, support that these parameters do not have the reasonable potential to contribute to WQS exceedances, and limits are not necessary to protect water quality. No new monitoring is proposed. Annual pretreatment priority pollutant scans will provide data for these parameters for future reasonable potential analysis.

Flow Rate, Total Precipitation, and Water Temperature

Continued monitoring for flow rate and water temperature and new monitoring for total precipitation is proposed in order to evaluate the performance of the treatment plant.

Nitrate + Nitrite and Total Kjeldahl Nitrogen

The 2020 *Ohio Integrated Water Quality Monitoring and Assessment Report* (Ohio EPA) lists the Ottawa River watershed as impaired for aquatic life due to nutrients, eutrophication, and dissolved oxygen. Major municipal point sources are listed among the likely sources. Considering this information and the fact that municipal WWTPs discharge a nutrient load to the river, monthly monitoring for nitrate + nitrite, and total Kjeldahl nitrogen is proposed based on best technical judgment. The purpose of the monitoring is to maintain a nutrient data set for use in the future studies. Nitrate + nitrite was evaluated using the WLA procedures and does not have reasonable potential to exceed the WLA.

Dissolved Orthophosphate and Total Phosphorus

Phosphorus is limited based on provisions of OAC 3745-33-06(C). Additionally, an evaluation report must be completed and submitted as part of the next NPDES renewal application. Details are in Part II of the permit.

Monitoring for dissolved orthophosphate (as P) 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.

Mercury

The current permit for Lima WWTP includes a mercury variance and variance-based limits for mercury. Based on the monitoring results from October 2017 through March 2022, and the new application information, the Lima WWTP has determined that the facility will not meet the 30-day average permit limit of 1.3 ng/L. However, the effluent data shows that the permittee can meet the mercury annual average value of 12 ng/L. The permittee's application has also demonstrated to the satisfaction of Ohio EPA that there is no readily apparent means of complying with the WQBEL without constructing prohibitively expensive end-of-pipe controls for mercury. Based upon these demonstrations, the Lima WWTP is eligible for renewal of the mercury variance under OAC 3745-1-38(H).

Lima WWTP submitted information supporting the renewal of the variance. The permittee coordinates with Allen County Solid Waste District and Allen County Homeland Security to collect mercury-containing materials, continues to monitor 19 industries annually, to reduce the amount of mercury being discharged. The calculation of the PEQ_{avg} value from 2017 to 2022 compared to the PEQ_{avg} calculated at the time the original variance was issued shows a reduction from 7.6 to 3.5 ng/L. The Pollutant Minimization Program (PMP) schedule developed from the original variance continues to be implemented, and further reductions in mercury may be possible.

Ohio EPA has reviewed the mercury variance application and has determined that it meets the requirements of the OAC. A condition in Part II of the NPDES permit lists the provisions of the mercury variance, and includes the following requirements:

- A variance-based monthly average effluent limit of 3.5 ng/L, which was developed from sampling data submitted by the permittee;
- A requirement that the permittee make reasonable progress to meet the WQBEL for mercury by implementing the plan of study, which has been developed as part of the PMP;
- Low-level mercury monitoring of the plant's influent and effluent;

- A requirement that the annual average mercury effluent concentration is less than or equal to 12 ng/L as specified in the plan of study;
- A summary of the elements of the plan of study;
- A requirement to submit an annual report on implementation of the PMP; and
- A requirement for submittal of a certification stating that all permit conditions related to implementing the plan of study and the PMP have been satisfied, but that compliance with the monthly average WQBEL for mercury has not been achieved.

Additivity of Carcinogens

Bis(2-ethylhexyl) phthalate and chloroform are carcinogens, which require the evaluation of the additive effect of these pollutants. OAC 3745-33-07(A)(8) states that a pollutant may be removed from the consideration of additivity if the PEL for the pollutant is less than the quantification level for that pollutant. For bis(2-ethylhexyl) phthalate, the average PEL (8.4 µg/L) is less than the quantification level (10 µg/L), so this parameter is removed from additivity consideration. As a result, there is no additive effect and carcinogenic additivity is not proposed for inclusion in the permit.

Whole Effluent Toxicity Reasonable Potential

Evaluating the acute and chronic toxicity results for *Ceriodaphnia dubia* in Table 11 and Attachment 1, under the provisions of 40 CFR Part 132, Appendix F, Procedure 6, gives an acute PEQ value of 1.6 TU_a and a chronic PEQ of 2.08 TU_c. Reasonable potential for toxicity is demonstrated, since these values exceed the WLA values of 0.3 TU_a and 1.0 TU_c. Consistent with Procedure 6 and OAC 3745-33-07(B), limits of 1.0 TU_a and 1.0 TU_c are proposed to continue. Quarterly monitoring is proposed to continue.

The acute and chronic toxicity results for *Pimephales promelas* in Table 11 show that there have been no detections of toxicity. Under the provisions of 40 CFR Part 132, Appendix F, Procedure 6, no PEQ values can be calculated. Reasonable potential for toxicity is not demonstrated. While this indicates that the plant's effluent does not currently pose a toxicity problem, annual chronic toxicity testing with the determination of acute endpoints is proposed consistent with the minimum monitoring requirements at OAC 3754-33-07(B)(11). The proposed monitoring will adequately characterize toxicity in the plant's effluent.

Peak Flow Rate

A new parameter (Peak Flow Rate) and revised loading limits are proposed to facilitate maximization of treatment capacity during wet weather events, based on flexibility afforded to CSO permittees by OAC 3745-33-05(C)(3)(c). See Part II for details.

Internal Monitoring Station 604

CBOD5 and TSS

Limits for CBOD5 and TSS are plant design limits based on performance criteria detailed in Appendices A and C of the City's Consent Decree. The proposed limits are protective of the requirements in 40 CFR 133.105 and is therefore proposed to be approved as equivalent to secondary treatment. Use of this station shall be limited to wet weather events in which influent flow rates exceed the hydraulic capacity of the activated sludge treatment system. Sampling for TSS and CBOD5 shall commence no later than two hours after a discharge has begun to occur at this station (i.e. peak wet weather mode has been initiated). Samples are not required for discharges lasting less than two (2) hours.

Flow Rate and Duration

Monitoring for flow rate and duration is proposed to facilitate evaluation of treatment system performance.

Additional Monitoring Requirements

At internal monitoring station 603, new monitoring for flow rate is proposed. Monitoring for bypass occurrence, duration, and volume is proposed to be removed.

At influent monitoring station 601, monitoring for bis(2-ethylhexyl) phthalate and selenium is proposed to be removed due to lack of reasonable potential to exceed the WLA at outfall 001.

At upstream monitoring station 801, monitoring for water temperature, dissolved oxygen, and pH are proposed to be removed because this data isn't needed for the reasonable potential analysis.

At downstream monitoring station 901, monitoring for dissolved oxygen is proposed to be removed because this data isn't needed for the reasonable potential analysis. Also, monitoring for dissolved hexavalent chromium is proposed to be removed.

Monitoring for bypass station 057 and CSO station 036 is proposed to be removed due to elimination of these stations by wet weather control projects. Monitoring for TSS and CBOD5 at CSOs 002, 003, 004, 005, and 006 is also proposed to be removed.

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 (station 581), removal of exception quality biosolids (584), removal to sanitary landfill (586), or transfer to another facility with an NPDES permit (588).

OTHER REQUIREMENTS

Compliance Schedule

Pretreatment Local Limits Review - A 6-month compliance schedule is proposed for the City to submit a technical justification for either revising its local industrial user limits or retaining its existing local limits. If revisions to local limits are required, the City must also submit a pretreatment program modification request. Details are in Part I.C of the 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 Lima WWTP to have a Class IV 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.

Low-Level Free Cyanide Testing

Currently there are three approved methods for free cyanide listed in 40 CFR 136 that have a quantification level lower than 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)).

These methods will allow Ohio EPA to make more reliable water quality-related decisions regarding free cyanide. Because the quantification levels are lower than any water quality-based effluent limits, it will also be possible to directly evaluate compliance with free cyanide limits.

CSO Public Notification

The rule for Public Notification Requirements for Combined Sewer Overflows to the Great Lakes Basin, i.e. 40 CFR 122.38, was finalized by U.S. EPA on December 17, 2017, published in the Federal Register on January 8, 2018, and became effective on Wednesday, February 7, 2018. This rule protects public health by ensuring timely notification to the public and to public health departments, public drinking water facilities, and other potentially affected public entities. This rule applies to CSO dischargers within Ohio’s Lake Erie Basin. Under this rule, CSO dischargers are subject to the following requirements:

- The City of Lima’s developed a CSO Public Notification Plan which was approved by Ohio EPA on October 19, 2018.
- Implementation of the Public Notification Plan.
- An Annual Report of data pertaining to CSO activity must be published on or prior to May 1 of every year. Ohio EPA and U.S. EPA must be provided with instructions on how to access the Annual Report.

Part II of the permit includes requirements for public notification of CSOs and the posting of an annual CSO report.

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 Ottawa River providing information about the discharge. Signage at outfalls is required pursuant to OAC 3745-33-08(A).

Part III

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

Storm Water Compliance

Parts IV, V, and VI have been included with the draft permit to ensure that any storm water flows from the facility site are properly regulated and managed. As an alternative to complying with Parts IV, V, and VI, the Lima WWTP may seek permit coverage under the general permit for industrial storm water (permit # OHR000006) or submit a “No Exposure Certification.” Parts IV, V, and VI will be removed from the final permit if: 1) the Lima WWTP submits a Notice of Intent (NOI) for coverage under the general permit for industrial storm water or submits a No Exposure Certification, 2) Ohio EPA determines that the facility is eligible for coverage under the general permit or meets the requirements for a No Exposure Certification, and 3) the determination by Ohio EPA can be made prior to the issuance of the final permit.

Figure 1. Location of Lima WWTP

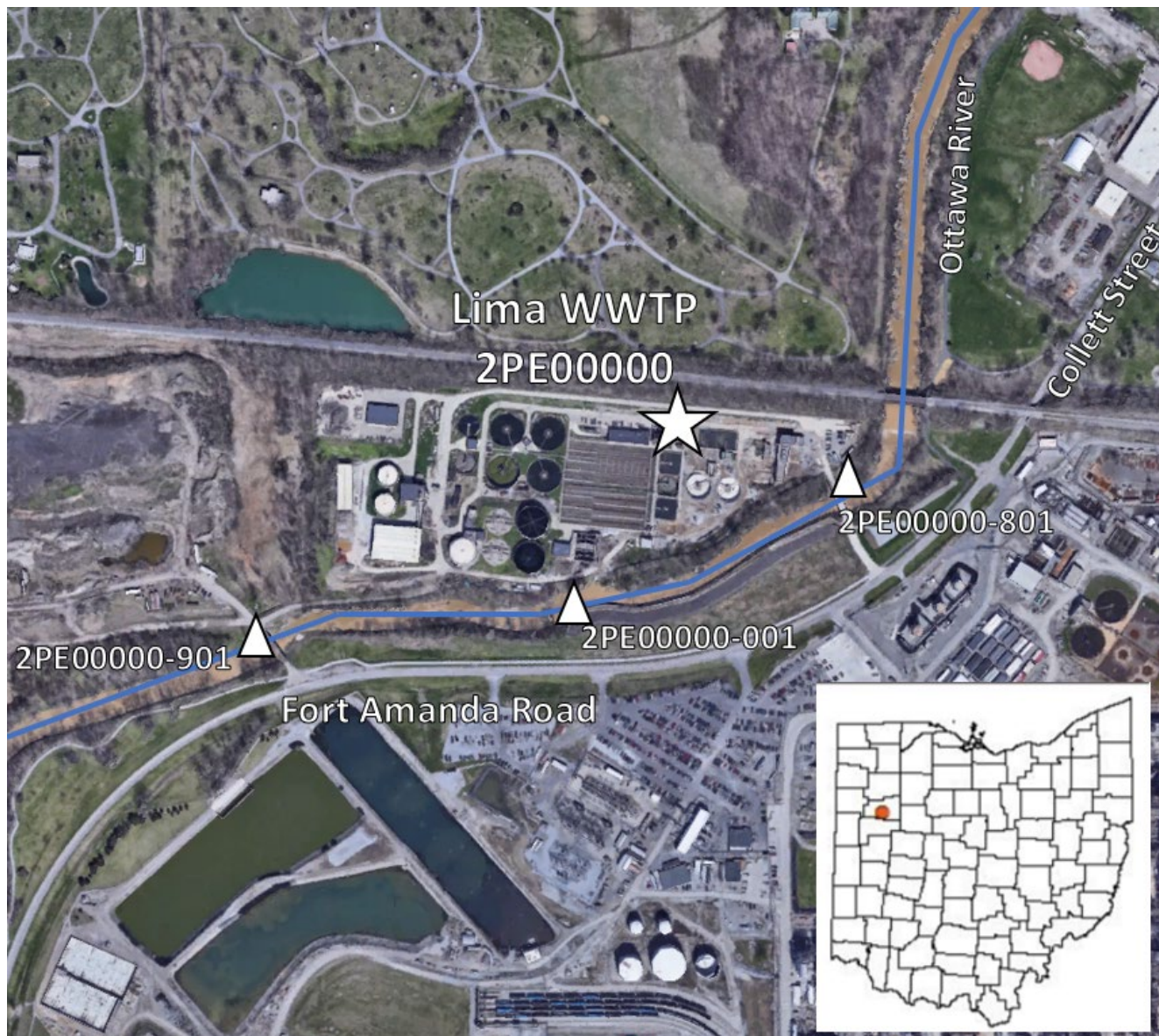


Figure 2. Diagram of Wastewater Treatment System

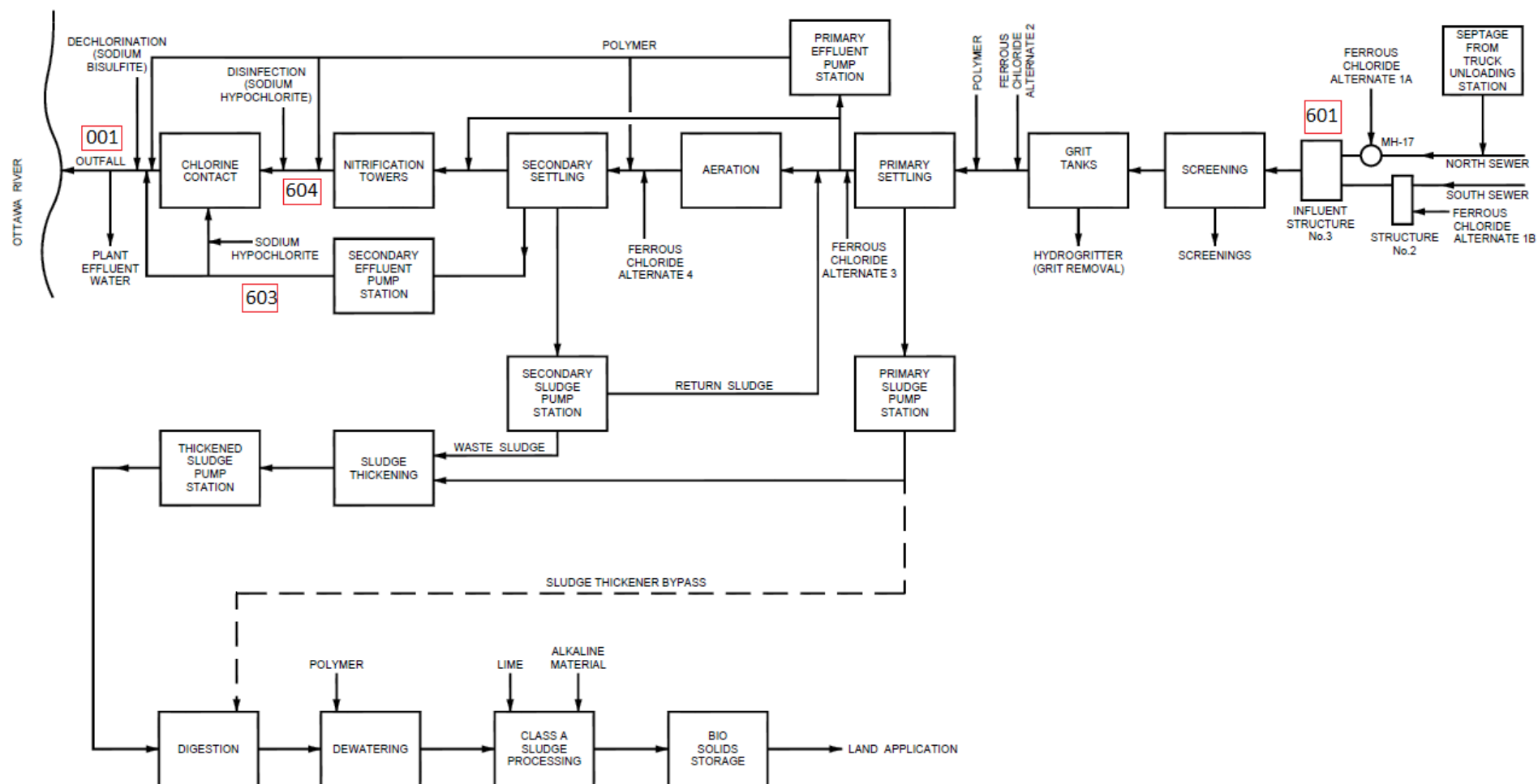


Figure 3. Lima WWTP Operating Modes

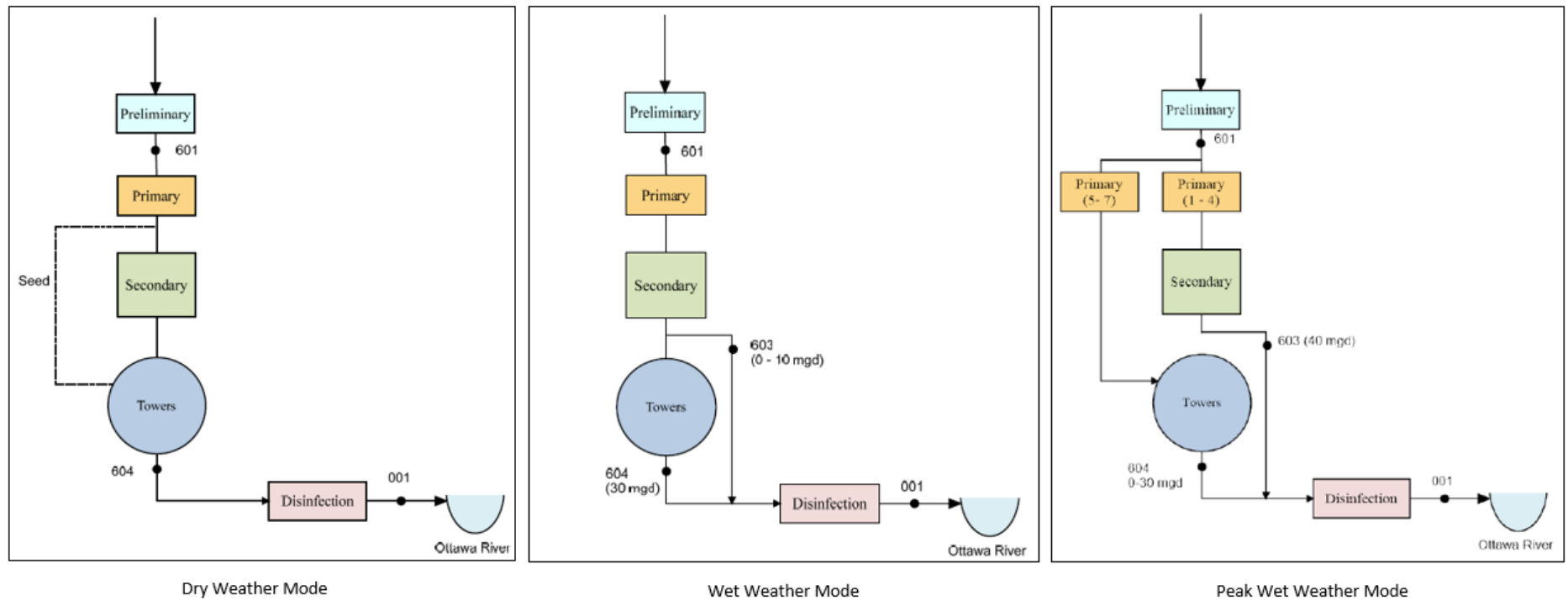


Figure 4. Ottawa River Study Area

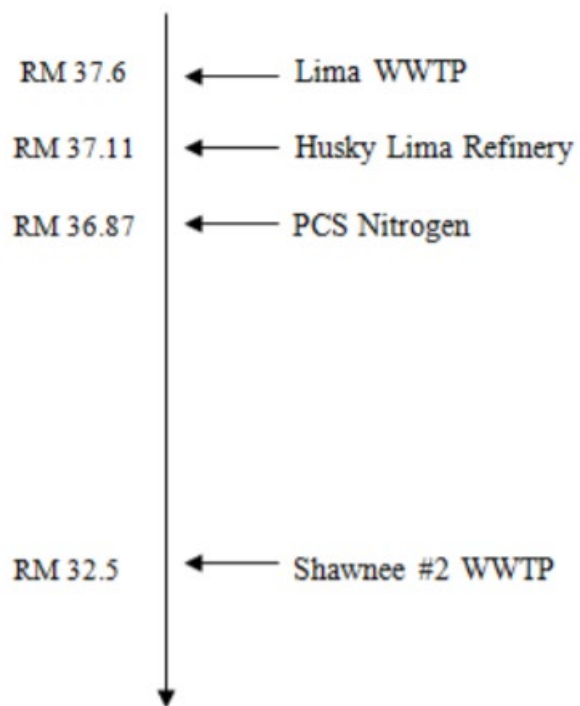


Table 1. Sewage Sludge Removal by Station

Year	581	584	586	588
2017	--	2284.68	442.62	--
2018	--	957.87	5174	--
2019	1928	1109.28	--	--
2020	295.6	1138	--	630.93
2021	--	2586.24	442.62	--

Table 2. Effluent Violations for Outfall 001

Station	Parameter	2017 ^a	2018	2019	2020	2021	2022 ^b	Total
001	<i>E. coli</i>	0	1	3	0	2	0	6
	Mercury	0	1	0	1	0	0	2
	Phosphorus	0	0	0	1	0	0	1
	pH, Minimum	0	0	3	1	0	0	4
604	Mercury	0	1	0	0	0	0	1
	Ammonia	0	3	0	0	0	0	3
	Total Suspended Solids	0	1	0	1	0	3	5
Total		0	7	6	4	2	3	22

^a Data from October through December only^b Data from January through March only**Table 3. Average Annual Effluent Flow Rates**

Station	Year	Annual Flow (MGD)		
		50th Percentile	95th Percentile	Maximum
001	2017 ^a	11.81	28.36	37.72
	2018	13.97	32.15	38.80
	2019	15.04	36.00	62.60
	2020	8.83	25.20	64.58
	2021	9.96	27.23	63.39
	2022 ^b	13.91	27.88	59.46
604	2017 ^a	11.81	28.11	30.00
	2018	13.97	30.75	38.08
	2019	19.64	35.59	46.88
	2020	8.90	25.77	64.58
	2021	9.96	27.23	63.39
	2022 ^b	13.91	27.88	59.46

^a Data from October through December only^b Data from January through March only

Table 4. Combined Sewer Overflow Discharges

Station	Occurrences						Volume (MG)						Annual Median	
	2017 ^a	2018	2019	2020	2021	2022 ^b	2017 ^a	2018	2019	2020	2021	2022 ^b	TSS (mg/L)	CBOD5 (mg/L)
002	7	54	62	27	19	1	84.8	284.6	482.9	167.0	385.2	51.2	186.5	34.7
003	7	59	62	28	18	1	46.0	215.9	337.8	162.8	97.0	13.9	194.5	45
004	4	36	45	23	14	1	23.7	640.0	398.7	64.4	71.3	2.1	197.6	27.1
005	3	18	30	14	11	1	23.1	41.4	88.2	22.6	48.2	1.5	156.8	23.3
006	2	18	17	12	9	--	7.5	24.5	18.1	6.7	13.7	--	90.4	21.9
007	2	10	22	12	9	1								
008	--	4	11	5	2	--								
009	--	3	1	--	--	--								
011	1	--	2	--	1	--								
012	--	3	2	--	3	--								
013	2	2	3	--	1	--								
014	1	8	3	1	1	--								
015	--	1	4	--	--	--								
016	--	2	3	--	2	--								
033	1	3	5	1	1	--								
034	1	2	3	1	2	1								
035	1	3	4	3	--	--								
036*	--	--	1	--	--	--								
037	--	4	9	5	3	--								
038	1		2		1									

*CSO 036 has been eliminated and is proposed to be removed

Table 5. Bypass Characterization

Station	Parameter	2017 ^a	2018	2019	2020	2021	2022 ^b
603	Occurrences	17	62	108	88	89	28
	Volume	55.3	115.8	687.1	863.9	847	283

*Bypass station 057 had no discharges in the last five years and has been eliminated

^a Data from October through December only

^b Data from January through March only

Table 6. Sanitary Sewer Overflow Discharges

Year	Occurrences
2017 ^a	46
2018	241
2019	340
2020	208
2021	179
2022 ^b	12

^a Data from October through December only^b Data from January through March only**Table 7. Calculated Annual Total Phosphorus Loadings**

Year	Median Phosphorus (mg/L)	Median Flow (MGD)	Median Loading (kg/day)
2017 ^a	0.40	11.81	17.88
2018	0.34	13.97	18.06
2019	0.36	15.04	20.44
2020	0.40	8.83	13.46
2021	0.27	9.96	10.17
2022 ^b	0.15	13.91	7.90

^a Data from October through December only^b Data from January through March only

MGD = million gallons per day

Table 8. Effluent Characterization Using Pretreatment Data

Parameter	Units	9/26/2017	9/5/2018	9/3/2019	9/2/2020	9/1/2021
Arsenic	µg/L	AA (5)	AA (5)	AA (5)	1.0	0.6
Bis(2-ethylhexyl) phthalate	µg/L	AA (5)	AA (5)	AA (5)	AA (1.83)	AA (1.83)
Bromodichloromethane	µg/L	8.6	AA (5)	9.4	23	10
Cadmium	µg/L	AA (3)	AA (3)	AA (3)	AA (0.1)	AA (0.1)
Chloroform	µg/L	21	15.4	18	25	16
Chromium	µg/L	AA (7)	AA (7)	AA (7)	2.0	2.1
Copper	µg/L	AA (8)	AA (8)	AA (8)	6.0	6.3
Dibromochloromethane	ng/L	AA (5)	AA (5)	AA (5)	12	4.1
Lead	µg/L	AA (10)	AA (10)	AA (10)	AA (0.1)	0.4
Molybdenum	µg/L	10	14	12	12	14
Nickel	µg/L	AA (8)	13.2	AA (8)	14	9.0
Selenium	µg/L	AA (4)	AA (3)	AA (3)	AA (3)	0.5
Zinc	µg/L	19	19	12	24	18

AA = not-detected (analytical method detection limit)

Table 9. Effluent Characterization Using Self-Reported Electronic Discharge Monitoring Reports (eDMR)

Outfall	Parameter	Unit	Current Limits		# Obs	Percentiles		Data Range
			30 Day	Daily		50th	95th	
001	Water Temperature	°C	-----Monitor-----		1308	14.7	23.8	5.21 - 25.2
	Dissolved Oxygen - 2017-18	mg/L	-----Monitor-----		1308	9.35	7.58*	6.71 - 12.1
	Dissolved Oxygen - 2018-22	mg/L	--	5.0 ^m	304	10.5	8.2*	7.8 - 12.8
	Total Suspended Solids	mg/L	-----Monitor-----		304	3.7	9.77	0 - 42.8
	Oil and Grease	mg/L	--	10	171	< 5	< 5	0 - 9.2
	Ammonia - All	mg/L	-----Monitor-----		304	.058	.396	0 - 25.2
	Ammonia (summer)	kg/day	341	681 ^w	625	1.36	26.2	0 - 94.6
	Ammonia (summer)	mg/L	2.0	4.0 ^w	625	.036	.469	0 - 1.51
	Ammonia (winter)	kg/day	681	1363 ^w	618	3.06	69.5	0 - 356
	Ammonia (winter)	mg/L	4.0	8.0 ^w	618	.067	1.02	0 - 4.88
	Total Kjeldahl Nitrogen	mg/L	-----Monitor-----		88	< .5	1.55	0 - 3.18
	Nitrite Plus Nitrate	mg/L	-----Monitor-----		87	11.1	18.8	3.38 - 20.8
	Phosphorus	kg/day	341	681 ^w	351	14.2	42.3	2.04 - 154
	Phosphorus (2018-22)	mg/L	2.0	4.0 ^w	351	.32	.84	.09 - 1.62
	Phosphorus (2017-18)	mg/L	-----Monitor-----		84	.4	1.14	.11 - 1.62
	Orthophosphate	mg/L	-----Monitor-----		43	.136	.69	0 - 1.22
	Nickel	µg/L	-----Monitor-----		45	< 8	12.8	0 - 14
	Zinc	µg/L	-----Monitor-----		45	17	30	0 - 54
	Cadmium	µg/L	-----Monitor-----		45	--	--	< 3
	Lead	µg/L	-----Monitor-----		45	--	--	< 10
	Chromium	µg/L	-----Monitor-----		45	--	--	< 7
	Copper	µg/L	-----Monitor-----		45	< 8	< 8	0 - 12
	Selenium	µg/L	-----Monitor-----		86	< 3	< 3	0 - 3.4
	Chromium, Dissolved Hexavalent	kg/day	1.88	2.73	87	--	--	< .0329
	Chromium, Dissolved Hexavalent	µg/L	11.0	16.0	87	--	--	< 3
	<i>E. coli</i>	#/100 mL	126	284 ^w	765	26	694	0 - 60700

Outfall	Parameter	Unit	Current Limits		# Obs	Percentiles		Data Range
			30 Day	Daily		50th	95th	
001	Bis(2-ethylhexyl) Phthalate	µg/L	-----Monitor-----		44	< 5	4.34	0 - 76.8
	Flow Rate	MGD	-----Monitor-----		1612	12	32.1	1.89 - 64.6
	Chlorine (2018-21)	mg/L	--	0.019	644	--	--	0 - 0
	Chlorine (2017-18)	mg/L	--	0.020	123	--	--	0 - 0
	Mercury	kg/day	0.000631	0.29	48	.0000452	.000331	0 - .000509
	Mercury	ng/L	3.7	1700	48	1.11	3.92	0 - 10.1
	Free Cyanide	µg/L			44	--	--	< 3
	Acute Toxicity, Ceriodaphnia dubia	TUa	--	1.0	13	< .2	.54	0 - .9
	Chronic Toxicity, Ceriodaphnia dubia	TUc	1.0	--	13	< 1	2.68	0 - 4.3
	Acute Toxicity, Pimephales promelas	TUa	-----Monitor-----		4	--	--	< .2
	Chronic Toxicity, Pimephales promelas	TUc	-----Monitor-----		4	--	--	< 1
	pH, Maximum	S.U.	--	9.0	1609	8	8.4	7.1 - 9
	pH, Minimum	S.U.	--	6.5 ^m	1607	7.6	6.9*	5.3 - 8.7
	Residue, Total Filterable	mg/L	-----Monitor-----		47	531	679	279 - 853
	CBOD 5 day	mg/L	-----Monitor-----		292	< 2.2	3.5	0 - 6.6
604	Water Temperature	°C	-----Monitor-----		301	13.9	23.7	0 - 27.4
	Dissolved Oxygen	mg/L	--	5.0 ^m	304	10.5	8.2*	7.8 - 12.8
	Total Suspended Solids	kg/day	2385	3407 ^w	1329	254	1270	0 - 8140
	Total Suspended Solids	mg/L	14	20 ^w	1329	6.2	15.6	0 - 63.2
	Oil and Grease	mg/L	--	10.0	19	--	--	< 5
	Ammonia (summer)	kg/day	341	681 ^w	123	3.03	147	0 - 1310
	Ammonia (summer)	mg/L	2.0	4.0 ^w	123	.061	2.64	0 - 24.3
	Ammonia (winter)	kg/day	681	1363 ^w	181	3.25	15.3	0 - 62.3
	Ammonia (winter)	mg/L	4.0	8.0 ^w	181	.051	.187	0 - .619
	Nitrite Plus Nitrate	mg/L	-----Monitor-----		10	12.3	19.2	8.57 - 21.4

Outfall	Parameter	Unit	Current Limits		# Obs	Percentiles		Data Range
			30 Day	Daily		50th	95th	
604	Phosphorus	kg/day	170	255 ^w	84	21.4	62.4	5.55 - 144
	Phosphorus	mg/L	1.0	1.5 ^w	84	.42	1.1	.1 - 1.48
	Free Cyanide	mg/L	-----Monitor-----		10	--	--	< .003
	Nickel	µg/L	-----Monitor-----		10	11	50.9	0 - 51.6
	Zinc	µg/L	-----Monitor-----		10	25	64.5	16 - 69
	Cadmium	µg/L	-----Monitor-----		10	--	--	< 3
	Lead	µg/L	-----Monitor-----		10	--	--	< 10
	Chromium	µg/L	-----Monitor-----		10	--	--	< 7
	Copper	µg/L	-----Monitor-----		10	--	--	< 8
	Selenium	µg/L	-----Monitor-----		10	--	--	< 4
	Chromium, Dissolved Hexavalent	µg/L	-----Monitor-----		10	--	--	< 10
	Antimony, TR	µg/L	-----Monitor-----		10	--	--	< 5
	Bis(2-ethylhexyl) Phthalate	µg/L	-----Monitor-----		10	--	--	< 5
	Flow Rate	MGD	-----Monitor-----		1612	12.7	30.9	.007 - 64.6
	Mercury, Total	kg/day	0.0013	0.29	10	.0000577	.000757	.0000334 - .00122
	Mercury, Total	ng/L	7.6	1700	10	1.22	18.2	.736 - 31.5
	Acute Toxicity, Ceriodaphnia dubia	TUa	-----Monitor-----		3	--	--	< .2
	Chronic Toxicity, Ceriodaphnia dubia	TUc	-----Monitor-----		3	--	--	< 1
	Residue, Total Filterable	mg/L	-----Monitor-----		11	578	827	490 - 913
	CBOD 5 day	kg/day	1192	1703 ^w	795	77.5	437	0 - 1880
	CBOD 5 day	mg/L	7.0	10 ^w	795	2.3	5.7	0 - 16

* = For minimum pH, 5th percentile shown in place of 50th percentile.

** = For dissolved oxygen, 5th percentile shown in place of 95th percentile.

^w = weekly average.

^m = minimum limit

Table 10. Projected Effluent Quality for Outfall 001

Parameter	Units	Number of Samples	Number > MDL	PEQ Average	PEQ Maximum
<i>Self-Monitoring (DMR) Data</i>					
Ammonia (summer)	mg/L	481	293	0.434	0.721
Ammonia (winter)	mg/L	395	268	0.638	1.211
Bis(2-ethylhexyl) phthalate	µg/L	47	2	5.862	8.03
Cadmium	µg/L	49	0	--	--
Chlorine	mg/L	767	0	--	--
Chromium	µg/L	49	2	5.11	7
Copper	µg/L	49	4	8.76	12
Dissolved Hexavalent Chromium	µg/L	85	0	--	--
Free Cyanide	µg/L	43	0	--	--
Lead	µg/L	2	1	1.11	1.52
Mercury (BCC)	ng/L	47	42	3.493	5.617
Nickel	µg/L	49	24	11.14	14.04
Nitrate + Nitrite	mg/L	85	85	16.84	22.84
Phosphorus	mg/L	426	426	0.617	1.024
Selenium	µg/L	84	2	2.234	3.06
Total Filterable Residue	mg/L	42	42	643	776
Total Kjeldahl Nitrogen	mg/L	83	25	1.264	1.971
Zinc	µg/L	49	46	25.46	34.24
<i>Pretreatment Data</i>					
Arsenic	µg/L	5	2	1.679	2.3
Bromodichloromethane	µg/L	5	4	38.62	52.9
Chloroform	µg/L	5	5	41.98	57.5
Dibromochloromethane	µg/L	5	2	20.15	27.6
Molybdenum	µg/L	5	5	23.51	32.2

DMR = Discharge Monitoring Report

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

BCC = bioaccumulative chemical of concern

Table 11. Summary of Acute and Chronic Toxicity Results

Date	<i>Ceriodaphnia Dubia</i>		<i>Pimephales promelas</i>	
	TU _a	TU _c	TU _a	TU _c
12/17/2017	AA (0.2)	AA (1.0)	--	--
3/13/2018	AA (0.2)	AA (1.0)	--	--
6/25/2018	AA (0.2)	AA (1.0)	--	--
8/28/2018	0.3	4.3	AA (0.2)	AA (1.0)
12/11/2018	AA (0.2)	AA (1.0)	--	--
3/11/2019	AA (0.2)	AA (1.0)	--	--
6/11/2019	AA (1.0)	AA (0.2)	--	--
8/2/2019	AA (0.2)	AA (1.0)	AA (0.2)	AA (1.0)
12/3/2019	0.9	1.6	--	--
1/7/2020	AA (2.0)	AA (1.0)	--	--
1/13/2020	AA (2.0)	AA (1.0)	--	--
1/21/2020	AA (2.0)	AA (1.0)	--	--
3/27/2020	AA (0.2)	AA (1.0)	--	--
6/29/2020	AA (0.2)	AA (1.0)	--	--
8/28/2020	AA (0.2)	AA (1.0)	AA (0.2)	AA (1.0)
12/18/2020	AE	AE	--	--
3/19/2021	AA (0.2)	1.1	--	--
6/7/2021	AA (0.2)	AA (1.0)	--	--
8/13/2021	AA (0.2)	AA (1.0)	AA (0.2)	AA (1.0)
12/11/2021	0.2	AA (1.0)	--	--

AA = non-detection; analytical method detection limit of 0.2 TU_a, 1.0 TU_c

AE = sample taken, not valid

-- = not tested

TU_a = acute toxicity unit

TU_c = chronic toxicity unit

Table 12. Aquatic Life Use Attainment Table

Location	RM	Aquatic Life Use Desig.	Attainment Status	Causes of Impairment	Sources of Impairment
Ottawa at Fetter Rd.	44.3	WWH	FULL		
Ottawa downstream Metzger Dam	43.4	WWH	PARTIAL	Low Flow Alteration, Nutrient/Eutrophication Biological Indicators	Flow Alteration from Water Diversions, Impoundment, Crop Production w/ Subsurface Drainage
Ottawa downstream Roush Rd.	42.5	WWH	PARTIAL	Low Flow Alteration Nutrient/Eutrophication Biological Indicators, DO (Low, Range)	Flow Alteration from Water Diversions, Impoundment, Crop Production w/ Subsurface Drainage
Ottawa at Sugar St.	41.3	WWH	FULL		
Ottawa downstream Lovers Lane Dam	40.1	WWH	PARTIAL	Nutrient/Eutrophication Biol. Indicators, Nutrients DO (Range)	SSOs CSOs
Ottawa downstream Elm St. Dam	39.6	WWH	FULL		
Ottawa downstream Erie RR Dam, Upstream Lima WWTP	37.9	WWH	PARTIAL	Nutrient/Eutrophication Biological Indicators, DO (Range), Organic Enrichment (Sewage) Biological Indicators, Other Anthropomorphic Substrate Alteration	CSOs Impoundment Historic Bottom Deposits
Ottawa downstream Lima WWTP	37.4	WWH	PARTIAL	Nutrient/Eutrophication Biological Indicators, Ammonia	Municipal Point Source Discharge CSOs
Ottawa downstream Husky Refinery	37.0	WWH	NON	Nutrient/Eutrophication Biological Indicators, Ammonia, Excess Algae, Chronic Toxicity (Impairment Unknown)	Municipal Point Source Discharge Industrial Point Source Discharge Source Unknown
Ottawa downstream PCS Nitrogen	36.1	WWH	NON	Nutrient/Eutrophication Biological Indicators, Ammonia, DO (Range), Chronic Toxicity (Impairment Unknown)	Municipal Point Source Discharge Industrial Point Source Discharge Source Unknown
Ottawa adjacent to Westfield Dr. (downstream major dischargers)	34.6	WWH	PARTIAL	Nutrient/Eutrophication Biological Indicators, DO (Minimum, Range), Chronic Toxicity (Impairment Unknown)	Municipal Point Source Discharge Industrial Point Source Discharge Source Unknown
Ottawa at Elm St., downstream Shawnee WWTP	31.1	WWH	PARTIAL	Nutrient/Eutrophication Biological Indicators, DO (Minimum, Range), Organic Enrichment (Sewage) Biological Indicators	SSOs, Municipal Point Source Discharges Industrial Point Source Discharges Urban Runoff/Storm Sewers
Ottawa at Allentown Dam Pool	28.9	WWH	PARTIAL	Nutrient/Eutrophication Biological Indicators, Fish-Passage Barriers	SSOs Municipal Point Discharge Impoundment
Ottawa at Piquad Rd.	25.8	WWH	FULL		

Data gathered from *Biological and Water Quality Study of the Ottawa River and Principal Tributaries, 2010*

RM = River mile

WWH = warmwater habitat

Table 13. Water Quality Criteria in the Study Area

Parameter	Units	Outside Mixing Zone Criteria					Inside Mixing Zone Maximum
		Average				Maximum Aquatic Life	
		Wildlife	Human Health	Agri-culture	Aquatic Life		
Aluminum	µg/L	--	4500	--	--	--	--
Ammonia (Summer)	mg/L	--	--	--	1.5	--	--
Ammonia (Winter)	mg/L	--	--	--	1.5	--	--
Arsenic	µg/L	--	580	100	150	340	680
Barium	µg/L	--	160000	--	1600 ^A	7000 ^A	14000 ^A
Bis(2-ethylhexyl) phthalate ^C	µg/L	--	32	--	8.4 ^A	1100 ^A	2100 ^A
Boron	µg/L	--	200000	--	3900 ^A	33000 ^A	65000 ^A
Bromodichloromethane ^C	µg/L	--	180	--	340	3100	6200
Cadmium	µg/L	--	730	50	5.8	15	31
Carbon disulfide	µg/L	--	--	--	15	130	260
Chlorides	mg/L	--	--	--	--	--	--
Chlorine	mg/L	--	--	--	0.011	0.019	0.038
Chloroform ^C	µg/L	--	1700	--	140 ^A	1300 ^A	2600 ^A
Chromium	µg/L	--	14000	100	310 ^F	2400 ^F	4700 ^F
Copper	µg/L	--	64000	500	27 ^F	44 ^F	88 ^F
Dissolved Hexavalent Chromium	µg/L	--	14000	--	11	16	31
Free Cyanide	µg/L	--	48000	--	5.2	22	44
Dibromochloromethane ^C	µg/L	--	150	--	320 ^E	2900 ^E	5800 ^E
Fluoride	mg/L	--	--	2	--	--	--
Iron	µg/L	--	--	5000	--	--	--
Lead	µg/L	--	--	100	50 ^F	960 ^F	1900 ^F
Magnesium	mg/L	--	--	--	--	--	--
Manganese	µg/L	--	61000	--	--	--	--
Mercury ^D	ng/L	1.3	3.1	10000	910	1700	--
Molybdenum	µg/L	--	10000	--	20000 ^A	190000 ^A	370000 ^A
Nickel	µg/L	--	43000	200	130 ^F	1200 ^F	2400 ^F
Nitrate + Nitrite	mg/L	--	--	100	--	--	--
Phenol	µg/L	--	2400	--	400	4700	9400
Phenolics	µg/L	--	--	--	--	--	--
Selenium	µg/L	--	3100	50	5	62	120
Silver	µg/L	--	11000	--	1.3	10	21
Strontium	µg/L	--	1400000	--	85000	220000	450000
Sulfates	mg/L	--	--	--	--	--	--
Sulfide	mg/L	--	--	--	--	--	--
Total Kjeldahl Nitrogen	mg/L	--	--	--	--	--	--
Total Filterable Residue	mg/L	--	--	--	1500	--	--
Urea	mg/L	--	--	--	17 ^A	150 ^A	300 ^A

Parameter	Units	Outside Mixing Zone Criteria					Inside Mixing Zone Maximum
		Average				Maximum Aquatic Life	
		Wildlife	Human Health	Agri-culture	Aquatic Life		
Aluminum	µg/L	--	4500	--	--	--	--
Vanadium	µg/L	--	--	--	44	150	300
Xylenes	µg/L	--	83000	--	27	240	480
Zinc	µg/L	--	35000	25000	330 ^F	330 ^F	660 ^F

^A Tier II

^B Human Health and Aquatic Life criteria are Tier I unless otherwise indicated.

^C Carcinogen

^D Bioaccumulative Chemical of Concern (BCC)

^E Screening value

^F Aquatic Life Criteria are Total Effective Criteria; Dissolved Metals Criteria with Translator Applied

Table 14. Instream Conditions and Discharger Flow

Parameter	Units		Value	Basis
<i>Upstream flows:</i>				
Ottawa R. above Lima WWTP				
1Q10	cfs	annual	0.0	USGS gage #04187100, 1989-2021 data
7Q10	cfs	annual	0.2	USGS gage #04187100, 1989-2021 data
30Q10	cfs	summer	1.6	USGS gage #04187100, 1989-2021 data
	cfs	winter	4.4	USGS gage #04187100, 1989-2021 data
90Q10	cfs	annual	4.6	USGS gage #04187100, 1988-2021 data
Harmonic Mean Flow	cfs	annual	4.8	USGS gage #04187100, 1988-2021 data
Mixing Assumption	%	average	25	Stream-to-discharge ratio
	%	maximum	100	Stream-to-discharge ratio
<i>Discharger Flows:</i>				
Lima Refining				
Outfall 001	cfs (MGD)	design	8.09 (5.23)	NPDES permit application
Outfall 011	cfs (MGD)	tiered	4.64 (3.0)	NPDES permit application
Outfall 012	cfs (MGD)	tiered	1.55 (1.0)	NPDES permit application
Outfall 013	cfs (MGD)	tiered	2.32 (1.5)	NPDES permit application
Outfall 014	cfs (MGD)	tiered	3.10 (2.0)	NPDES permit application
Outfall 015	cfs (MGD)	tiered	4.64 (3.0)	NPDES permit application
Outfall 016	cfs (MGD)	tiered	7.74 (5.0)	NPDES permit application
Lima WWTP				
Outfall 001	cfs (MGD)	average	28.62(18.5)	NPDES permit application
PCS Nitrogen				
Outfall 001	cfs (MGD)	average	6.14 (3.97)	NPDES permit application
Shawnee #2 WWTP				
Outfall 001	cfs (MGD)	average	3.10 (2.0)	NPDES permit application
Instream Hardness	mg/L	annual	295	DMR (Lima 901); n=52, 2017-2022
Instream Temperature	°C	summer	23.2	DMR (Lima 901); n=16, 2017-2022
	°C	winter	3.95	DMR (Lima 901); n=14, 2017-2022
Instream pH	S.U.	summer	7.8	DMR (Lima 901); n=16, 2017-2022
	S.U.	winter	8.4	DMR (Lima 901); n=14, 2017-2022
<i>Dissolved Metals Translators</i>				
Chromium	µg/L		1.71	Lima Ref./PCS Study, n=10, 2013
Copper	µg/L		1.18	Lima Ref./PCS Study, n=10, 2013
Lead	µg/L		2.05	Lima Ref./PCS Study, n=10, 2013
Nickel	µg/L		1.02	Lima Ref./PCS Study, n=10, 2013
Zinc	µg/L		1.13	Lima Ref./PCS Study, n=10, 2013

DMR = Discharge Monitoring Report

NPDES = National Pollutant Discharge Elimination System

n = number of observations

Table 15. Background Water Quality for the Ottawa River

Parameter	Units	Season	Value	Basis
Ammonia	mg/L	summer	0.12	Lima DMR, 801; n=16, 0<MDL, 2017-22
Ammonia	mg/L	winter	0.038	Lima DMR, 801; n=14, 0<MDL, 2017-22
Arsenic	µg/L	annual	2.1	STORET; n=49, 13<MDL, 2010-11
Barium	µg/L	annual	47	STORET; n=47, 0<MDL, 2010-11
Bis(2-ethylhexyl) Phthalate	µg/L	annual	0	STORET; n=2, 2<MDL, 2010-11
Boron	µg/L	annual	0	No representative data available.
Cadmium	µg/L	annual	0	STORET; n=48, 0<MDL, 2010-11
Carbon disulfide	µg/L	annual	0	No representative data available.
Chlorine	mg/L	annual	0	No representative data available.
Chloroform	µg/L	annual	0	STORET; n=2, 0<MDL, 2010
Chromium	µg/L	annual	0	STORET; n=48, 0<MDL, 2010-11
Dissolved Hexavalent Chromium	µg/L	annual	0	No representative data available.
Copper	µg/L	annual	2.45	STORET; n=46, 3<MDL, 2010-11
Free Cyanide	µg/L	annual	0	No representative data available.
Fluoride	mg/L	annual	0	No representative data available.
Iron	µg/L	annual	426	STORET; n=47, 0 <MDL, 2010-11
Lead	µg/L	annual	1.0	STORET; n=47, 46 <MDL, 2010-11
Manganese	µg/L	annual	56	STORET; n=47, 0 <MDL, 2010-11
Molybdenum	µg/L	annual	0	No representative data available.
Nickel	µg/L	annual	4.6	STORET; n=47, 0 <MDL, 2010-11
Nitrate + Nitrite	mg/L	annual	2.53	Lima DMR, 801; n=53, 3<MDL, 2017-22
Phenol	µg/L	annual	0	No representative data available.
Selenium	µg/L	annual	1.0	STORET; n=47, 44 <MDL, 2010-11
Silver	µg/L	annual	0	No representative data available.
Strontium	µg/L	annual	1820	STORET; n=47, 0 <MDL, 2010-11
Total Filterable Residue	mg/L	annual	491	STORET; n=54, 0 <MDL, 2010-11
Urea	µg/L	annual	0	No representative data available.
Vanadium	µg/L	annual	0	No representative data available.
Xylene	µg/L	annual	0	No representative data available.
Zinc	µg/L	annual	5.0	STORET; n=47, 37 <MDL, 2010-11

DMR = Discharge Monitoring Report

n = number of observations

STORET = United States Environmental Protection Agency Storage and Retrieval Data Warehouse, stations P04P19, P04S14, P04S24, 301610, P04W08, P04K03, and P04K04

Table 16. Summary of Effluent Limits to Maintain Applicable Water Quality Criteria

Parameter	Units	Outside Mixing Zone Criteria					Inside Mixing Zone Maximum
		Average				Maximum Aquatic Life	
		Wildlife	Human Health	Agri-culture	Aquatic Life		
Ammonia (Summer)	mg/L	--	--	--	1.6	--	--
Ammonia (Winter)	mg/L	--	--	--	1.7	--	--
Arsenic ^B	µg/L	--	604 ^A	104	150	340	680
Bis(2-ethylhexyl) phthalate	µg/L	--	33.33	--	8.4	1100	2100
Cadmium ^B	µg/L	--	760 ^A	52	5.8	15	31
Chloroform	µg/L	--	1771	--	140	1300	2600
Chromium ^B	µg/L	--	14363 ^A	102	310	2400	4700
Dissolved Hexavalent Chromium ^B	µg/L	--	14454 ^A	--	11	16	31
Copper	µg/L	--	65658 ^A	513 ^A	27	44	88
Free Cyanide ^B	µg/L	--	49243 ^A	--	5.2	22	44
Lead ^B	µg/L	--	--	103	50	960	1900
Mercury ^C	ng/L	1.3	3.1	10000 ^A	910	1700	--
Molybdenum ^B	µg/L	--	10416	--	20035	190000	370000
Nickel ^B	µg/L	--	44394 ^A	206	130	1200	2400
Nitrate + Nitrite ^B	mg/L	--	--	104	--	--	--
Selenium	µg/L	--	3186 ^A	51	3.0 ^D	62	120
Silver ^B	µg/L	--	11457 ^A	--	1.3	10	21
Total Filterable Residue	mg/L	--	--	--	1501	--	--
Zinc ^B	µg/L	--	36455 ^A	26039 ^A	331	330	660

^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.

^C Bioaccumulative Chemical of Concern (BCC); no mixing zone allowed after 11/15/2010, WQS must be met at end-of-pipe, unless requirements for an exception are met as listed in OAC 3745-2-05(A)(2)(e)(ii)

^D Wasteload allocation fixed at this value, see discussion on page 15.

Table 17. Parameter Assessment

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

No parameters fit this category

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

Arsenic	Bromodichloromethane	Cadmium
Chlorine	Chromium	Dissolved Hexavalent Chromium
Free Cyanide	Dibromochloromethane	Lead
Molybdenum	Nickel	Nitrate + Nitrite
Silver	Zinc	

Group 3: PEQ_{max} < 50% of maximum PEL and PEQ_{avg} < 50% of average PEL. No limit recommended, monitoring optional.

Chloroform	Copper	Total Filterable Residue
------------	--------	--------------------------

Group 4: PEQ_{max} > 50% but < 100% of the maximum PEL or PEQ_{avg} > 50% but < 100% of the average PEL. Monitoring is appropriate.

Bis(2-ethylhexyl) phthalate	Selenium
-----------------------------	----------

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.

Parameter	Units	Period	Recommended Effluent Limits	
			Average	Maximum
Ammonia (summer)	mg/L	annual	1.6	--
Ammonia (winter)	mg/L	annual	1.7	--
Mercury - TR (BCC)	ng/L	annual	1.3	1700

PEL = preliminary effluent limit

PEQ = projected effluent quality

WLA = wasteload allocation

WQS = water quality standard

PEL = preliminary effluent limit

PEQ = projected effluent quality

WLA = wasteload allocation

WQS = water quality standard

Table 18. 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
Total Precipitation	inches	----- Monitor -----				M ^c
Dissolved Oxygen	mg/L	5.0 ^m	--	--	--	WQS
Total Suspended Solids	mg/L	20 ^d	14	1402 ^d	982	PD
Oil & Grease	mg/L	10	--	--	--	WQS
Ammonia (summer)	mg/L	2.4 ^d	1.6	168 ^d	112	WLA
Ammonia (winter)	mg/L	2.6 ^d	1.7	182 ^d	119	WLA
Total Kjeldahl Nitrogen	mg/L	----- Monitor -----				M
Nitrate plus Nitrite	mg/L	----- Monitor -----				M
Phosphorus	mg/L	1.5 ^d	1.0	105 ^d	70	PTS
Orthophosphate	mg/L	----- Monitor -----				PMR
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 -----				M
<i>E. coli</i>	#/100 mL	284 ^d	126	--	--	WQS
Bis(2-ethylhexyl) Phthalate	µg/L	----- Monitor -----				RP
Flow Rate	MGD	----- Monitor -----				M ^c
Chlorine	mg/L	0.019	--	--	--	PD/WLA
Mercury	ng/L	1700	3.5	0.12	0.00025	RP/VAR
Free Cyanide	µg/L	----- Monitor -----				M
Acute Toxicity, <i>Ceriodaphnia dubia</i>	TUa	1.0	--	--	--	WET1
Chronic Toxicity, <i>Ceriodaphnia dubia</i>	TUc	--	1.0	--	--	WET1
Acute Toxicity, <i>Pimephales promelas</i>	TUa	----- Monitor -----				WET2
Chronic Toxicity, <i>Pimephales promelas</i>	TUc	----- Monitor -----				WET2
pH, maximum	SU	9.0	--	--	--	WQS
pH, minimum	SU	6.5 ^m	--	--	--	WQS
Total Filterable Residue	mg/L	----- Monitor -----				M
CBOD5	mg/L	10 ^d	7.0	701 ^d	491	PD

^a Effluent loadings are based the average daily design flow is 18.5 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)
PD = Plant Design (OAC 3745-33-05(E))
PTS = Phosphorus Treatment Standards (OAC 3745-33-06 (C))
RP = Reasonable Potential for requiring water quality-based effluent limits and monitoring requirements in permits (OAC 3745-33-07(A))

VAR = Mercury variance (OAC 3745-1-38(J))

WET1 = Requiring water quality-based effluent limits and monitoring requirements for whole effluent toxicity in NPDES permits [40 CFR Part 132, Appendix F, Procedure 6 and OAC 3745-33-07(B)]

WET2 = Minimum testing requirements for whole effluent toxicity [OAC 3745-33-07(B)(11)]

WLA = Wasteload Allocation procedures (OAC 3745-2)

WQS = Ohio Water Quality Standards (OAC 3745-1)

^c Monitoring of flow and other indicator parameters is specified to assist in the evaluation of effluent quality and treatment plant performance.

^d 7 day average limit.

^m minimum limit

Table 19. Final Effluent Limits for Internal Monitoring Station 604

Parameter	Units	Concentration		Loading (kg/day) ^a		Basis ^b
		Daily Maximum	30 Day Average	Daily Maximum	30 Day Average	
Total Suspended Solids	mg/L	65	45	--	--	PD
Flow Rate	MGD	----- Monitor -----				M ^c
CBOD5	mg/L	65	45	--	--	PD

^b Definitions: PD = Plant Design (OAC 3745-33-05(E))
M = Division of Surface Water NPDES Permit Guidance 1: Monitoring frequency requirements for Sanitary Discharges

^c Monitoring of flow and other indicator parameters is specified to assist in the evaluation of effluent quality and treatment plant performance.

Attachment 1. Whole Effluent Toxicity Reasonable Potential Analysis

	Water Flea (<i>Ceriodaphnia dubia</i>)		Fathead Minnow (<i>Pimephales promelas</i>)	
	Acute	Chronic	Acute	Chronic
WLA (TU)	0.3	1.0	0.3	1.0
Total # of Tests	19	18 ¹	4	4
Maximum Value (TU)	0.9	1.6	AA	AA
Coefficient of Variation ² (standard deviation/mean) [Where # tests > 10]	1.18	0.52	--	--
Multiplying Factors ³	1.8	1.7	--	--
PEQ (Maximum Value x Multiplying Factor)	1.6	2.08	--	--
Reasonable Potential Demonstrated? (Yes/No) (Yes if PEQ > WLA)	Yes	Yes	No	No

¹ The City received hauled waste following an emergency at a commercial facility in mid-2018. This caused an upset of the treatment system, causing several effluent violations. In response, the City has halted receipt of hauled industrial wastewater and increased monitoring of received loads. The high toxicity value of 4.3 TUc on 8/28/2018 is likely a result of this upset and is therefore excluded from the reasonable potential analysis.

² 40 CFR Part 132, Appendix F, Procedure 6, Paragraph D

³ 40 CFR Part 132, Appendix F, Table F6-1

Attachment 2. 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