Ohio EPA Permit No.: 3PB00020*MD
Application No: OH0025801

Action Date: June 21, 2024
Effective Date: August 1, 2024
Expiration Date: July 31, 2029

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

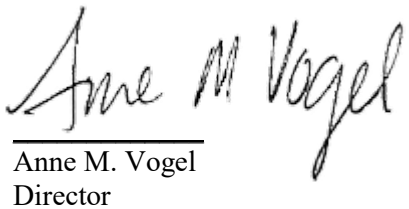
In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq., hereinafter referred to as the "Act"), and the Ohio Water Pollution Control Act (Ohio Revised Code Section 6111),

Village of Hiram

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from the Village of Hiram Wastewater Treatment Plant, located at 11617 Garfield Road, Hiram, Ohio, Portage County, to the Hiram Tributary to Silver Creek at River Mile 1.6 in accordance with the conditions specified in Part I, II, and III, of this permit.

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

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



Anne M. Vogel
Director

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PART I, A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit and lasting 24 months, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outfall 3PB00020001. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 001 - Interim

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00010 - Water Temperature - C	-	-	-	-	-	-	-	1/Day	Grab	All
00300 - Dissolved Oxygen - mg/l	-	5.0	-	-	-	-	-	1/Day	Grab	All
00400 - pH - S.U.	9.0	6.5	-	-	-	-	-	1/Day	Grab	All
00530 - Total Suspended Solids - mg/l	-	-	45	30	-	34.1	22.8	2/Week	24hr Composite	All
00552 - Oil and Grease, Hexane Extr Method - mg/l	10	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	2.4	1.6	-	1.82	1.22	1 / 2 Weeks	24hr Composite	Summer
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	3.45	2.3	-	2.62	1.75	1 / 2 Weeks	24hr Composite	Winter
00625 - Nitrogen Kjeldahl, Total - mg/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
00630 - Nitrite Plus Nitrate, Total - mg/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
00665 - Phosphorus, Total (P) - mg/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01074 - Nickel, Total Recoverable - ug/l	-	-	-	-	-	-	-	2/Year	24hr Composite	Semi-annual
01094 - Zinc, Total Recoverable - ug/l	-	-	-	-	-	-	-	2/Year	24hr Composite	Semi-annual

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
01113 - Cadmium, Total Recoverable - ug/l	-	-	-	-	-	-	-	2/Year	24hr Composite	Semi-annual
01114 - Lead, Total Recoverable - ug/l	-	-	-	-	-	-	-	2/Year	24hr Composite	Semi-annual
01118 - Chromium, Total Recoverable - ug/l	-	-	-	-	-	-	-	2/Year	24hr Composite	Semi-annual
01119 - Copper, Total Recoverable - ug/l	34	-	-	21	0.0258	-	0.0159	1/Month	24hr Composite	All
01220 - Chromium, Dissolved Hexavalent - ug/l	-	-	-	-	-	-	-	2/Year	Grab	Semi-annual
31648 - *E. coli* - #/100 ml	-	-	284	126	-	-	-	1/Week	Grab	Summer
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	Continuous	All
50092 - Mercury, Total (Low Level) - ng/l	1700	-	-	12	0.00129	-	0.00001	2/Year	Grab	Semi-annual
51173 - Cyanide, Free (Low-Level) - ug/l	-	-	-	-	-	-	-	2/Year	24hr Composite	Semi-annual
70300 - Residue, Total Filterable - mg/l	-	-	-	1518	-	-	-	1/Month	24hr Composite	All
80082 - CBOD 5 day - mg/l	-	-	40	25	-	30.3	19.0	2/Week	24hr Composite	All

Notes for Station Number 3PB00020001:
* Effluent loadings based on average design flow of 0.200 MGD.

a. Copper, Phosphorus, and Total Filterable Residue - See Part I, C - Schedule of Compliance.
b. Free Cyanide - See Part II, Item M.
c. Mercury - See Part II, Item N.
d. The facility utilizes ultraviolet (UV) light for disinfection.
e. Quarterly-Alt. is defined as the months of March, June, September, and December.

PART I, A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning 24 months after the effective date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outfall: 3PB00020001. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 001 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00010 - Water Temperature - C	-	-	-	-	-	-	-	1/Day	Grab	All
00300 - Dissolved Oxygen - mg/l	-	5.0	-	-	-	-	-	1/Day	Grab	All
00400 - pH - S.U.	9.0	6.5	-	-	-	-	-	1/Day	Grab	All
00530 - Total Suspended Solids - mg/l	-	-	45	30	-	34.1	22.8	2/Week	24hr Composite	All
00552 - Oil and Grease, Hexane Extr Method - mg/l	10	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	2.40	1.6	-	1.82	1.22	1 / 2 Weeks	24hr Composite	Summer
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	3.45	2.3	-	2.62	1.75	1 / 2 Weeks	24hr Composite	Winter
00625 - Nitrogen Kjeldahl, Total - mg/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
00630 - Nitrite Plus Nitrate, Total - mg/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
00665 - Phosphorus, Total (P) - mg/l	-	-	1.5	1.0	-	1.14	0.76	1/Month	24hr Composite	All
01074 - Nickel, Total Recoverable - ug/l	-	-	-	-	-	-	-	2/Year	24hr Composite	Semi-annual
01094 - Zinc, Total Recoverable - ug/l	-	-	-	-	-	-	-	2/Year	24hr Composite	Semi-annual

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
01113 - Cadmium, Total Recoverable - ug/l	-	-	-	-	-	-	-	2/Year	24hr Composite	Semi-annual
01114 - Lead, Total Recoverable - ug/l	-	-	-	-	-	-	-	2/Year	24hr Composite	Semi-annual
01118 - Chromium, Total Recoverable - ug/l	-	-	-	-	-	-	-	2/Year	24hr Composite	Semi-annual
01119 - Copper, Total Recoverable - ug/l	34	-	-	21	0.0258	-	0.0159	1/Month	24hr Composite	All
01220 - Chromium, Dissolved Hexavalent - ug/l	-	-	-	-	-	-	-	2/Year	Grab	Semi-annual
31648 - *E. coli* - #/100 ml	-	-	284	126	-	-	-	1/Week	Grab	Summer
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	Continuous	All
50092 - Mercury, Total (Low Level) - ng/l	1700	-	-	12	0.00129	-	0.00001	2/Year	Grab	Semi-annual
51173 - Cyanide, Free (Low-Level) - ug/l	-	-	-	-	-	-	-	2/Year	24hr Composite	Semi-annual
70300 - Residue, Total Filterable - mg/l	-	-	-	1515	-	-	1147	1/Month	24hr Composite	All
80082 - CBOD 5 day - mg/l	-	-	40	25	-	30.3	19.0	2/Week	24hr Composite	All

Notes for Station Number 3PB00020001:
* Effluent loadings based on average design flow of 0.200 MGD.

a. Copper, Phosphorus and Total Filterable Residue - See Part I, C - Schedule of Compliance.
b. Free Cyanide - See Part II, Item M.
c. Mercury - See Part II, Item N.
d. The facility utilizes ultraviolet (UV) light for disinfection.
e. Quarterly-Alt. is defined as the months of March, June, September, and December.

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, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outfall: 3PB00020602. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Internal Monitoring Station - 602 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00530 - Total Suspended Solids - mg/l	-	-	-	-	-	-	-	When Disch.	Grab	All
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	-	-	-	-	-	When Disch.	Grab	All
50060 - Chlorine, Total Residual - mg/l	0.019	-	-	-	-	-	-	When Disch.	Grab	Summer
51428 - Bypass Volume - MGAL	-	-	-	-	-	-	-	When Disch.	24hr Total	All
74062 - Overflow Occurrence - No./Month	-	-	-	-	-	-	-	When Disch.	Total	All
74063 - Overflow Volume - Million Gallons	-	-	-	-	-	-	-	When Disch.	Total	All
80082 - CBOD 5 day - mg/l	-	-	-	-	-	-	-	When Disch.	Grab	All
82517 - Duration of Discharge - Hours	-	-	-	-	-	-	-	When Disch.	24hr Total	All

Notes for Station Number 3PB00020602:

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

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

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

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

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

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

PART I, B. SSO LIMITATIONS AND MONITORING REQUIREMENTS

4. SSO Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor at Station Number 3PB00020300, 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 3PB00020300:

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 C and D.

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, the permittee shall monitor the treatment works' final sludge at Station Number 3PB00020588, 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 3PB00020588:

a. 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).

b. 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.

c. 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.

d. See Part II, Items J, K, and L.

PART I, B. INFLUENT MONITORING REQUIREMENTS

6. Influent Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor the treatment works' influent wastewater at Station Number 3PB00020601, and report to the Ohio EPA in accordance with the following table. Samples of influent used for determination of net values or percent removal must be taken the same day as those samples of effluent used for that determination. See Part II, OTHER REQUIREMENTS, for location of influent sampling.

Table - Influent Monitoring - 601 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00530 - Total Suspended Solids - mg/l	-	-	-	-	-	-	-	1/Week	24hr Composite	All
01119 - Copper, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
80082 - CBOD 5 day - mg/l	-	-	-	-	-	-	-	1/Week	24hr Composite	All

Notes for Station Number 3PB00020601:

a. Sampling for the respective/common parameters shall occur on the same day as Outfall 3PB00020001.

PART I, B. UPSTREAM MONITORING REQUIREMENTS

7. Upstream Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor the receiving stream, upstream of the point of discharge at Station Number 3PB00020801, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - Upstream Monitoring - 801 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00010 - Water Temperature - C	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00300 - Dissolved Oxygen - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00400 - pH - S.U.	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00625 - Nitrogen Kjeldahl, Total - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00630 - Nitrite Plus Nitrate, Total - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00665 - Phosphorus, Total (P) - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
31648 - *E. coli* - #/100 ml	-	-	-	-	-	-	-	1 / 2 Weeks	Grab	June - Aug

Notes for Station Number 3PB00020801:

a. Sampling for the respective/common parameters shall occur on the same day as Outfall 3PB00020001.

b. Quarterly-Alt. is defined as the months of March, June, September, and December.

PART I, B. DOWNSTREAM-FARFIELD MONITORING REQUIREMENTS

8. Downstream-Farfield Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor the receiving stream, downstream of the point of discharge, at Station Number 3PB00020901, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - Downstream-Farfield Monitoring - 901 - Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00010 - Water Temperature - C	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00300 - Dissolved Oxygen - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00400 - pH - S.U.	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00630 - Nitrite Plus Nitrate, Total - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00665 - Phosphorus, Total (P) - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00900 - Hardness, Total (CaCO3) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
31648 - *E. coli* - #/100 ml	-	-	-	-	-	-	-	1 / 2 Weeks	Grab	June - Aug

Notes for Station Number 3PB00020901:

a. Sampling for the respective/common parameters shall occur on the same day as Outfall 3PB00020001.

b. Quarterly-Alt. is defined as the months of March, June, September, and December.

PART I, C. - SCHEDULE OF COMPLIANCE

Milestone Summary Report

Section	Report	Event Code	Due Date
Final Effluent Compliance Status Report - 95999	Status Report	95999	August 1, 2024
Submit Permit-to-Install (PTI) Application (1299)	Final Plan Submitted	1299	September 1, 2024
End Construction (4599)	End Construction	4599	December 1, 2024
Submit First Annual Report	Submit First Annual Report	90199	12 months after the permit effective date
Final Compliance w/ Eff Limits	Final Compliance w/ Eff Limits	5699	24 months after the permit effective date

1. Copper Final Effluent Limitations

The permittee shall immediately investigate potential sources of Copper to meet the final effluent limitations for Copper at outfall 3PB00020001, including plant processes, significant and non-significant industrial, commercial and residential users of the treatment plant, and any other wastestreams or sewers tributary to the treatment plant. Copper sources found should be eliminated or minimized. In any event, the permittee shall undertake the following action as soon as practicable but not later than the dates in the following schedule:

a. The permittee submitted a Permit to Install (PTI) application (PTI No. 1490083) to the Division of Drinking and Ground Water (DDAGW) program on December 12, 2022, for the installation of a sodium hydroxide(caustic) feed system (corrosion control) on the softener by-pass line located at the Village of Hiram Water Treatment Plant (Hiram WTP), PWSID: OH6701612. Ohio EPA approved the PTI on November 28, 2023. In accordance with the DDAGW PTI report, after at least two 6-month monitoring periods of sodium hydroxide injection and monitoring of water quality parameters and lead and copper, the system will be designated with optimal water quality control parameters.

b. Not later than August 1, 2024, the permittee shall submit to the Ohio EPA Northeast District Office, a brief status report on the construction and optimization of the Hiram WTP corrosion control feed system, as well as any additional improvement at the Hiram WWTP to meet the final effluent limits for Copper at Outfall 3PB00020001. (Event Code 95999 - Status Report)

d. In the event that compliance with the final effluent limits for Copper has not been achieved, the permittee shall submit a PTI for necessary improvements to the Hiram Wastewater Treatment Plant (Hiram WWTP) to Ohio EPA Northeast District Office, no later than September 1, 2024. (Event Code 1299 - Submit Permit-to-Install (PTI) Application (1299))

c. Not later than December 1, 2024, the permittee shall complete construction of the Hiram WWTP improvements and attain compliance at Outfall 3PB00020001. (Event Code 4599 – End Construction)

e. The permittee shall notify the Ohio EPA Northeast District Office in writing within 14 days of achieving compliance with the final effluent limitations for Copper at outfall 3PB00020001.

2. Total Phosphorus and Total Filterable Residue Final Effluent Limitations

The permittee shall attain compliance with the Total Phosphorus and Total Filterable Residue effluent limitations at Outfall 3PB00020001 as soon as practicable but not later than the dates in the following schedule:

a. The permittee shall immediately initiate an evaluation to determine the ability of its existing treatment facilities to meet the final effluent limitations.

b. No later than 12 months after the permit effective date, the permittee shall submit to Ohio EPA Northeast District Office a report on the progress toward attaining compliance with the final effluent limitations. If the permittee determines that its existing treatment facilities are not capable of meeting the final effluent limitations, the permittee shall include an approvable Permit to Install (PTI) application for necessary plant improvements at that time. (Event Code 90199 – Submit First Annual Report)

c. No later than 24 months after the permit effective date, the permittee shall attain compliance with the final effluent limitations. The permittee shall notify Ohio EPA Northeast District Office within 14 days of attaining compliance. (Event Code 5699 – Final Compliance w/ Eff Limits)

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 I 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 I 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. If the designated professional operator of record is unable to meet the minimum staffing requirements at a class A or class I treatment works, then a professional operator with a certificate equal to or higher than that of the treatment works may serve as the professional operator of record until such time as the designated professional operator of record is available. The use of this provision does not require notification to the agency unless the use of the backup professional operator exceeds thirty consecutive days. In the event the use of a backup professional operator under this provision exceeds thirty consecutive days, the owner or professional operator shall provide notice in accordance with paragraph (A)(2) of rule 3745-7-02 of the Administrative Code.

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.

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
3PB00020001	Final effluent (Lat: 41 N 18 ' 24.12 "; Long: 81 W 8 ' 53.03")
3PB00020300	Collection system sanitary sewer overflow (SSO) occurrences
3PB00020588	Sludge disposal via transfer to another NPDES permit holder
3PB00020601	Influent monitoring
3PB00020602	Flow equalization basin overflow
3PB00020801	Upstream monitoring
3PB00020901	Downstream monitoring

C. 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 your eDMR 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 Northeast 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.

D. 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.

E. 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.

F. Composite samples shall be comprised of at least three grab samples proportionate in volume to the sewage flow rate at the time of sampling and collected at intervals of at least 30 minutes, but not more than 2 hours, during the period that the plant is staffed on each day for sampling. Such samples shall be collected at such times and locations, and in such fashion, as to be representative of the facility's overall performance.

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

H. Limits Below Quantification

The parameters below have had effluent limitations established that are below the Ohio EPA Quantification Level (QL) for the approved analytical procedure promulgated at 40 CFR Part 136. QLs may be expressed as Practical Quantification Levels (PQL) or Minimum Level (ML). Compliance with an effluent limit that is below the QL is determined in accordance with ORC Section 6111.13 and OAC 3745-33-07(C). For maximum effluent limits, any value reported below the QL shall be considered in compliance with the effluent limit. For average effluent limits, compliance shall be determined by taking the arithmetic man of values reported for a specified averaging period, using zero (0) for any value reported at a concentration less than the 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 QL, 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 method detection limit (MDL) but below the QL: report the analytical result, even though it is below the QL.
3. Results below the MDL: report the analytical result as "below detection" using the code "AA".

The following table of QLs will be used to determine compliance with final effluent limits:

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

This permit may be modified, or 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 limits (WQBELs).

I. Water quality-based effluent limits (WQBELs) 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 WQBELs or other conditions that are necessary to comply with a revised wasteload allocation or approved Total Maximum Daily Load (TMDL) report, as required under Section 303(d) of the Clean Water Act.

J. 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.

K. No later than March 1st 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 Ohio EPA eBusiness Center/STREAMS, Division of Surface Water NPDES Permit Application service.

L. 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.

M. 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.

N. Monitoring for Mercury (low-level)

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

O. 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.

P. Upper Mahoning River Watershed Total Maximum Daily Load (TMDL) Report TrackingThe ¿Total Maximum Daily Loads for the Upper Mahoning River Watershed¿ report was approved by U.S. EPA on September 28, 2011. The TMDL assigned an individual wasteload allocation of 1.7 kg/day total phosphorus (based on a monthly average effluent concentration of 1.0 mg/L) for the Windham WWTP. The phosphorus loading from the Windham WWTP will continue to be re-evaluated as part of subsequent permit renewals.

PART III - GENERAL CONDITIONS

1. DEFINITIONS

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

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

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

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

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

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

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

"MGD" means million gallons per day.

"mg/l" means milligrams per liter.

"ug/l" means micrograms per liter.

"ng/l" means nanograms per liter.

"S.U." means standard pH unit.

"kg/day" means kilograms per day.

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

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

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

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

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

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

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

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

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

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

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

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

2. GENERAL EFFLUENT 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/help-center/ebusiness-center

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:

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

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

a. The name of the permittee, and a contact name and telephone number;
b. The time(s) at which the discharge occurred, and was discovered;
c. The approximate amount and the characteristics of the discharge;
d. The stream(s) affected by the discharge;
e. The circumstances which created the discharge;
f. The name and telephone number of the person(s) who have knowledge of these circumstances;
g. What remedial steps are being taken; and,
h. The name and telephone number of the person(s) responsible for such remedial steps.

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

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

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

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

2. The cause of the violation;

3. The remedial action being taken;

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

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

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

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

13. RESERVED

14. DUTY TO MITIGATE

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

15. AUTHORIZED DISCHARGES

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

16. DISCHARGE CHANGES

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

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

B. For publicly owned treatment works:

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

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

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

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

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

treatment works or improvements to such works be approved by the Director of the Ohio EPA prior to initiation of construction.

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

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

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

17. TOXIC POLLUTANTS

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

18. PERMIT MODIFICATION OR REVOCATION

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

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

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

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

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

19. TRANSFER OF OWNERSHIP OR CONTROL

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

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

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

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

20. OIL AND HAZARDOUS SUBSTANCE LIABILITY

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

21. SOLIDS DISPOSAL

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

22. CONSTRUCTION AFFECTING NAVIGABLE WATERS

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

23. CIVIL AND CRIMINAL LIABILITY

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

24. STATE LAWS AND REGULATIONS

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

25. PROPERTY RIGHTS

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

26. UPSET

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

27. SEVERABILITY

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

28. SIGNATORY REQUIREMENTS

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

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

29. OTHER INFORMATION

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

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

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

30. NEED TO HALT OR REDUCE ACTIVITY

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

31. APPLICABLE FEDERAL RULES

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

32. AVAILABILITY OF PUBLIC SEWERS

Notwithstanding the issuance or non-issuance of an NPDES permit to a semi-public disposal system, whenever the sewage system of a publicly owned treatment works becomes available and accessible, the permittee operating any semi-public disposal system shall abandon the semi-public disposal system and connect it into the publicly owned treatment works.

National Pollutant Discharge Elimination System (NPDES) Permit Program

MINOR DISCHARGER FACT SHEET

Regarding NPDES Permit to Discharge to State Waters

Ohio Environmental Protection Agency
P.O. Box 1049
50 West Town St, Suite 700
Lazarus Government Center
Columbus, Ohio 43216-1049
(614) 644-2001

Public Notice No.: 203194
Public Notice Date May 17, 2024
Comment Period Ends: June 16, 2024

Ohio EPA Permit No.: **3PB00020*MD**
Application No.: **OH0025801**

Name and Address of Applicant:

Village of Hiram
Rosser Municipal Building
11617 Garfield Road
Hiram, Ohio 44234

Name and Address of Facility Where Discharge Occurs:

Hiram Wastewater Treatment Plant
11617 Garfield Road
Hiram, Ohio 44234
Portage County

Receiving Water: **Hiram Tributary (RM 1.6) to Silver Creek (RM 1.1)**

Subsequent Stream Network: **Silver Creek, Eagle Creek, Mahoning River, Beaver River, Ohio River**

INTRODUCTION

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.

The terms and conditions of the permit will comply with the requirements of Ohio Administrative Code Chapter 3745-33, and Ohio Revised Code Section 6111.03(J).

PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

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

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

Requests for public meetings shall be in writing and shall state the action of the Director objected to, the questions to be considered, and the reasons the action is contested. Such requests should be emailed to HClerk@epa.ohio.gov or mailed to:

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

Interested persons are invited to submit written comments upon the discharge permit. Comments should be submitted by email to epa.dswcomments@epa.ohio.gov (preferred method) or delivered in person or by mail no later than 30 days after the date of this Public Notice. Deliver or mail all comments to:

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

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

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

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 email to epa.dswcomments@epa.ohio.gov (preferred method) or deliver or mail this information to:

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

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

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

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

DESCRIPTION OF DISCHARGE

The original Village of Hiram Wastewater Treatment Plant ("Hiram WWTP") was constructed in 1900; the current 0.200 million gallons per day (MGD) advanced biological treatment plant was last upgraded in 1994. The treatment plant serves a population of approximately 1,220 residents in the Village and surrounding areas of Hiram Township. The collection system is comprised of separate sanitary sewers and includes three (3) pump stations. Potable water supply for the Village is provided by three wells located in its ground water well field.

A description and/or sketch of the location of the discharge is appended as Additional Monitoring **Requirements**

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.

Influent Monitoring

Continued monitoring of the plant influent parameters, including copper, are recommended. Frequencies are recommended to match the requirements for Outfall 3PB00020001.

Upstream (3PB00020801) and Downstream (3PB00020901) Monitoring

Monitoring in the receiving stream is recommended for the following parameters: DO, pH, temperature, ammonia-N, nitrate-nitrite (as N), total phosphorus, *E. coli*, and hardness (downstream only). Based on concurrence from Hiram WWTP, the monitoring frequency for hardness has been increased from 1/quarter to 1/month in order to establish a better dataset for future stream modeling.

Additional monitoring has been included for TKN. Copper monitoring is recommended to be removed. Based on revisions to Ohio EPA monitoring guidance, the monitoring frequencies for *E. coli* at the upstream and downstream stations have been changed from 1/quarter (May-October) to 1/ 2 weeks (June - August).

Emergency Bypass/Overflow (3PB00020602) Monitoring

Monitoring is recommended for the following parameters: volume and duration.

OTHER REQUIREMENTS

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 discharge monitoring reports (DMRs); 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 OAC 3745-7. These rules require the facility to have a Class I wastewater treatment plant operator in charge of the sewage treatment plant operations discharging through Outfall 3PB00020001. 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".

Outfall Signage

Part II of the permit includes requirements for the permittee to place and maintain a sign at each outfall to the receiving stream 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.

Figure *1*. As shown in

, the Hiram WWTP wet-stream processes and/or treatment units consist of preliminary treatment (screening and comminutor), influent pump station, extended aeration activated sludge process, secondary clarification, and ultraviolet (UV) disinfection. Effluent flow is monitored using a V-notched weir and ultrasonic sensor. Outfall 3PB00020001 discharges to the Hiram Tributary to Silver Creek at approximately river mile (RM) 1.6.

As shown in Figure 2, wet-weather storage is provided in a 300,000 gallon, 3-cell flow equalization (EQ) basin. Once diverted from the headworks to the EQ basin, wastewater is re-introduced into the treatment process as the influent flow rate decreases. Any wet-weather overflow from the EQ basin (Internal Bypass Station 3PB00020602) combines with the treated effluent prior to the sampler at Outfall 3PB00020001.

Sludge management consists of aerobic digestion and sludge holding. The liquid sludge is presently hauled to another NPDES permit holder (Station 3PB00020588) for additional treatment and final disposal.

RECEIVING WATER USE CLASSIFICATION

The Hiram WWTP discharges to the following 12-digit Watershed Assessment Unit (WAU): 050301030401: Headwaters Eagle Creek. The Hiram Tributary to Silver Creek is described by Ohio EPA River Code: 18-046-001; Silver Creek is described by Ohio EPA River Code: 18-046-000, County: Portage, Ecoregion: Erie/Ontario Lake Hills & Plains.

Hiram Tributary is currently designated in Ohio's WQS (OAC 3745-1-25) for the following uses: Warmwater Habitat (WWH), Agricultural Water Supply (AWS), Industrial Water Supply (IWS), and Secondary Contact Recreation (SCR). Silver Creek is currently designated for the following uses: Coldwater Habitat (CWH), Agricultural Water Supply (AWS), Industrial Water Supply (IWS), and Primary Contact Recreation (PCR). In addition to the requirements in 40 CFR Part 133, the following water quality standards and effluent standards and limitations were applied to the discharge: Ohio Water Quality Standards (WQS), Waste Load Allocation (WLA), Plant Design, Ohio EPA Agency Policy and/or Guidance, Total Maximum Load (TMDL) Report.

Pursuant to Section 303(d) of the Clean Water Act (CWA), 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. Ohio EPA's biennial "Integrated Water Quality Monitoring and Assessment Report" (Integrated Report) summarizes the general condition of Ohio's waters and identifies waters that are not meeting water quality goals. The report satisfies the CWA requirements for both Section 305(b) for biennial reports on the condition of the State's waters and Section 303(d) for a prioritized list of impaired waters. For each impaired water, Ohio EPA typically prepares a Total Maximum Daily Load (TMDL) analysis.

The 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. Ohio EPA typically focuses on watersheds in preparing TMDLs.

Comprehensive chemical, physical, and biological monitoring was conducted in the Eagle Creek basin in 2006 to identify pollutants impairing beneficial uses and to support the development of TMDLs for those

pollutants. The results of the study indicate that Eagle Creek immediately upstream and downstream of the Hiram WWTP was in "Full" attainment of the Warmwater Habitat Aquatic Life Use criteria.

The "*Total Maximum Daily Loads for the Upper Mahoning River Watershed*" Report was finalized by Ohio EPA on August 17, 2011. TMDLs were prepared for total phosphorus, habitat, siltation, and *E. coli* bacteria. Total phosphorus TMDLs were developed to address nutrient impaired sites located in the headwaters of the Mahoning River, Eagle Creek, and the portion of Deer Creek that drains to the Walborn and Deer Creek reservoir system. With respect to Hiram WWTP, the TMDL report includes the following recommendation:

> *"The recommended point source control in this 12-digit subwatershed is that one discharger gets a 1 mg/l - total phosphorus limit: Hiram WWTP.*
>
> *Otherwise the majority of water quality improvement should be derived from abatement of nonpoint sources. Streams in this 12-digit HUC are well buffered. Likely the most significant source of nutrients is from crop production. The flat soils and relatively high proportion of hydric or poorly drained soils suggest that wetland restoration or controlled drainage are well suited in this area. Nutrient management, as a general rule is an important practice to reduce nutrient loading to surface waters from cropland and highly managed turf areas."*

The complete TMDL report and associated supplemental information are available via the following Ohio EPA link: https://epa.ohio.gov/divisions-and-offices/surface-water/reports-data/mahoning-river-watershed.

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. In addition, antidegradation and whole effluent toxicity issues must be addressed.

Effluent data were used to determine what parameters should undergo WLA, e.g. ammonia-nitrogen, nitrate-nitrite (as nitrogen), total dissolved solids (aka total filterable residue), metals, etc. 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. This data is evaluated statistically and projected effluent quality (PEQ) values are calculated for each pollutant. Average PEQ (PEQavg) values represent the 95th percentile of monthly average data, and maximum PEQ (PEQmax) values represent the 95th percentile of all data points.

The primary methods for calculating PEQs are outlined in "*Modeling Guidance 1 - Calculating PEQ: determining a discharger's effluent quality"* (Ohio EPA Division of Surface Water, 2006, Rev. 1). The method selected is dependent on case-specific facts, i.e., determined on a pollutant-specific basis using knowledge of the characteristics of the available data. For more information on PEQ calculations, see Modeling Guidance #1 at the following webpage:

https://epa.ohio.gov/static/Portals/35/guidance/npdes_permit_guidance%201.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 PEQavg or PEQmax 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.

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

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

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

Table 1 presents a summary of unaltered Discharge Monitoring Reports (DMRs) for Outfall 3PB00020001. Data are presented for the period January 2019 - December 2023; the current permit limits are provided for comparison.

Table 2 summarizes the chemical specific data for Outfall 3PB00020001 by presenting the average and maximum Projected Effluent Quality (PEQ) values. 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.

Table 3 lists the WQS that are applicable to the receiving stream. Allocations are developed using a percentage of the stream design flow as specified in Table 4 Where noted, the background flow statistics have been updated utilizing the web-based United States Geological Survey (USGS) StreamStats Ver. 4.20 software. In lieu of the typical median value, an mean hardness value based on a shorter three-year review period, i.e. 256 mg/L for 2021 – 2023, was used in the WLA.

Table 5 provides a summary of WLA to maintain the applicable WQS. The WLA results cannot exceed the Inside Mixing Zone Maximum (IMZM) values unless a mixing demonstration is completed in accordance with OAC 3745-2-08 that justifies an alternate value.

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 5. The average PEL (PELavg) is compared to the average PEQ (PEQavg) from Table 2, and the PELmax is compared to the PEQmax. Based on the

calculated percentage of the allocated value [(PEQavg ÷ PELavg) X 100, or (PEQmax ÷ PELmax) X 100)], the parameters are assigned to group 3, 4, or 5. The groupings are listed in Table 6

The final effluent limits are determined by evaluating the groupings in conjunction with other applicable rules and regulations. Table 7 presents the final effluent limits and monitoring requirements proposed for Outfall 3PB00020001 and the basis for their recommendations:

- The limitations proposed for total suspended solids (TSS), ammonia-nitrogen, and 5-day carbonaceous biochemical oxygen demand (CBOD5) are a continuation of existing permit limitations. These limits are all based on plant design criteria and are protective of WQS. The TSS and CBOD5 limits are equivalent to the Secondary Treatment Standards in 40 CFR Part 133.

- The 2011 Upper Mahoning River TMDL report recommended a phosphorus limit of 1.0 mg/L. The existing permit, however, does not include the TMDL limit. A 24-month compliance schedule is recommended for the facility to meet the limit. Details are in Part I, C of the permit.

- Limits recommended for dissolved oxygen (DO), oil and grease (O&G), pH, and *Escherichia coli* are based on WQS (OAC 3745-1-35 and -37). The effluent limits are a continuation of existing limits.

- The Ohio EPA risk assessment (Table 6) placed copper, mercury, and total filterable residue (aka total dissolved solids or TDS) in Group 5. This placement indicates that the reasonable potential to exceed WQS exists and limits are necessary to protect water quality. Pollutants that meet this requirement must have permit limits under OAC 3745-33-07(A)(1). The copper and mercury effluent limits are a continuation of existing limits. Monthly monitoring and a 24-month compliance schedule is recommended for the facility to meet the revised effluent limits for total filterable residue.

- The Ohio EPA risk assessment (Table 6) placed lead in Group 4. This placement supports that this parameter does not have the reasonable potential to contribute to WQS exceedances, and limits are not necessary to protect water quality. In accordance with OAC 3745-33-07(A)(2), monitoring for Group 4 pollutants (where the PEQ exceeds 50 percent of the WLA) is required.

- The Ohio EPA risk assessment (Table 6) placed cadmium, chromium (total), hexavalent chromium (dissolved), free cyanide, nickel, and zinc in groups 2 and 3. This placement support that these parameters do not have the reasonable potential to contribute to WQS exceedances, and limits are not necessary to protect water quality. Based on this placement, the existing effluent limits for chromium (total) and hexavalent chromium (dissolved) are recommended to be removed. Monitoring at a 2/year frequency is recommended for these parameters to document that they continue to remain at low levels.

- Based on a review of the DMR data, the monitoring requirements for silver and beryllium are recommended to be removed. All reported data were below the analytical detection levels. In addition, it is recommended that monitoring for hardness be removed.

- Monitoring is proposed to continue for the following parameters in order to assist in the evaluation of effluent quality and treatment plant performance: flow rate, temperature, and nitrate + nitrite (as N). A new monitoring requirement has been added for total Kjeldahl nitrogen (TKN).

Additional Monitoring Requirements

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.

Influent Monitoring

Continued monitoring of the plant influent parameters, including copper, are recommended. Frequencies are recommended to match the requirements for Outfall 3PB00020001.

Upstream (3PB00020801) and Downstream (3PB00020901) Monitoring

Monitoring in the receiving stream is recommended for the following parameters: DO, pH, temperature, ammonia-N, nitrate-nitrite (as N), total phosphorus, *E. coli*, and hardness (downstream only). Based on concurrence from Hiram WWTP, the monitoring frequency for hardness has been increased from 1/quarter to 1/month in order to establish a better dataset for future stream modeling.

Additional monitoring has been included for TKN. Copper monitoring is recommended to be removed. Based on revisions to Ohio EPA monitoring guidance, the monitoring frequencies for *E. coli* at the upstream and downstream stations have been changed from 1/quarter (May-October) to 1/ 2 weeks (June - August).

Emergency Bypass/Overflow (3PB00020602) Monitoring

Monitoring is recommended for the following parameters: volume and duration.

OTHER REQUIREMENTS

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 discharge monitoring reports (DMRs); 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 OAC 3745-7. These rules require the facility to have a Class I wastewater treatment plant operator in charge of the sewage treatment plant operations discharging through Outfall 3PB00020001. 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".

Outfall Signage

Part II of the permit includes requirements for the permittee to place and maintain a sign at each outfall to the receiving stream 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.

Figure 1. Facility Location

Figure 2. Hiram WWTP Schematic

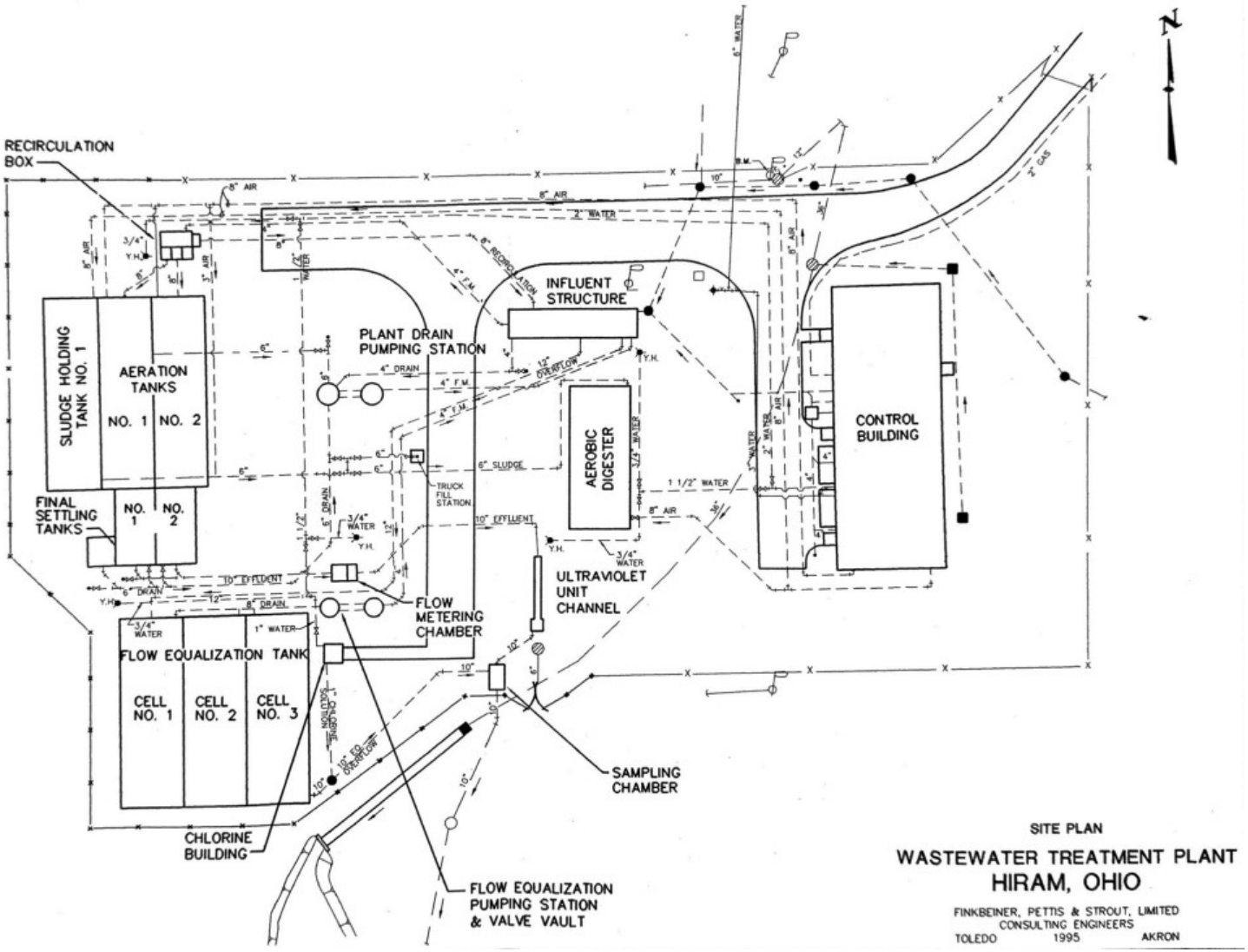

Table 1. Effluent Monitoring Data for Outfall 3PB00020001 between 1/2019 and 12/2023

Parameter	Unit	Current Limits		# Obs.	Percentiles		Data Range
		30 Day	Daily		50th	95th	
Water Temperature	°C	Monitor		1253	14.9	22.7	6.1 - 25.9
Dissolved Oxygen	mg/L	--	5.0[m]	1253	8.8	7.3*	5.3 - 18.2
pH	S.U.	--	6.5 - 9.0	1253	7.2	7.48	6.7 - 7.92
Total Suspended Solids	kg/day	22.8	34.1[w]	495	.849	4.56	.028 - 19.5
Total Suspended Solids	mg/L	30	45[w]	495	3.4	11.4	.1 - 28
Oil and Grease	mg/L	--	10	20	< 5	.155	0 - 3.1
Nitrogen, Ammonia - Summer	kg/day	1.22	1.82[w]	124	.0123	.0379	.00274 - .0938
Nitrogen, Ammonia - Summer	mg/L	1.6	2.40[w]	124	.0622	.116	.0131 - .516
Nitrogen, Ammonia - Winter	kg/day	1.75	2.62[w]	127	.02	.0748	.00288 - .249
Nitrogen, Ammonia - Winter	mg/L	2.3	3.45[w]	127	.0562	.197	.0107 - .608
Nitrite Plus Nitrate, Total	mg/L	Monitor		60	26.5	39	11.4 - 190
Phosphorus, Total	mg/L	Monitor		60	2.06	4.17	.8 - 4.85
Hardness, Total (CaCO3)	mg/L	Monitor		10	311	406	168 - 430
Beryllium, TR	µg/L	Monitor		10	--	--	< .5
Nickel, TR	µg/L	Monitor		10	< 10	7.7	0 - 14
Silver, TR	kg/day	0.000985	0.00833	10	--	--	< .000307
Silver, TR	µg/L	1.3	8.1	10	--	--	< 5
Zinc, TR	µg/L	Monitor		10	36.5	56.2	23 - 58
Cadmium, TR	µg/L	Monitor		10	--	--	< .5
Lead, TR	µg/L	Monitor		10	< 2	7.98	0 - 10
Chromium, TR	kg/day	0.0758	2.98	10	--	--	< .00132
Chromium, TR	µg/L	100	3929	10	--	--	< 10
Copper, TR	kg/day	0.0159	0.0258	61	.00905	.0211	.00192 - .0271
Copper, TR	µg/L	21	34	61	35	58	13 - 79
Chromium, Dissolved Hexavalent	kg/day	0.00833	0.0122	10	--	--	< .00136
Chromium, Dissolved Hexavalent	µg/L	11	16	10	--	--	< 4
E. coli	#/100 mL	126	284[w]	124	4	123	1 - 230
Flow Rate	MGD	Monitor		1826	.0685	.159	.007 - .471
Mercury, Total	kg/day	0.00001	0.00129	10	.0000012	.00000192	.000000227 - .00000203
Mercury, Total	ng/L	12	1700	10	2.7	6.72	.782 - 7.9
Residue, Total Filterable	mg/L	1518	--	60	954	1220	488 - 1660
CBOD 5 day	kg/day	19	30.3[w]	497	.615	1.72	.0993 - 7.03
CBOD 5 day	mg/L	25	40[w]	497	2.18	4.51	.59 - 8.71

* = For pH minimum and dissolved oxygen, 5th percentile shown in place of 95th percentile.
TR = Total Recoverable
w = weekly average
m = Minimum limit

Table 2. Projected Effluent Quality

Parameter	Units	Number of Samples	Number > MDL	PEQ Average	PEQ Maximum
Ammonia - Nitrogen (Summer)	mg/L	82	82	0.12	0.18
Ammonia - Nitrogen (Winter)	mg/L	64	64	0.15	0.23
Cadmium - TR	µg/L	10	0	--	--
Chromium - TR	µg/L	10	0	--	--
Hexavalent Chromium (Dissolved)	µg/L	10	0	--	--
Copper - TR	µg/L	61	61	52.1	70.6
Cyanide, Free	µg/L	--	--	--	--
Total Filterable Residue	mg/L	60	60	1141.9	1351.4
Lead - TR	µg/L	10	4	12.4	17
Mercury	ng/L	10	10	9.4	18.3
Nickel - TR	µg/L	10	1	17.4	23.8
Nitrate-N + Nitrite-N	mg/L	59	59	35.9	46.9
Zinc - TR	µg/L	10	10	56.6	80.9

MDL = analytical method detection limit
PEQ = projected effluent quality
TR = total recoverable

Table 3. Water Quality Criteria in the Study Area

Parameter	Units	Outside Mixing Zone Criteria				Inside Mixing Zone Maximum
		Average			Maximum Aquatic Life	
		Human Health	Agri-culture	Aquatic Life		
Ammonia - Nitrogen (Summer)	mg/L	--	--	1.9	--	--
Ammonia- Nitrogen (Winter)	mg/L	--	--	4.7	--	--
Cadmium - TR	µg/L	--	50	5.2	13	26
Chromium - TR	µg/L	--	100	190	3900	7800
Hexavalent Chromium (Dissolved)	µg/L	--	--	11	16	31
Copper - TR	µg/L	--	500	21	34	68
Cyanide, Free	µg/L	400	--	12	46	92
Total Filterable Residue	mg/L	--	--	1500	--	--
Lead - TR	µg/L	--	100	21	410	810
Mercury	ng/L	12	10000	910	1700	3400
Nickel - TR	µg/L	4600	200	120	1000	2100
Nitrate-N + Nitrite-N	mg/L	--	100	--	--	--
Zinc - TR	µg/L	26000	25000	270	270	530

TR = total recoverable

Table 4. Instream Conditions and Discharger Flow

Parameter	Units	Season	Value	Basis
Stream Flows				
1Q10	cfs	annual	0.002	USGS StreamStats Ver. 4.20 (Drainage Area = 0.2 square miles)
7Q10	cfs	annual	0.003	
30Q10	cfs	summer	0.005	
		winter	0.09	Calculated from USGS Gage 04202000 - Cuyahoga River at Hiram Rapids OH
Harmonic Mean	cfs	annual	0.012	USGS StreamStats Ver. 4.20 (Drainage Area = 0.2 square miles)
Mixing Assumption	%	average	100	Wasteload Allocation Procedure (OAC 3745-2)
		maximum	100	
Hardness, OMZ, IMZ *	mg/L	annual	256	DMR Station 901; 2021 - 2023; n=12; Mean Value
pH	S.U.	summer	7.8	DMR Station 901; 2019 - 2023; n=10
		winter	7.8	DMR Station 901; 2019 - 2023; n=4
Temperature	ºC	summer	20.2	DMR Station 901; 2019 - 2023; n=10
		winter	10.2	DMR Station 901; 2019 - 2023; n=4
Hiram WWTP flow	cfs (mgd)	annual	0.31 (0.200)	NPDES Permit Application
Background Water Quality				
Ammonia (Summer)	mg/L	summer	0.04	DMR; 2019-2023; n=10; 0<MDL; Station 801; Median Value
Ammonia (Winter)	mg/L	winter	0.03	DMR; 2019-2023; n=4; 0<MDL; Station 801; Mean Value
Cadmium - TR	µg/L	annual	0	No representative data available.
Chromium - TR	µg/L	annual	0	No representative data available.
Hexavalent Chromium (Dissolved)	µg/L	annual	0	No representative data available.
Copper - TR	µg/L	annual	0	DMR; 2019-2023; n=20; 0<MDL; Station 801; Median Value
Cyanide, Free	µg/L	annual	0	No representative data available.
Dissolved Solids	mg/L	annual	0	No representative data available.
Lead - TR	µg/L	annual	0	No representative data available.
Mercury	ng/L	annual	0	No representative data available.
Nickel - TR	µg/L	annual	0	No representative data available.
Nitrate-N + Nitrite-N	mg/L	annual	0	No representative data available.
Zinc - TR	µg/L	annual	0	No representative data available.

* Mean (average) value used in place of median value.

DMR = Discharge Monitoring Report
MDL = analytical method detection limit
n = number of samples
TR = total recoverable
USGS = United States Geological Survey
WLA = Wasteload Allocation

Table 5. Summary of Effluent Limits to Maintain Applicable Water Quality Criteria

Parameter	Units	Outside Mixing Zone Criteria				Inside Mixing Zone Maximum
		Average			Maximum Aquatic Life	
		Human Health	Agri-culture	Aquatic Life		
Ammonia (Summer)	mg/L	--	--	1.93	--	--
Ammonia (Winter)	mg/L	--	--	6.06	--	--
Cadmium - TR	µg/L	--	52	5.3	13	26
Chromium - TR	µg/L	--	104	192	3925	7800
Hexavalent Chromium (Dissolved)	µg/L	--	--	11	16	31
Copper - TR	µg/L	--	519	21	34	68
Cyanide, Free	µg/L	416	--	12	46	92
Total Filterable Residue	mg/L	--	--	1515	--	--
Lead - TR	µg/L	--	104	21	413	810
Mercury	ng/L	12	10000	910	1700	3400
Nickel - TR	µg/L	4778	208	121	1006	2100
Nitrate-N + Nitrite-N	mg/L	--	104	--	--	--
Zinc - TR	µg/L	27008	25969	273	272	530

TR = total recoverable

Table 6. Parameter Assessment

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

No parameters placed in this group.

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

Cadmium - TR	Chromium - TR	Hexavalent Chromium (Dissolved)
Cyanide, Free	Nickel - TR	

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

Nitrate-N + Nitrite-N	Zinc - TR

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

Lead - TR

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

Limits to Protect Numeric Water Quality Criteria

		Recommended Effluent Limits	
Parameter	***Units***	***Average***	***Maximum***
Copper - TR	µg/L	21	34
Total Filterable Residue	mg/L	1515	--
Mercury	ng/L	12	1700

Total Filterable Residue (Total Dissolved Solids) and mercury become Group 5 parameters based upon the loading test in OAC 3745-2-06(B).

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

Table 7. Final Effluent Limits for Outfall 3PC00009001

Parameter	Freq.	Units	Concentration		Loading (kg/day)[a]		Basis[c]
			30 Day Average	Daily Maximum	30 Day Average	Daily Maximum	
Water Temperature	1/day	°C	- - - - - - - - - - Monitor - - - - - - - - - - -				M
Flow Rate	Cont.	MGD	- - - - - - - - - - Monitor - - - - - - - - - - -				M
pH	1/day	SU	6.5 - 9.0		--	--	WQS
Dissolved Oxygen (Min.)	1/day	mg/L	--	5.0	--	--	WQS
Total Suspended Solids	2/week	mg/L	30	45 [b]	22.8	34.1 [b]	PD
Oil & Grease	1/quarter	mg/L	--	10	--	--	WQS
Ammonia (as N) - Summer	1/ 2 weeks	mg/L	1.6	2.4 [b]	1.22	1.82 [b]	WLA
Ammonia (as N) - Winter	1/ 2 weeks	mg/L	2.3	3.45 [b]	1.75	2.62 [b]	PD
Total Kjeldahl Nitrogen	1/month	mg/L	- - - - - - - - - - Monitor - - - - - - - - - - -				M
Nitrate Plus Nitrite (as N)	1/month	mg/L	- - - - - - - - - - Monitor - - - - - - - - - - -				M
Phosphorus, Total (P) [d]	1/month	mg/L	1.0	1.5 [b]	0.76	1.14 [b]	TMDL
Nickel	2/year	µg/L	- - - - - - - - - - Monitor - - - - - - - - - - -				M
Zinc	2/year	µg/L	- - - - - - - - - - Monitor - - - - - - - - - - -				M
Cadmium	2/year	µg/L	- - - - - - - - - - Monitor - - - - - - - - - - -				M
Lead	2/year	µg/L	- - - - - - - - - - Monitor - - - - - - - - - - -				M
Chromium, Total	2/year	µg/L	- - - - - - - - - - Monitor - - - - - - - - - - -				M
Copper	1/month	µg/L	21	34	0.0159	0.0258	WLA
Hexavalent Chromium (Dissolved)	2/year	µg/L	- - - - - - - - - - Monitor - - - - - - - - - - -				M
Free Cyanide	2/year	µg/L	- - - - - - - - - - Monitor - - - - - - - - - - -				RP
E. coli	1/week	#/100 mL	126	284 [b]	--	--	WQS
Mercury Low-Level)	2/year	ng/L	12	1700	0.00001	0.00129	WLA
Residue, Total Filterable [d]	1/month	mg/L	1515	--	1147	--	WLA
Carbonaceous Biochemical Oxygen Demand (5-day)	2/week	mg/L	25	40 [b]	19.0	30.3 [b]	PD

[a] Effluent loadings based on average design discharge flow of 0.200 MGD.

[b] 7-day average limit.

[c] **Definitions:** **M =** Division of Surface Water NPDES Permit Guidance 1: Monitoring frequency requirements for Sanitary Discharges
PD = Plant Design per OAC 3745-33-07(A)(1)(b)
RP = Reasonable Potential for requiring water quality-based effluent limits and monitoring requirements in permits (OAC 3745-33-07(A))
TMDL = "Total Maximum Daily Loads for the Upper Mahoning River Watershed", Ohio EPA, August 2011
WLA = Wasteload Allocation procedures (OAC 3745-2)
WQS = Ohio Water Quality Standards (OAC 3745-1)

[d] 24-month compliance schedule recommended to meet new and/or revised final effluent limits. Existing limits to remain in effect during interim period.