

National Pollutant Discharge Elimination System (NPDES) Permit Program**PUBLIC NOTICE****NPDES Permit to Discharge to State Waters**

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

Public Notice No.: 221240
Date of Issue of Public Notice: 5/11/2026
Name and Address of Applicant: Holmes County Commissioners, 4829 Township Road 356,
Millersburg, OH, 44654

Name and Address of Facility
Where Discharge Occurs: Berlin WWTP, 4829 Township Road 356, Millersburg, OH,
44654, Holmes County

Outfall Flow and Location List:

001	300000 GPD	Lat: 40.541667	Long: -81.810556
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Receiving Stream: Doughty Creek at River Mile 16.57

Nature of Business: Provider of public sanitary sewer (collection and treatment)

Key parameters to be limited
in the permit are as follows: Total Suspended Solids, Nitrogen, Ammonia (NH₃-N), CBOD 5
day, pH, Cadmium, Total Recoverable, Copper, Total
Recoverable, Dissolved Oxygen, E. coli, Oil and Grease,
Hexane Extr Method

The Director has, after evaluation of pertinent technical, social, and economic information, determined that the discharge specified in this permit will result in a change from ambient in water quality of the receiving stream. This change will not interfere with or become injurious to the existing designated use.

On the basis of preliminary staff review and application of standards and regulations, the director of the Ohio Environmental Protection Agency will issue a permit for the discharge subject to certain effluent conditions and special conditions. The draft permit will 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. Any person may submit written comments on the draft permit and administrative record and may request a public hearing. A request for public hearing shall be in writing and shall state the nature of the issues to be raised. In appropriate cases, including cases where there is significant public interest, the director may hold a public hearing on a draft permit or permits prior to final issuance of the permit or permits. Following final action by the director, any aggrieved party has the right to appeal to the Environmental Review Appeals Commission.

Interested persons are invited to submit written comments upon the discharge permit. Comments should be submitted in person, by E-mail or by mail no later than 30 days after the date of this public notice. Comments should be e-mailed to epa.dswcomments@epa.ohio.gov or delivered or mailed to both of the following locations: 1) Ohio Environmental Protection Agency, Lazarus Government Center, Division of Surface Water, Permits Processing Unit, 50 West Town St., Suite 700, P.O. Box 1049, Columbus, Ohio 43216-1049 and 2) Ohio Environmental Protection Agency, Northeast District Office 2110 East Aurora Road, Twinsburg, Ohio 44087.

The Ohio EPA permit number and public notice numbers should appear next to the above address on the envelope and on each page of any submitted comments. All comments received no later than 30 days after the date of this public notice will be considered.

Proposed Water Quality Based Effluent Limitations: This draft permit contains water quality based effluent limitation(s) (WQBELs). In accordance with Ohio Revised Code Section 6111.03(J)(3), the Director establishes 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 of the timely submitted National Pollutant Discharge Elimination System (NPDES) permit renewal application, along with any and all pertinent information available to the Director.

This public notice hereby 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 WQBEL(s). This information shall be submitted to the addresses listed above.

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 WQBEL(s), written notification for any additional time shall be sent no later than 30 days after the date of this public notice to the Director at the addresses listed above.

Should the applicant determine that compliance with a WQBEL is technically and/or economically unattainable, the permittee may submit an application for a variance to the applicable WQBEL in accordance with the terms and conditions set forth in Ohio Administrative Code (OAC) Rule 3745-1-38 no later than 30 days after the date of this public notice to the addresses listed above.

Alternately, the applicant may propose the development of site-specific water quality standard(s) pursuant to OAC Rule 3745-1-39. The permittee shall submit written notification to the Director regarding their intent to develop site-specific water quality standards for the pollutant at issue to the addresses listed above no later than 30 days after the date of this public notice.

The application, fact sheets, permit including effluent limitations, special conditions, comments received, and other documents are available for inspection and may be copied at a cost of 5 cents per page at the Ohio Environmental Protection Agency at the address shown on page one of this public notice any time between the hours of 8 a.m. and 4:30 p.m., Monday through Friday. Copies of the public notice are available at no charge at the same address. Individual NPDES draft permits that are in public notice are available on DSW's web site: <https://epa.ohio.gov/divisions-and-offices/surface-water/permitting/list-of-draft-permit-public-notices>

Mailing lists are maintained for persons or groups who desire to receive public notice for all applications in the state or for certain geographical areas. Persons or groups may also request copies of fact sheets, applications, or other documents pertaining to specific applications. Persons or groups may have their names put on such a list by making a written request to the agency at the address shown above.

Ohio EPA Permit No.: 3PG00147*HD
Application No: OH0112127

DRAFT COPY
SUBJECT TO REVISION
OHIO EPA

Action Date:
Effective Date:
Expiration Date: 5 Years

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),

Holmes County Commissioners

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from the Berlin Wastewater Treatment Plant (WWTP), located at 4829 Township Road 356, Berlin Township, Ohio, Holmes County, to Doughty Creek at River Mile 16.57 in accordance with the conditions specified in Parts I, II, and III of this permit.

I have determined that a lowering of water quality in Doughty Creek is necessary. In accordance with OAC 3745-1-05, this decision was reached only after examining a series of technical alternatives, reviewing social and economic issues related to the degradation, and considering all public and appropriate intergovernmental comments. The activity approved is an alternative to the applicant's preferred activity. The lowering of water quality is necessary to accommodate important social or economic development in the area in which the water body is located.

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.

John Logue
Director

Total Pages: 30

PART I, A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outfall: 3PG00147001. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 001 - Final

Effluent Characteristic Parameter	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00010 - Water Temperature - C	-	-	-	-	-	-	-	1/Day	Multiple Grab	All
00300 - Dissolved Oxygen - mg/l	-	6.0	-	-	-	-	-	1/Day	Grab	All
00400 - pH - S.U.	9.0	6.5	-	-	-	-	-	1/Day	Grab	All
00530 - Total Suspended Solids - mg/l	-	-	18	12	-	20.5	13.7	2/Week	24hr Composite	All
00552 - Oil and Grease, Hexane Extr Method - mg/l	10	-	-	-	-	-	-	1/Month	Grab	All
00610 - Nitrogen, Ammonia (NH3-N) - mg/l	-	-	1.8	1.2	-	2.05	1.37	2/Week	24hr Composite	Summer
00610 - Nitrogen, Ammonia (NH3-N) - mg/l	-	-	2.3	1.5	-	2.62	1.71	2/Week	24hr Composite	Winter
00625 - Nitrogen Kjeldahl, Total - mg/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
00630 - Nitrite Plus Nitrate, Total (as N) - mg/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
00665 - Phosphorus, Total (P) - mg/l	-	-	-	-	-	-	-	1 / 2 Weeks	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
01113 - Cadmium, Total Recoverable - ug/l	16	-	-	6.5	0.018	-	0.0073	1/Month	24hr Composite	All
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	41	-	-	26	0.047	-	0.030	1/Month	24hr Composite	All
01220 - Chromium, Dissolved Hexavalent - ug/l	-	-	-	-	-	-	-	2/Year	24hr Composite	Semi-annual
31648 - <i>E. coli</i> - #/100 ml	-	-	284	126	-	-	-	2/Week	Grab	Summer
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	Continuous	All
50092 - Mercury, Total (Low Level) - ng/l	-	-	-	-	-	-	-	2/Year	Grab	Semi-annual
51173 - Cyanide, Free (Low-Level) - 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			
70300 - Residue, Total Filterable - mg/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
80082 - CBOD 5 day - mg/l	-	-	15	10	-	17.1	11.4	2/Week	24hr Composite	All

Notes for Station Number 3PG00147001:

*Effluent loadings based on average design flow of 0.300 MGD.

- a. Semi-annual - Sampling shall be performed in June and December.
- b. The permittee utilizes Ultraviolet (UV) radiation to meet the disinfection requirement.
- c. Free Cyanide (Low-Level) - See Part II, Item N.
- d. Mercury, Total (Low Level) - See Part II, Item O.
- e. Method Detection Limits - See Part II, Item Q.
- f. WWTP proposed Expansion to 0.450 MGD - See Part II, Items R and S.

PART I, B. SSO LIMITATIONS AND MONITORING REQUIREMENTS

1. SSO Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor at Station Number 3PG00147300, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for the location of sampling.

Table - SSO Monitoring - 300 – Final

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

Notes for Station Number 3PG00147300:

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. SEWAGE SLUDGE OR BIOSOLIDS LIMITATIONS AND MONITORING REQUIREMENTS

2. Sewage Sludge or Biosolids Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall comply with the following limitations and monitoring requirements for the treatment works' final sewage sludge or biosolids and report to the Ohio EPA in accordance with the following table at Station Number 3PG00147581. See Part II, OTHER REQUIREMENTS.

Table - Sludge Monitoring - 581 – Final

Effluent Characteristic Parameter	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00611 - Ammonia (NH3) In Sludge - mg/kg	-	-	-	-	-	-	-	1/Year	Composite	December
00627 - Nitrogen Kjeldahl, Total In Sludge - mg/kg	-	-	-	-	-	-	-	1/Year	Composite	December
00633 - Nitrite Plus Nitrate, Total In Sludge - mg/kg	-	-	-	-	-	-	-	1/Year	Composite	December
00668 - Phosphorus, Total In Sludge - mg/kg	-	-	-	-	-	-	-	1/Year	Composite	December
00938 - Potassium In Sludge - mg/kg	-	-	-	-	-	-	-	1/Year	Composite	December
01003 - Arsenic, Total In Sludge - mg/kg	75	-	-	-	-	-	-	1/Year	Composite	December
01028 - Cadmium, Total In Sludge - mg/kg	85	-	-	-	-	-	-	1/Year	Composite	December
01043 - Copper, Total In Sludge - mg/kg	4300	-	-	-	-	-	-	1/Year	Composite	December
01052 - Lead, Total In Sludge - mg/kg	840	-	-	-	-	-	-	1/Year	Composite	December
01068 - Nickel, Total In Sludge - mg/kg	420	-	-	-	-	-	-	1/Year	Composite	December
01093 - Zinc, Total In Sludge - mg/kg	7500	-	-	-	-	-	-	1/Year	Composite	December
01148 - Selenium, Total In Sludge - mg/kg	100	-	-	-	-	-	-	1/Year	Composite	December
51129 - Sludge Fee Weight - dry tons	-	-	-	-	-	-	-	1/Year	Total	December
51131 - Fecal Coliform in Sludge - CFU/gram	2000000	-	-	-	-	-	-	1/Year	Multiple Grab	December
70316 - Sludge Weight - Dry Tons	-	-	-	-	-	-	-	1/Year	Total	December
71921 - Mercury, Total In Sludge - mg/kg	57	-	-	-	-	-	-	1/Year	Composite	December
78465 - Molybdenum In Sludge - mg/kg	75	-	-	-	-	-	-	1/Year	Composite	December

Notes for Station Number 3PG00147581:

a. Monitoring data shall be reported on the December Discharge Monitoring Report (DMR). Monitoring shall be performed prior to biosolids being removed from the facility for beneficial use/land application. The monitoring data can be collected at any time during the reporting period. Annual monitoring reported in the December DMR does not have to occur in December. It is recommended that composite samples of the biosolids be collected at the end of the sewage sludge treatment process and analyzed close enough to the time of beneficial use to be reflective of the biosolids current quality, but not so close that the results of the

analysis are not available prior to land applying the biosolids.

b. To sample for fecal coliform, the permittee should collect and analyze a grab sample over a two-week period for a total of seven grab samples when practical. Each of the grab samples shall be analyzed independently to determine the MPN/g (or CFU/g when applicable) of fecal coliform in the individual sample. The geometric mean of those seven results shall be reported on the DMR. Each fecal coliform sample shall be delivered to the analytical lab and analyzed within the holding time, in accordance with the requirements for Part 9221 E. or part 9222 D., "Standard Methods for the Examination of Water and Wastewater" or EPA Method 1680 or 1681 in 40 CFR Part 136. Analysis results shall be obtained prior to sewage sludge being removed from the treatment facility.

c. For biosolids disposed of by hauling to an authorized landfill or transferred to another NPDES permit holder, metal and nutrient analysis is not required.

d. If no biosolids are removed from the facility during the reporting period and no metal and nutrient analysis is completed during the reporting period, select the "No Discharge" check box on the data entry form and PIN the eDMR. If no biosolids are removed from the facility during the reporting period and metal and nutrient analysis is completed during the reporting period enter the results for the metal and nutrient analysis on the DMR and report "0" for sludge weight and sludge fee weight.

e. Each day when sewage sludge is removed from the treatment works 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. For reporting purposes, report the average value attained during the reporting period.

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

g. Sludge weight is a calculated total for the year. To convert from gallons of liquid sewage sludge to dry tons of sewage sludge: $\text{dry tons} = \text{gallons} \times 8.34 \text{ (lb/gallon)} \times 0.0005 \text{ (tons/lb)} \times \text{decimal fraction total solids}$.

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

i. See Part II, Items K, L, and M.

PART I, B. SEWAGE SLUDGE OR BIOSOLIDS LIMITATIONS AND MONITORING REQUIREMENTS

3. Sewage Sludge or Biosolids Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall comply with the following limitations and monitoring requirements for the treatment works' final sewage sludge or biosolids and report to the Ohio EPA in accordance with the following table at Station Number 3PG00147586. See Part II, OTHER REQUIREMENTS.

Table - Sludge Monitoring - 586 – Final

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

Notes for Station Number 3PG00147586:

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

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

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

d. Each day when sewage sludge is removed from the treatment works for 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.

e. 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 (lb/gallon) x 0.0005 (tons/lb) x decimal fraction total solids.

f. See Part II, Items K, L, and M.

PART I, B. SEWAGE SLUDGE OR BIOSOLIDS LIMITATIONS AND MONITORING REQUIREMENTS

4. Sewage Sludge or Biosolids Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall comply with the following limitations and monitoring requirements for the treatment works' final sewage sludge or biosolids and report to the Ohio EPA in accordance with the following table at Station Number 3PG00147588. See Part II, OTHER REQUIREMENTS.

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			
80991 - Sludge Volume, Gallons - Gals	-	-	-	-	-	-	-	1/Year	Total	December

Notes for Station Number 3PG00147588:

- Monitoring is required when sewage sludge is removed from the permittee's facility for transfer to another NPDES permit holder. The total sludge volume transferred to another NPDES permit holder for the entire year shall be reported on the December Discharge Monitoring Report (DMR).
- If no sewage sludge is removed from the permittee's facility for transfer to another NPDES permit holder during the year, select the "No Discharge" check box on the data entry form and PIN the eDMR.
- Sludge weight is a calculated total for the year. To convert from gallons of liquid sewage sludge to dry tons of sewage sludge: dry tons = gallons x 8.34 (lb/gallon) x 0.0005 (tons/lb) x decimal fraction total solids.
- Each day when sewage sludge is removed from the treatment works for disposal, a representative composite 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) removed from the treatment plant on that day.
- See Part II, Items K, L, and M.

PART I, B. INFLUENT MONITORING REQUIREMENTS

5. 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 3PG00147601, and report to the Ohio EPA in accordance with the following table. Samples of influent used for determination of net values or percent removal must be taken the same day as those samples of effluent used for that determination. See Part II, OTHER REQUIREMENTS, for location of influent sampling.

Table - Influent Monitoring - 601 – Final

Effluent Characteristic Parameter	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00400 - pH - S.U.	-	-	-	-	-	-	-	1/Day	Grab	All
00530 - Total Suspended Solids - mg/l	-	-	-	-	-	-	-	2/Week	24hr Composite	All
01113 - Cadmium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01119 - Copper, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
80082 - CBOD 5 day - mg/l	-	-	-	-	-	-	-	2/Week	24hr Composite	All

Notes for Station Number 3PG00147601:

a. Sampling for the respective parameters shall occur on the same day as Outfall 3PG00147001.

PART I, B. UPSTREAM MONITORING REQUIREMENTS

6. Upstream Monitoring. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee shall monitor the receiving stream, upstream of the point of discharge at Station Number 3PG00147801, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - Upstream Monitoring - 801 – Final

Effluent Characteristic Parameter	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00010 - Water Temperature - C	-	-	-	-	-	-	-	1/Month	Grab	All
00300 - Dissolved Oxygen - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
00400 - pH - S.U.	-	-	-	-	-	-	-	1/Month	Grab	All
00610 - Nitrogen, Ammonia (NH ₃ -N) - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00625 - Nitrogen Kjeldahl, Total - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00630 - Nitrite Plus Nitrate, Total (as N) - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00665 - Phosphorus, Total (P) - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00900 - Hardness, Total (CaCO ₃) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
31648 - <i>E. coli</i> - #/100 ml	-	-	-	-	-	-	-	1 / 2 Weeks	Grab	June - Aug

Notes for Station Number 3PG00147801:

- a. Sampling for the respective parameters shall occur on the same day as Outfall 3PG00147001.
- b. Quarterly-Alt - Sampling shall be performed in March, June, September, and December.

Part I, B. DOWNSTREAM-NEARFIELD MONITORING REQUIREMENTS

7. Downstream-Nearfield 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 3PG00147901, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - Downstream-Nearfield Monitoring - 901 – Final

Effluent Characteristic Parameter	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00010 - Water Temperature - C	-	-	-	-	-	-	-	1/Month	Grab	All
00400 - pH - S.U.	-	-	-	-	-	-	-	1/Month	Grab	All
00610 - Nitrogen, Ammonia (NH ₃ -N) - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00625 - Nitrogen Kjeldahl, Total - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00630 - Nitrite Plus Nitrate, Total (as N) - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00665 - Phosphorus, Total (P) - mg/l	-	-	-	-	-	-	-	1/Quarter	Grab	Quarterly - Alt.
00900 - Hardness, Total (CaCO ₃) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
31648 - <i>E. coli</i> - #/100 ml	-	-	-	-	-	-	-	1 / 2 Weeks	Grab	June - Aug

Notes for Station Number 3PG00147901:

- a. Sampling for the respective parameters shall occur on the same day as Outfall 3PG00147001.
- b. Quarterly-Alt - Sampling shall be performed in March, June, September, and December.

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 II treatment works. The permittee shall designate one or more professional operator of record to oversee the technical operation of the treatment works with a valid certification of a class equal to or greater than the classification of the treatment works.

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

2. Professional Operator of Record

a. Within three days of a change in a professional operator of record, the permittee shall notify the Director of the Ohio EPA of any such change on a form acceptable to Ohio EPA. The notification must be submitted electronically to opcert@epa.ohio.gov. The appropriate form can be found at the following website: https://dam.assets.ohio.gov/image/upload/epa.ohio.gov/Portals/28/documents/opcert/Operator_of_Record_Notification_Form.pdf

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

c. The professional operator of record for a Class II, III, or IV treatment works or Class II sewerage system may be replaced by a backup professional operator with a certificate one classification lower than the treatment works or sewerage system for a period of up to thirty consecutive days. The use of this provision does not require notification to the agency. This provision may not be used to routinely circumvent minimum staffing requirements.

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

3. Minimum Staffing Requirements

a. The permittee shall ensure that the treatment works professional operator of record is physically present at the facility in accordance with the minimum staffing requirements per paragraphs (C)(1) and (C)(3)(j-k) 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 paragraphs (C)(2) and (C)(3)(j) of rule 3745-7-04 of the Ohio Administrative Code.

c. If Ohio EPA approves a reduction in minimum staffing requirements based upon a facility operating plan, any change in the criteria under which the operating plan was approved (e.g., retirement of a professional operator listed in the approved staffing plan, loss of the professional operator of record, reduction in the workforce, removal or failure of automation or continuous monitoring, etc.) will require that the treatment works immediately return to the minimum staffing requirements included in paragraph (C)(1) of rule 3745-7-04 of the Ohio Administrative Code.

4. Additional Staffing Requirements

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

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

Sampling Station	Description of Location
3PG00147001	Final effluent (Lat/Long: 40.5416 N, -81.8105 W)
3PG00147300	Collection system sanitary sewer overflows (SSOs)
3PG00147581	Class B sewage sludge (biosolids) prior to land application
3PG00147586	Disposal of sewage sludge or biosolids in an authorized landfill
3PG00147588	Transfer of sewage sludge or biosolids to another NPDES permittee
3PG00147601	Plant Influent monitoring
3PG00147801	Doughty Creek within 500 feet upstream of outfall 3PG00147001
3PG00147901	Doughty Creek within 500 feet downstream of outfall 3PG00147001

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 to Ohio EPA a 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 SSO 5-Day Notification report is available in and must be submitted to STREAMS through the Ohio EPA eBusiness Center, Division of Surface Water NPDES Permit Application service.

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 an SSO Annual report for the previous calendar year. The SSO Annual report must be submitted electronically in STREAMS, available through the Ohio EPA eBusiness Center, Division of Surface Water NPDES Permit Application service. 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, and any other continuously-recorded parameters, 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 a series of grab samples collected over a 24-hour period and proportionate in volume to the sewage flow rate at the time of sampling. Such samples shall be collected at such times and locations, and in such a fashion, as to be representative of the facility's overall performance.

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

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

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

J. 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.

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

L. No later than March 1st of each calendar year, the permittee shall submit an Annual Sewage Sludge report summarizing the sewage sludge disposal, use, storage, or treatment activities of the permittee during the previous calendar year. The Annual Sewage Sludge report is available in and shall be submitted to STREAMS through Ohio EPA eBusiness Center, Division of Surface Water NPDES Permit Application service.

M. The permittee shall maintain standard operating procedures for how pathogen reduction and vector attraction reduction are achieved, in accordance with 3745-40-09 of the Ohio Administrative Code.

A sampling plan shall be maintained by the permittee. The plan shall include, at a minimum, the following for all required sampling:

- a. Sample collection or monitoring locations.
- b. Sample or monitoring frequency.
- c. Sample collection or monitoring procedures.
- d. Sample storage and preservation procedures.
- e. For composite samples of biosolids, a minimum of six grab samples collected at such times and locations, and in such fashion, as to be representative of the biosolids generated at the facility for beneficial use.

N. Monitoring for Low-Level Free Cyanide

The permittee shall use an approved method for free cyanide listed in 40 CFR 136 that has a quantification level lower than water quality-based effluent limits: ASTM D7237-18(A), OIA-1677-09, SM 4500-CN-R-2021, and ASTM D4282-15.

O. 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.

P. 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.

Q. Sufficiently Sensitive Data / Method Detection Limits

The permittee shall use analytical procedures approved under 40 CFR 136 with sufficiently sensitive method detection limits (MDLs) that are capable of detecting and measuring the pollutants at, or below, the respective water quality criteria or existing permit effluent limits. All detected concentration values above the MDL must be reported.

R. Construction of Wastewater Treatment Plant (WWTP) Expansion to 0.450 MGD

The permittee received Ohio EPA approval for permit-to-install (PTI) DSWPTI-1565781 on November 20, 2024, authorizing expansion of the Berlin WWTP from 0.300 MGD to 0.450 MGD and construction of multiple associated treatment upgrades. The permittee completed the antidegradation review process for the increased flow. Construction began on March 17, 2025, but only the copper-reduction portion of the PTI commenced on this date. This portion was completed on March 31, 2026. The permittee plans to bid the remaining upgrades in June 2026, with an anticipated 24-month construction period. Final effluent limitations and monitoring requirements for the 0.450 MGD WWTP expansion are provided in Part II, Item Q.

a. The permittee shall submit an NPDES permit modification request to increase the design flow from 0.300 MGD to 0.450 MGD within 30 days of commencing construction of the PTI-approved expansion.

b. The permittee shall notify the appropriate Ohio EPA District Office within seven days of initiating construction of the PTI-approved expansion (excluding the copper-reduction work) and shall provide notification at least 30 days prior to completion of that construction.

Q. Final Effluent Limits for Outfall 3PG00147001 at Proposed Expansion to 0.450 MGD

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	--	6.0	--	--	BADCT
Total Suspended Solids	2/week	mg/L	12	18 ^b	20.5	30.7 ^b	BADCT
Oil & Grease	1/month	mg/L	--	10	--	--	WQS
Ammonia (as N) - Summer	2/week	mg/L	1.1	1.7 ^b	1.9	2.9 ^b	PD, ABS
Ammonia (as N) - Winter	2/week	mg/L	1.5	2.3 ^b	2.6	3.9 ^b	PD, ABS
Total Kjeldahl Nitrogen	1/month	mg/L	----- Monitor -----				M
Nitrate Plus Nitrite (as N)	1/month	mg/L	----- Monitor -----				M
Phosphorus, Total (P)	1/2 weeks	mg/L	--	--	--	--	M
Nickel	2/year	µg/L	----- Monitor -----				M
Zinc	2/year	µg/L	----- Monitor -----				M
Cadmium	1/month	µg/L	5.9	14	0.010	0.024	ABS
Lead	2/year	µg/L	----- Monitor -----				M
Chromium	2/year	µg/L	----- Monitor -----				M
Copper	1/month	µg/L	23	37	0.040	0.063	ABS
Hexavalent Chromium (Dissolved)	2/year	µg/L	----- Monitor -----				M
Free Cyanide (Low-Level)	2/year	µg/L	----- Monitor -----				M
<i>E. coli</i>	2/week	#/100 mL	126	284 ^b	--	--	WQS
Mercury (Low-Level)	2/year	ng/L	----- Monitor -----				M
Residue, Total Filterable	1/month	mg/L	1857	--	3167	--	WLA
CBOD (5-day)	2/week	mg/L	10	15 ^b	17.0	25.5 ^b	BADCT

^a Effluent loadings based on average design discharge flow of 0.450 MGD.

^b 7-day average limit

^c **Definitions:** **ABS** = Antibacksliding Rule (OAC 3745-33-05(F) and 40 CFR Part 122.44(l))
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))
WLA = Wasteload Allocation procedures (OAC 3745-2)
WQS = Ohio Water Quality Standards (OAC 3745-1)

PART III - GENERAL CONDITIONS

A. Definitions

"#/100 ml" means the number of bacteria per 100 milliliters of sample.

"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.

"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.

"Act" means the federal Water Pollution Control Act (commonly referred to as the "Clean Water Act" or "CWA"), 33 U.S.C. sections 1251 to 1387 as amended through November 27, 2023.

"Biosolids" means sewage sludge or mixtures containing sewage sludge that have been treated for beneficial use.

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

"CFR" means the Code of Federal Regulations as published in the Federal Register.

"Critical value" means the most extreme result of multiple grab sampling or continuous monitoring in a 24-hour period. For parameters with a maximum limit, the critical value is the highest result. For parameters with a minimum limit, the critical value is the lowest result.

"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.

"DMR" means Ohio EPA Discharge Monitoring Report (DMR) form.

"eBusiness Center" (also known as "eBiz") means the Ohio EPA Division of Surface Water Electronic Business Center, an online platform for submission of data, applications, reports, fee payments, etc. The eBusiness Center is available at: <https://ebiz.epa.ohio.gov>. Guidance and instructions for access and completing tasks in the eBusiness Center are available at: <https://epa.ohio.gov/divisions-and-offices/surface-water/permitting/electronic-business-services>

"e-DMR" means electronic Discharge Monitoring Report, an online platform for reporting required

monitoring data. e-DMR is accessible through the Ohio EPA eBusiness Center.

"Maximum limitations" means compliance with limitations having descriptions of "maximum" shall be determined from any single value for effluent samples and/or measurements collected.

"Minimum limitations" means compliance with limitations having descriptions of "minimum" shall be determined from any single value for effluent samples and/or measurements collected.

"Monthly discharge limitation" means the highest allowable arithmetic 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.

"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 aliquots taken at regular intervals throughout the 24-hour period.

"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 aliquots throughout the 24-hour period.

"OAC" means the Ohio Administrative Code.

"ORC" means the Ohio Revised Code.

"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.

"Quarterly-Alt (1/Quarter) sampling frequency" means the sampling shall be done in the months of March, June, September, and December, unless specifically identified otherwise in the effluent limitations and monitoring requirements table.

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

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

"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.

"Sewage sludge" means a solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works as defined in ORC 6111.01. 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 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 ORC 3745.11(X), are based on the reported sludge fee weight for the most recent calendar year.

"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 sewage sludge weight generated in a calendar year (use the most recent calendar year data when the NPDES permit is up for renewal).

"STREAMS" means the Surface Water Tracking, Reporting, and Electronic Application Management System, an online application for submission of reports, applications, and other required forms, which is available through the eBusiness Center.

"Summer" means the period from May 1 through October 31.

"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.

"Weekly discharge limitation" means the highest allowable arithmetic average of daily discharges over a calendar week as defined in this section, 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 "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.

"Winter" means the period from November 1 through April 30.

"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.

B. Reserved

C. Facility Operation and Quality Control

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

1. At all times, the permittee maintains in good working order and operates 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.

2. The permittee effectively monitors the operation and efficiency of treatment and control facilities and the quantity and quality of the treated discharge.
3. 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 Part III, Item M.

D. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of ORC 6111.07(A) and the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit application.

E. Duty to Reapply

To continue the permitted activity, the permittee shall submit a complete renewal application, on a form provided by the Director, no later than 180 days prior to the expiration date of the permit. An expired permit continues in force and effect until the Director acts on a timely renewal application.

F. Reporting

1. All reports required by this permit 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:

- a. In the case of a corporation, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - i. 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
 - ii. 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.
- b. In the case of a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- c. 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 representative. A person is a duly authorized representative only if:
 - i. The authorization is made in writing by a person described in OAC 3745-33-03(F).

ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position.

2. Monitoring data required by this permit shall be submitted on a monthly frequency using Ohio EPA Discharge Monitoring Report (DMR) forms and submitted through the e-DMR platform, which is accessible through the Ohio EPA eBusiness Center.

Delegated Responsible Officials must be delegated by the Responsible Official using the eBusiness Center's delegation function. For e-DMR, any person signing and submitting the DMR must have an eBusiness Center account and Personal Identification Number (PIN). More information on e-DMR submission or the PIN and delegation processes, please view the following web page:
<https://epa.ohio.gov/divisions-and-offices/surface-water/permitting/electronic-business-services>

3. DMRs shall be submitted to Ohio EPA by the 20th day of the month following the month-of-interest.

4. 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 Part III, Item G, the results of such monitoring shall be included in the calculation and reporting of the values required in the reports specified above.

5. 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 Part III, Item I.

G. Sampling and Analytical Method

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

2. The permittee shall use test procedures from the methods cited above that are sufficiently sensitive for the pollutant parameter being analyzed. Methods are sufficiently sensitive when any of the following conditions are met:

a. The method quantification level (QL) is at or below the level of the applicable water quality criterion for the measured pollutant or pollutant parameter;

b. The method QL is above the applicable water quality criterion, but the amount of pollutant or pollutant parameter in the permittee's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or

c. The method has the lowest QL of the analytical methods approved under 40 CFR 136 or required under 40 CFR subchapter N or O for the measured pollutant or pollutant parameter.

H. Recording of Results

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

1. The date, time, and precise location of sampling or measurements;
2. The person(s) who performed the sampling or measurements;
3. The date(s) the analyses were performed on those samples;
4. The person(s) who performed the analyses;
5. The analytical techniques or methods used; and
6. The results of all analyses and measurements.

I. 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 the treatment, storage, transfer, or disposal, and the beneficial use of biosolids, which shall be kept for a minimum of five years (or longer as required by 40 CFR Part 503), including:

1. All sampling and analytical records (including internal sampling data not reported);
2. All original recordings for any continuous monitoring instrumentation;
3. All instrumentation, calibration and maintenance records;
4. All treatment works operation and maintenance records;
5. All reports required by this permit; and
6. 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 or biosolids, from the date of the sample, measurement, report, or application.
7. All records associated with professional operators shall be maintained in accordance with OAC 3745-7-09.

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 or biosolids, for retention of records shall start from the date of sample, measurement, report, or application.

J. 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 ORC 6111.05 state that effluent data and receiving water quality data shall not be considered confidential.

K. 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, 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 maintained by this permit.

L. Right of Entry

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

1. 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.
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.
4. 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.

M. Unauthorized Discharges

1. 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 Part III, Items M.2 and M.3.

2. Notice

- a. Unanticipated Bypass - The permittee shall submit notice as required in Part III, Item N.3.
- b. Anticipated Bypass - The permittee shall submit notice as required in Part III, Item N.5.

3. Prohibition of Bypass

- a. Bypass is prohibited and the Director may take enforcement action against a permittee for a bypass, unless:
 - i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - ii. 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
 - iii. The permittee submitted notices as required under Part III, Item M.2.
- b. 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 Part III, Item M.3.a.

N. Noncompliance Notification

1. Spills or Discharges that may Endanger Human Health or the Environment

a. Any spill or discharge (other than an SSO) that may endanger human health or the environment must be reported within thirty (30) minutes of discovery by calling the Ohio EPA 24-Hour Emergency Hotline toll-free at (800) 282-9378. The permittee must also, within twenty-four (24) hours, complete a 24 Hour Spill Notification report, available in and submitted to STREAMS through the eBusiness Center.

b. Any sanitary sewer overflow (SSO) that may endanger human health or the environment must be reported within twenty-four (24) hours by calling the Ohio EPA Emergency Hotline toll-free at (800) 282-9378, and calling the local Board of Health. The permittee must also complete a SSO - 5 Day Notification report, available in and submitted to STREAMS through the eBusiness Center.

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

- i. The name of the permittee, and a contact name and telephone number;
- ii. The time(s) at which the discharge occurred, and was discovered;
- iii. The approximate amount and the characteristics of the discharge;
- iv. The stream(s) affected by the discharge;
- v. The circumstances which created the discharge, and a name and telephone number of the person(s) who have knowledge of these circumstances;
- vi. What remedial steps taken or planned, and a name and telephone number of the person(s) responsible for such remedial steps;
- vii. If the noncompliance has not been corrected, the anticipated time it is expected to continue; and
- viii. If applicable, the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combine sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather.

2. Exceedance of a Daily Maximum Discharge Limit

The exceedance of a daily maximum discharge limit for any of the pollutants listed in the permit shall be reported within twenty-four (24) hours of discovery by submitting a Daily Max Limit Exceedance report, available in and shall be submitted to STREAMS through the Ohio EPA eBusiness Center.

3. Limit Exceedance due to Unanticipated Bypass

The exceedance of any discharge limit for any of the pollutants listed in the permit that is the result of an unanticipated bypass shall be reported within twenty-four (24) hours of discovery. The occurrence of an unanticipated bypass that does not result in exceedance of a discharge limit shall be reported at the time monitoring reports are submitted. In either instance, notification shall be provided by submitting an Unanticipated Bypass Notification report, available in and shall be submitted to STREAMS through the Ohio EPA eBusiness Center.

4. Limit Exceedance due to Upset

The exceedance of any discharge limit for any of the pollutants listed in the permit that is the result of an

upset shall be reported within twenty-four (24) hours of discovery. The occurrence of an upset that does not result in exceedance of a discharge limit shall be reported at the time monitoring reports are submitted. In either instance, notification shall be provided by submitting an Upset Notification Report, available in and shall be submitted to STREAMS through the Ohio EPA eBusiness Center.

5. Anticipated Bypass

If the permittee knows in advance of the need for a bypass, the permittee shall, whenever possible, provide notification at least ten (10) days beforehand by submitting an Anticipated Bypass Report, which is available in and shall be submitted to STREAMS through the eBusiness Center.

6. Noncompliance with Part I,C Schedule of Compliance Event

If the permittee is unable to meet any date for achieving a compliance event, as specified in Part I,C, notification shall be provided by submitting a Permit Compliance Schedule Update report, available in and shall be submitted to STREAMS through the Ohio EPA eBusiness Center, within fourteen (14) days of becoming aware of such a situation. The notification shall include the following:

- a. The Schedule of Compliance event which has been or will be violated;
- b. The cause of the violation;
- c. The remedial action being taken;
- d. The probable date by which compliance will occur; and
- e. The probability of complying with subsequent and final events as scheduled.

7. All other permit violations

The permittee shall electronically report all other instances of noncompliance that are not covered by reports required in Items N.1 through N.6 at the time monitoring reports are submitted, by submitting a Noncompliance (Miscellaneous) report, which is available in and shall be submitted to STREAMS through the eBusiness Center.

O. Duty to Mitigate

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

P. 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 CWA Section 309, 40 CFR 122.41(a), and ORC 6111.09 and 6111.99.

Q. Discharge Changes

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

1. 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 of this permit. 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.

2. For publicly owned treatment works (POTW):

- a. Any proposed plant modification, addition, and/or expansion that will change the capacity or efficiency of the plant;
- b. The addition of any new pollutants into the POTW from an indirect discharger which would be subject to CWA Sections 301 or 306 if it were directly discharging those pollutants; and
- c. 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.
- d. Notice in Part III, Item Q.2 shall include the following:
 - i. The name of the permittee, a contact name, an email address, and telephone number;
 - ii. The relevant change(s) outlined in Part III, Items Q.2.a, Q.2.b, or Q.2.c;
 - iii. The quality and quantity of effluent introduced into POTW;
 - iv. Any anticipated impact of the change(s) on the quantity or quality of effluent to be discharged.

3. 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. ORC 6111.44 and 6111.45 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.

4. 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:

- a. 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 122.42(a)(1)(i) through 122.42(a)(1)(iv).
- b. 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 40 CFR 122.42(a)(2)(i) through 122.42(a)(2)(iv).

R. Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established under CWA Section 307(a) for toxic pollutants and with standards for sewage sludge use or disposal established under CWA Section 405(d) within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, 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.

S. Permit Modification or Revocation

1. 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:

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

2. Pursuant to OAC 3745-33-04, 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 at least ninety days before the date on which it is desired that the modification become effective. Application forms are available and shall be submitted through STREAMS, available in the Ohio EPA eBusiness Center.

T. Transfer of Ownership or Control

This permit cannot be transferred or assigned, nor shall a new owner or successor be authorized to discharge from this facility until the following requirements are met:

- 1. No later than 60 days prior to the date of the transfer, the applicant shall submit a complete and acceptable application for permit transfer. Failure to complete the application and follow the associated instructions may result in the application being returned to the applicant. The transfer application is available in and shall be submitted through STREAMS, available on the Ohio EPA eBusiness Center
- 2. 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, the permit will be modified to reflect the new owner.

U. 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 CWA Section 311.

V. Solids Disposal

Collected grit and screenings, and other solids other than sewage sludge or biosolids, 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.

W. 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.

X. 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.

Y. 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 CWA Section 510.

Z. 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.

AA. Upset

The provisions of 40 CFR 122.41(n), relating to "Upset," are incorporated herein by reference in their entirety. For definition of "upset," see Part III, Item A. For reporting of upsets, see Part III, Item N.4

AB. 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.

AC. Signatory Requirements

All applications submitted to the Director shall be signed and certified in accordance with the requirements of 40 CFR 122.22 and OAC 3745-33-03.

All reports submitted to the Director shall be signed and certified in accordance with the requirements of 40 CFR 122.22 and OAC 3745-33-08.

AD. Other Information

1. 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.
2. ORC 6111.07(C) provides no person knowingly shall submit false information or records or fail to submit information or records pertaining to discharges of sewage, industrial wastes, or other wastes or to sludge management required as a condition of a permit or knowingly render inaccurate any monitoring device or other method required to be maintained by the director.
3. ORC 6111.99 provides that any person who purposely or knowingly violates Sections 6111.04,

6111.042, 6111.05, or division (A) of Section 6111.07 of the Revised Code shall be subject to fines and/or imprisonment.

AE. 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.

AF. Applicable Federal Rules

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

AG. 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 all sewage 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.: 221240
Public Notice Date: May 11, 2026
Comment Period Ends: June 10, 2026

Ohio EPA Permit No.: **3PG00147*HD**
Application No.: **OH0112127**

Name and Address of Applicant:

**Holmes County Commissioners
Holmes County Sanitary Engineer
7191 SR 39, P.O. Box 90
Millersburg, Ohio 44654**

Name and Address of Facility
Where Discharge Occurs:

**Berlin Wastewater Treatment Plant
4829 Township Road 356
Berlin Township, Ohio 44654
Holmes County**

Receiving Water:

Doughty Creek (RM 16.57)

Subsequent Stream Network:

**Killbuck Creek (RM 15.68), Walhonding
River, Muskingum 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.

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 effluent limits (WQBELs) 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 PARTICIPATION IN THE FORMULATION OF FINAL DETERMINATIONS

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

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

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

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

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

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

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

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

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 Holmes County Berlin Wastewater Treatment Plant (Berlin WWTP) currently serves a population of approximately 3,500 in the unincorporated community and census-designated place commonly referred to as “Berlin Village” in Berlin Township. The existing 0.300 MGD advanced treatment plant was originally constructed in 1994; the last major upgrade was in 2021. A description of the location of the discharge is appended as Figure 1. The wet-stream processes consist of an aerated grit chamber, influent pumping station, influent screening (bar screen and auger screen), two 149,000-gallon aeration tanks, two final settling tanks, tertiary disk filters (Aqua Aerobics), and ultraviolet disinfection. The treatment plant discharges to Doughty Creek via Outfall 3PG00147001 at approximately River Mile 16.57.

Sludge handling operations consist of aerobic digestion (two 149,000-gallon aerated sludge holding tanks), sludge pumping station, mechanical dewatering (mobile unit filter press), and sludge drying beds. The stabilized Class B sludge/biosolids are presently land applied for agronomic benefit in Holmes County. The County also has provisions for sludge disposal at an authorized solid waste landfill or hauling to another NPDES-permitted facility.

Pursuant to Ohio EPA Permit to Install (PTI) No. 1565781, Holmes County initially proposed to expand the capacity of the Berlin WWTP from 0.300 MGD to 0.600 MGD. Based on financial constraints, Holmes County subsequently revised the final expansion capacity to 0.450 MGD.

The intent of the expansion is to support the projected population increases and expansion of the commercial/industrial base in Berlin Township over the next three decades. The U.S. Census data indicates that the population growth in Berlin Township and Holmes County has averaged 7.8% and 4.4%, respectively, between 2010 and 2020. Based on the historical census data, it is anticipated that increases in population will continue in both Berlin Township and Holmes County. The projected flow rate through the Berlin WWTP is anticipated to increase from approximately 0.238 MGD to approximately 0.376 MGD by 2030. The treatment plant expansion has not yet been completed.

The treatment plant expansion project includes the following (see Figure 2):

- Conversion of one existing sludge holding tanks to aeration tank
- Addition of one rectangular clarifier
- Increasing the size of the UV disinfection system
- Addition of aerobic sludge digester tanks and dewatered sludge storage building
- Additional treatment for copper removal

Holmes County is proposing multiple mitigative measures to offset the anticipated loading increases associated with the proposed plant expansion. Those mitigative measures include:

- Development of a 9-Element Nonpoint Source Implementation Strategy (9-Element NPS-IS) for the Doughty Creek basin. The 9-Element NPS-IS will document the causes of impacts in Doughty Creek, identify critical areas for improvement, and describe projects to meet listed objectives of the strategy. Projects to reduce sediment and nutrient impacts in Doughty Creek can be evaluated and funded once the 9-Element NPS-IS is completed by Holmes County and approved by Ohio EPA.
- Development of industrial pretreatment limits to control the discharge of metals and Total Dissolved Solids (TDS) from manufacturing facilities to the sanitary sewers. Holmes County proposes to utilize procedures established by Ohio EPA and US EPA to establish industrial

pretreatment limits intended to prevent pass-through and interference at the Berlin WWTP.

RECEIVING WATER USE CLASSIFICATION

The facility discharges to the following 12-digit Watershed Assessment Unit (WAU): 050400030802: Headwaters Doughty Creek. Doughty Creek is described by Ohio EPA River Code: 17-153-000, County: Holmes, Ecoregion: Western Allegheny Plateau. The stream is currently designated in Ohio's WQS (OAC 3745-1-24) for the following uses: Warmwater Habitat (WWH), 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.

Comprehensive chemical, physical, and biological monitoring was conducted by Ohio EPA in the Killbuck Creek watershed, including Doughty Creek, in 2009 to identify pollutants impairing beneficial uses and to support the development of TMDLs for those pollutants. Doughty Creek, downstream of the Berlin WWTP, was found to be in attainment of the Aquatic Life use criteria. The complete study is documented in the report "*Biological and Water Quality Study of the Killbuck Creek Watershed, 2009*", Ohio EPA, June 2011; the document can be accessed via the following link: <https://epa.ohio.gov/divisions-and-offices/surface-water/reports-data/muskingum-river-watershed>. The 2009 study is the most recent evaluation of Doughty Creek.

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-N-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: <http://www.epa.ohio.gov/dsw/guidance/guidance.aspx>.

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:

Aquatic life (Warmwater Habitat)		
Toxics (metals, organics, etc.)	Average	Annual 7Q10
	Maximum	Annual 1Q10
Ammonia-N	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 3PG00147001. Data are presented for the period May 2021 – February 2026; current permit limits are provided for comparison.

Table 2 summarizes the chemical specific data for Outfall 3PG00147001 by presenting the average and maximum Projected Effluent Quality (PEQ) values for select parameters, e.g. Ammonia-N-nitrogen, nitrate-nitrite (as nitrogen), total dissolved solids (aka total filterable residue). 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. 4.32.0 software.

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.

REASONABLE POTENTIAL/EFFLUENT LIMITS/MANAGEMENT DECISIONS

After appropriate effluent limits are calculated, the reasonable potential of the discharger to violate the WQS must be determined. Each parameter is examined and placed in a defined "group". Parameters that do not have a WQS or do not require a WLA based on the initial screening are assigned to either group 1 or 2. For the allocated parameters, the preliminary effluent limits (PEL) based on the most restrictive average and maximum WLAs are selected from

Table 5. The average PEL (PEL_{avg}) is compared to the average PEQ (PEQ_{avg}) from Table 2, and the PEL_{max} is compared to the PEQ_{max}. Based on the calculated percentage of the allocated value $[(PEQ_{avg} \div PEL_{avg}) \times 100]$, or $[(PEQ_{max} \div PEL_{max}) \times 100]$, the parameters are assigned to group 3, 4, or 5. The groupings are listed in Table 6.

The recommended final effluent limits are determined by evaluating the groupings in conjunction with other applicable rules and regulations. The existing permit limits, based on 0.3 MGD, will remain in place until the expansion has been completed (See Table 7). The existing permit limits are protective of water quality. A new monitoring requirement has been included for free cyanide (low-level).

Table 8 presents the final effluent limits and monitoring requirements proposed for Outfall 3PG00147001, based on the future design capacity of 0.450 MGD, and the basis for their recommendations:

- The concentration limitations for total suspended solids (TSS), dissolved oxygen (DO), and 5-day carbonaceous biochemical oxygen demand (CBOD₅) for the expanded treatment plant are based on the Best Available Demonstrated Control Technology (BADCT) criteria in Table 5-1 of OAC 3745-1-05. These limitations are equivalent to the requirements in the existing permit.
- The existing ammonia effluent limits were evaluated in accordance with the antidegradation provisions, as well as part of the WLA procedures. Application of the BADCT-mix equation to the additional flow requires that the summer concentration limitations be slightly decreased, i.e. from 1.2 to 1.1 mg/L monthly limit. Based on the anti-backsliding provisions of OAC 3745-33-05(F), the existing plant design winter limits are more stringent than the BADCT criteria and, therefore, are recommended to continue. Application of these limits remain protective of the WQS for ammonia toxicity in Doughty Creek.
- Limits recommended for 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. Primary Contact Recreation (PCR) criteria apply to Doughty Creek.
- The Ohio EPA risk assessment (Table 6) placed copper 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 existing permit limits are more protective than the WLA recommended limits and will remain in place.
- The Ohio EPA risk assessment (Table 6) chromium, hex. chromium, lead, mercury, 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. Monitoring at a reduced frequency (e.g. 2/year) is recommended for these parameters to document that these pollutants continue to remain at low levels.
- The Ohio EPA risk assessment (Table 6) places Cadmium in Group 2. Anti-backsliding provisions will maintain the existing permit limits.
- 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, nitrate + nitrite (as N), and total Kjeldahl nitrogen (TKN). A new monitoring requirement has been included for free cyanide (low-level).
- The Method Detection Limit (MDL) is the basic measure of whether a pollutant parameter has been detected via an analytical method. It's the minimum concentration at which we can be confident that the effluent concentration is greater than zero. Ohio EPA guidance requires that all analytical results,

including results that are above the MDL but below the Quantification Level (QL), be reported on DMRs. To ensure that data is obtained that allows Ohio EPA to make water quality-related decisions, the permittee must utilize the lowest available detection methods currently approved under 40 CFR Part 136 for monitoring NPDES permit parameters. A special condition is included in Part II of the permit that provides guidance on the MDLs the permittee should use in analyzing for the following parameters: cadmium, copper, hexavalent chromium, and lead.

Additional Monitoring Requirements

Additional monitoring requirements proposed at the final effluent, influent, upstream/downstream, and/or sludge 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.

OTHER REQUIREMENTS

Compliance Schedules

Copper Final Effluent Limits - The existing permit included a compliance schedule for treatment system improvement to achieve compliance with the copper effluent limits. The construction of this system was completed on March 31, 2026. No extension of the compliance schedule is proposed for the renewal permit.

Construction Schedule/Final Effluent Limits – Construction of the approved expansion has not begun yet. A condition of the renewal permit will be to submit a permit modification request for the approved increase in flow to the approved 0.450 MGD.

The proposed language to be included in Part II of the permit is:

Construction of Wastewater Treatment Plant (WWTP) Expansion to 0.450 MGD

The permittee received Ohio EPA approval for permit-to-install (PTI) DSWPTI-1565781 on November 20, 2024, authorizing expansion of the Berlin WWTP from 0.300 MGD to 0.450 MGD and construction of multiple associated treatment upgrades. The permittee completed the antidegradation review process for the increased flow. Construction began on March 17, 2025, but only the copper-reduction portion of the PTI commenced on this date. This portion was completed on March 31, 2026. The permittee plans to bid the remaining upgrades in June 2026, with an anticipated 24-month construction period. Final effluent limitations and monitoring requirements for the 0.450 MGD WWTP expansion are provided in Part II, Item Q.

- a. The permittee shall submit an NPDES permit modification request to increase the design flow from 0.300 MGD to 0.450 MGD within 30 days of commencing construction of the PTI-approved expansion.
- b. The permittee shall notify the appropriate Ohio EPA District Office within seven days of initiating construction of the PTI-approved expansion (excluding the copper-reduction work), and shall provide notification at least 30 days prior to completion of that construction.

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 II wastewater treatment plant operator in charge of the sewage treatment plant operations discharging through Outfall 3PG00147001. 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

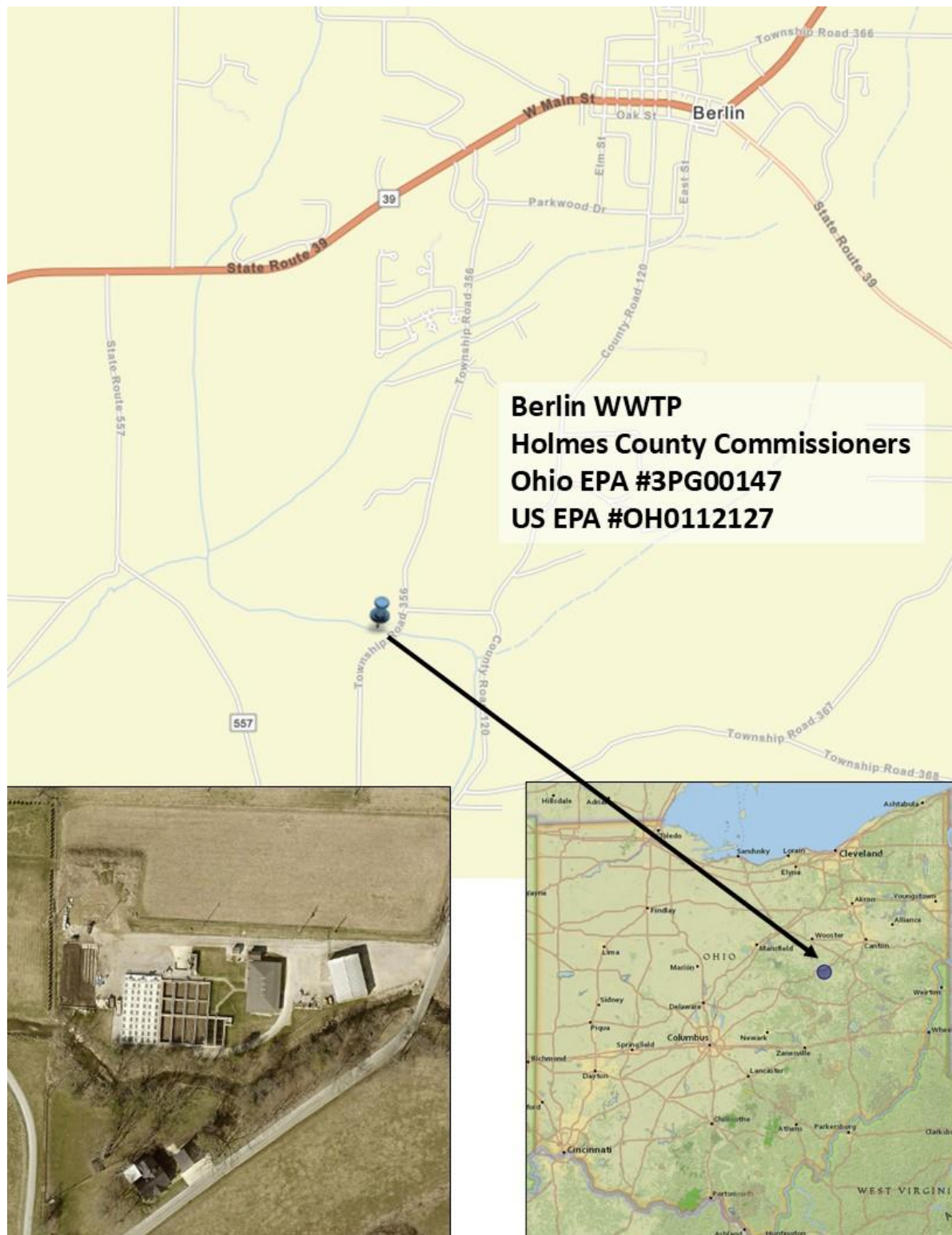


Figure 2. Process Flow Diagram

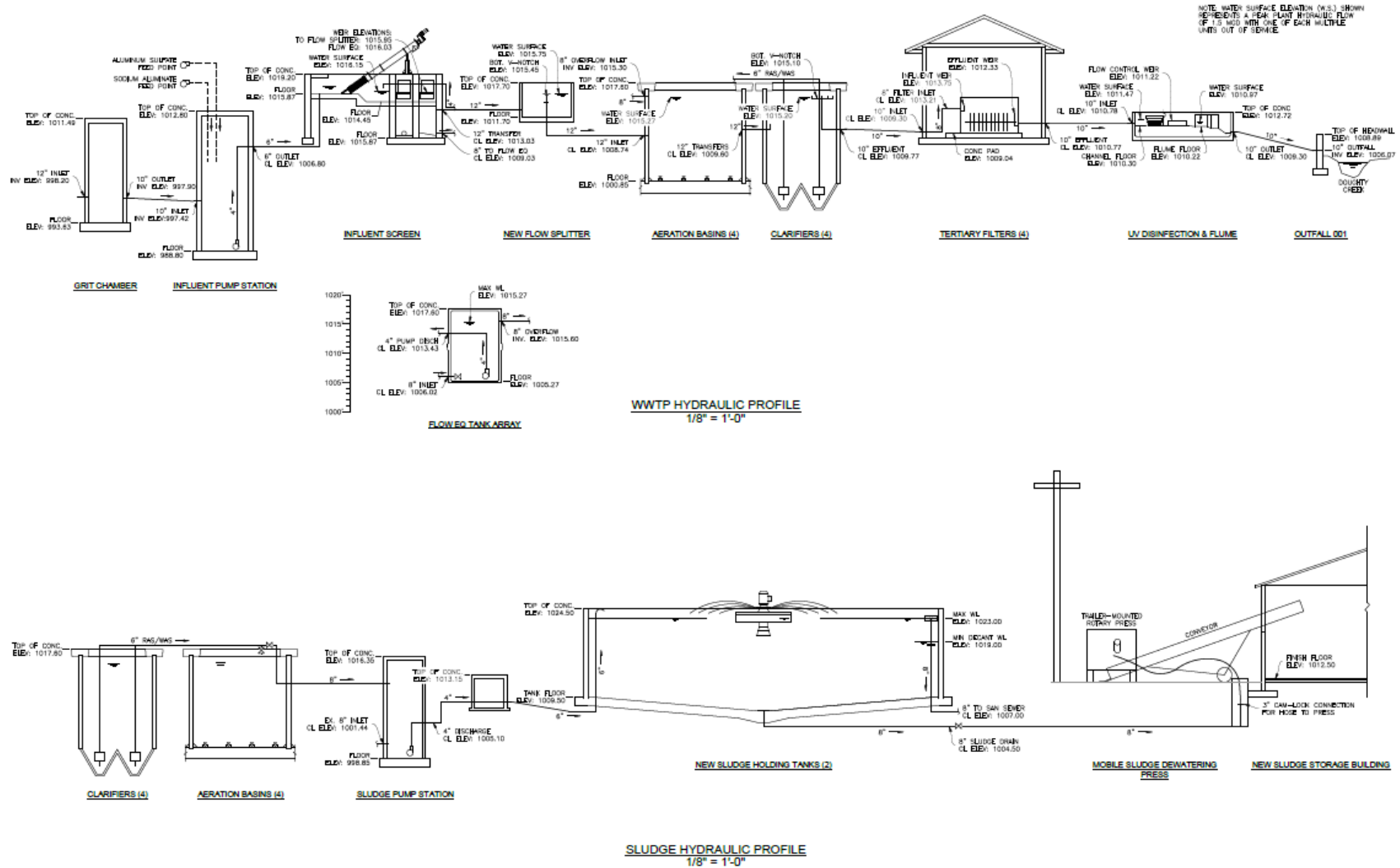


Table 1. Effluent Monitoring Data for 3PG00147001 between 5/1/2021 and 2/28/2026

Parameter	Unit	Current Limits		# Obs	Percentiles		Data Range
		30 Day	Daily		50 th	95 th	
Water Temperature	C	Monitor Only		1188	16.9	22.7	7.3-27.1
Dissolved Oxygen - Summer	mg/l		6 ^m	633	7.71	8.64	4.83-9.78
Dissolved Oxygen - Winter	mg/l		6 ^m	555	8.84	9.77	6.58-10.8
pH	S.U.		6.5-9.0	1188	7.2	7.5	6.6-7.7
Total Suspended Solids	mg/l	12	18 ^w	456	2	6.25	0-3460
Oil and Grease	mg/l		10	57	0	1.34	0-5.7
Nitrogen, Ammonia - Summer	mg/l	1.2	1.8 ^w	240	0.05	0.305	0-4.8
Nitrogen, Ammonia - Winter	mg/l	1.5	2.3 ^w	216	0	0.2	0-22.4
Nitrogen Kjeldahl, Total	mg/l	Monitor Only		57	0.8	1.45	0-2.2
Nitrite Plus Nitrate, Total	mg/l	Monitor Only		57	30.2	41.5	1.8-45.7
Phosphorus, Total (P)	mg/l	Monitor Only		117	4.04	6.11	0.52-26.4
Nickel, TR	ug/l	Monitor Only		17	2	3	0-3
Zinc, TR	ug/l	Monitor Only		25	40	78.4	22-116
Cadmium, TR	ug/l	6.5	16	63	0.9	0.9	0-0.9
Lead, TR	ug/l	Monitor Only		17	0	0	0-0
Chromium, TR	ug/l	Monitor Only		17	0	2.4	0-4
Copper, TR	ug/l	26	41	136	28	36.3	15-46
Chromium, Diss. Hexavalent	ug/l	Monitor Only		10	1.9	4.31	0-4.4
E. coli - Summer	#/100 ml	126	284 ^w	240	10	890	0-24200
Flow Rate	MGD	Monitor Only		1689	0.253	0.365	0.0293-0.624
Mercury, Total	ng/l	Monitor Only		25	1.1	4.98	0.4-14.8
Residue, Total Filterable	mg/l	Monitor Only		65	1200	1410	656-1660
CBOD 5 day - Summer	mg/l	10	15 ^w	240	0	5.05	0-310
CBOD 5 day - Winter	mg/l	10	15 ^w	217	0	4	0-8

* = 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 Name	Units	# of Obs.	# of Obs. > MDL	PEQ average	PEQ max.
Ammonia (Summer)	mg/l	160	114	0.27036	0.46723
Ammonia (Winter)	mg/l	103	46	0.37153	0.47612
Cadmium, TR	ug/l	61	37	1.0835	1.5924
Chromium, Diss. Hexavalent	ug/l	10	6	5.4202	10.015
Chromium, TR	ug/l	17	5	4.006	6.8861
Copper, TR	ug/l	135	135	33.142	38.345
Lead, TR	ug/l	17	0	--	--
Mercury	ng/l	25	25	4.6621	7.9357
Nickel, TR	ug/l	17	10	3.3399	5.1035
Nitrite Plus Nitrate	mg/l	55	55	41.163	55.012
Residue, Total Filterable	mg/l	62	62	1334.6	1488.4
Zinc, TR	ug/l	25	25	66.42	92.893

MDL = analytical method detection limit

PEQ = projected effluent quality

TR = Total Recoverable

Table 3. Water Quality Criteria in the Study Area

ParameterUnits		Outside Mixing Zone Criteria				Inside Mixing Zone Maximum
		Average			Maximum Aquatic Life	
		Human Health	Agri-culture	Aquatic Life		
Ammonia (Summer)	mg/L	--	--	1.3	--	--
Ammonia (Winter)	mg/L	--	--	2.3	--	--
Cadmium, TR	µg/L	--	50	6.1	16	33
Chromium, TR	µg/L	--	100	220	4600	9200
Chromium, Diss. Hexavalent	µg/L	--	--	11	16	31
Copper, TR	µg/L	--	500	25	41	83
Dissolved solids (ave)	mg/L	--	--	1500	--	--
Lead, TR	µg/L	--	100	28	530	1100
Mercury	ng/L	12	10000	910	1700	3400
Nickel, TR	µg/L	4600	200	140	1200	2500
Zinc, TR	µg/L	26000	25000	320	320	630
Nitrate-N + Nitrite-N	mg/L	--	100	--	--	--

TR = Total Recoverable

Table 4. Instream Conditions and Discharger Flow

Parameter	Units	Season	Value	Basis
Stream Flows				
1Q10	cfs	annual	0.196	Streamflow Variability Index - 0.54 Drainage Area - 9.73 sq.mi. USGS StreamStats Program
7Q10	cfs	annual	0.241	
		summer	0.241	
		winter	3.66	
30Q10	cfs	summer	0.412	
		winter	6.76	
90Q10	cfs	annual	0.771	
Harmonic Mean	cfs	annual	2.17	
Mixing Assumption	%	average	100	WLA procedures
	%	maximum	100	WLA procedures
Hardness, OMZ	mg/l	annual	315	901 Station, N=57
Hardness, IMZ	mg/l	annual	315	901 Station, N=57
pH	S.U.	summer	8	901 Station, N=20
		winter	8.1	801 Station, N=14
Temperature	°C	summer	20.85	901 Station, N=20
		winter	12.65	901 Station, N=32
Berlin WWTP flow	cfs (mgd)	annual	0.46417 (0.300)	Plant has been authorized to expand to 0.45 mgd. A permit modification will be submitted as construction nears completion.
Background Water Quality				
Ammonia-S	mg/L	summer	0.09	NPDES; n=11; 2<MDL; Berlin 801 Station
Ammonia-W	mg/L	winter	0.15	NPDES; n=4; 1<MDL; Berlin 801 Station
Cadmium - TR	µg/L	annual	0	OEPA; n=12; 0<MDL; Killbuck survey
Chromium - TR	µg/L	annual	0	OEPA; n=12; 0<MDL; Killbuck survey
Chromium VI - Diss	µg/L	annual		No representative data available.
Copper - TR	µg/L	annual	2.5	OEPA; n=8; 4<MDL; Killbuck survey
Dissolved solids (ave)	mg/L	annual	470	OEPA; n=11; 0<MDL; Killbuck survey
Lead - TR	µg/L	annual	1	OEPA; n=12; 11<MDL; Killbuck survey
Mercury - TR (BCC)	ng/L	annual		No representative data available.
Nickel - TR	µg/L	annual	2.4	OEPA; n=8; 8<MDL; Killbuck survey
Zinc - TR	µg/L	annual	5	OEPA; n=12; 7<MDL; Killbuck survey
Nitrate-N + Nitrite-N	mg/L	annual	2.28	OEPA; n=12; 12<MDL; Killbuck survey

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	--	--	2.37	--	--
Ammonia (Winter)	mg/L	--	--	33.61	--	--
Cadmium, TR	µg/L	--	284	9.3	23	33
Chromium VI - Diss.	µg/L	--	--	17	23	31
Chromium, TR	µg/L	--	568	334	6542	9200
Copper, TR	µg/L	--	2826	37	57	83
Dissolved solids (ave)	mg/L	--	--	2035	--	--
Lead, TR	µg/L	--	563	42	753	1100
Mercury	ng/L	12	10000	910	1700	3400
Nickel, TR	µg/L	26094	1124	211	1706	2500
Nitrate-N + Nitrite-N	mg/L	--	557	--	--	--
Zinc, TR	ug/L	147527	141852	484	453	630

These calculations are based on a design flow of 0.300 MGD

TR = Total Recoverable

Parameter	Units	Outside Mixing Zone Criteria				Inside Mixing Zone Maximum
		Average			Maximum Aquatic Life	
		Human Health	Agri-culture	Aquatic Life		
Ammonia-S	mg/L	--	--	2.02	--	--
Ammonia-W	mg/L	--	--	23.17	--	--
Cadmium - TR	µg/L	--	206	8.2	21	33
Chromium - TR	µg/L	--	412	296	5895	9200
Chromium VI - Diss	µg/L	--	--	15	21	31
Copper - TR	µg/L	--	2051	33	52	83
Dissolved solids (ave)	mg/L	--	--	1857	--	--
Lead - TR	µg/L	--	409	37	679	1100
Mercury - TR (BCC)	ng/L	12	10000	910	1700	3400
Nickel - TR	µg/L	18929	816	188	1537	2500
Nitrate-N + Nitrite-N	mg/L	--	405	--	--	--
Zinc - TR	µg/L	107019	102902	429	409	630

These calculations are based on a future approved design flow of 0.450 MGD

TR = Total Recoverable

Table 6. Parameter Assessment

Group 1:	Due to a lack of criteria, the following parameters could not be evaluated at this time.		
Group 2:	PEQ < 25 percent of WQS or all data below minimum detection limit. WLA not required. No limit recommended; monitoring optional.		
	Cadmium - TR Nickel - TR	Chromium - TR	Lead - TR
Group 3:	PEQ _{max} < 50 percent of maximum PEL and PEQ _{avg} < 50 percent of average PEL. No limit recommended; monitoring optional.		
	Chromium VI - Diss Nitrate-N + Nitrite-N	Mercury - TR (BCC)	Zinc - TR
Group 4:	PEQ _{max} >= 50 percent, but < 100 percent of the maximum PEL or PEQ _{avg} >= 50 percent, but < 100 percent of the average PEL. Monitoring is appropriate. Dissolved solids (ave)		
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.		
<u>Limits to Protect Numeric Water Quality Criteria</u>			
<u>Parameter</u>	<u>Units</u>	<u>Recommended Effluent Limits</u>	
		<u>Average</u>	<u>Maximum</u>
Copper - TR	µg/L	37	57
Copper - TR becomes a Group 5 parameter based upon the loading test [OAC 3745-2-06(B)].			

*Assessment based on current flow of 0.300 MGD

PEL = preliminary effluent limit

PEQ = projected effluent quality

S = Summer

TR = Total Recoverable

WLA = wasteload allocation

WQS = water quality standard

Table 7. Final Effluent Limits for Outfall 3PG00147 001 at Existing 0.300 MGD Capacity

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	--	6.0	--	--	PD
Total Suspended Solids	2/week	mg/L	12	18 ^b	13.7	20.5 ^b	PD
Oil & Grease	1/month	mg/L	--	10	--	--	WQS
Ammonia (as N) - Summer	2/week	mg/L	1.2	1.8 ^b	1.37	2.05 ^b	PD
Ammonia (as N) - Winter	2/week	mg/L	1.5	2.3 ^b	1.71	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)	1/2 weeks	mg/L	----- Monitor -----				M
Nickel	2/year	µg/L	----- Monitor -----				M
Zinc	2/year	µg/L	----- Monitor -----				M
Cadmium	1/month	µg/L	6.5	16	0.0074	0.0018	ABS
Lead	2/year	µg/L	----- Monitor -----				M
Chromium	2/year	µg/L	----- Monitor -----				M
Copper	1/month	µg/L	26	41	0.03	0.047	ABS
Hexavalent Chromium (Dissolved)	2/year	µg/L	----- Monitor -----				M
Free Cyanide (Low-Level)	2/year	µg/L	----- Monitor -----				M
<i>E. coli</i>	2/week	#/100 mL	126	284 ^b	--	--	WQS
Mercury (Low-Level)	2/year	ng/L	----- Monitor -----				M
Residue, Total Filterable	1/month	mg/L	----- Monitor -----				WLA
CBOD (5-day)	2/week	mg/L	10	15 ^b	11.4	17.1 ^b	PD

^a Effluent loadings based on average design discharge flow of 0.300 MGD.

^b 7-day average limit

^c **Definitions:** **ABS** = Antibalancing Rule (OAC 3745-33-05(F) and 40 CFR Part 122.44(l))
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))
WLA = Wasteload Allocation procedures (OAC 3745-2)
WQS = Ohio Water Quality Standards (OAC 3745-1)

Table 8. Final Effluent Limits for Outfall 3PG00147001 at Proposed Expansion to 0.450 MGD

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	--	6.0	--	--	BADCT
Total Suspended Solids	2/week	mg/L	12	18 ^b	20.5	30.7 ^b	BADCT
Oil & Grease	1/month	mg/L	--	10	--	--	WQS
Ammonia (as N) - Summer	2/week	mg/L	1.1	1.7 ^b	1.9	2.9 ^b	PD, ABS
Ammonia (as N) - Winter	2/week	mg/L	1.5	2.3 ^b	2.6	3.9 ^b	PD, ABS
Total Kjeldahl Nitrogen	1/month	mg/L	----- Monitor -----				M
Nitrate Plus Nitrite (as N)	1/month	mg/L	----- Monitor -----				M
Phosphorus, Total (P)	1/2 weeks	mg/L	--	--	--	--	M
Nickel	2/year	µg/L	----- Monitor -----				M
Zinc	2/year	µg/L	----- Monitor -----				M
Cadmium	1/month	µg/L	5.9	14	0.010	0.024	ABS
Lead	2/year	µg/L	----- Monitor -----				M
Chromium	2/year	µg/L	----- Monitor -----				M
Copper	1/month	µg/L	23	37	0.040	0.063	ABS
Hexavalent Chromium (Dissolved)	2/year	µg/L	----- Monitor -----				M
Free Cyanide (Low-Level)	2/year	µg/L	----- Monitor -----				M
<i>E. coli</i>	2/week	#/100 mL	126	284 ^b	--	--	WQS
Mercury (Low-Level)	2/year	ng/L	----- Monitor -----				M
Residue, Total Filterable	1/month	mg/L	1857	--	3167	--	WLA
CBOD (5-day)	2/week	mg/L	10	15 ^b	17.0	25.5 ^b	BADCT

^a Effluent loadings based on average design discharge flow of 0.450 MGD.

^b 7-day average limit

^c **Definitions:** **ABS** = Antibacksliding Rule (OAC 3745-33-05(F) and 40 CFR Part 122.44(l))
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))
WLA = Wasteload Allocation procedures (OAC 3745-2)
WQS = Ohio Water Quality Standards (OAC 3745-1)