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.: OEPAP 18-07-040 DFT
Date of Issue of Public Notice: Jul-17-2018
Name and Address of Applicant: Aqua Ohio Water Co. Inc. - Blacklick WWTP, 5481 Buenos Aires Boulevard, Westerville, OH, 43081

Name and Address of Facility Where Discharge Occurs: Aqua Ohio Water Co. Inc. - Blacklick WWTP, 4010 Signal Drive, Columbus, OH, 43235, Franklin County

Outfall Flow and Location List: 001 1,200,000 GPD 39N 52' 42" 82W 51' 33"
Receiving Stream: Blacklick Creek

Nature of Business: e pump station and aerobic sludge holding. Waste sludge is processed with belt filter press, then disposed of in landfill or transferred to another NPDES Permit holder (Quasar).

Key parameters to be limited in the permit are as follows: Dissolved Oxygen, Total Suspended Solids, Ammonia Nitrogen (NH3), Oil and Grease-Hexane Extr Method, Total Phosphorus (P), Total Residual Chlorine, E. coli, Maximum pH, Minimum pH, CBOD 5-day

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 a 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 or by mail no later than 30 days after the date of this public notice. Comments should be 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, Central District Office PO Box 1049 Columbus, OH 43216-1049.
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 Total Maximum Daily Loading (TMDL) Based Limits**
This draft permit contains TMDL-based effluent limits or other terms and conditions based on the Big Walnut Creek TMDL which may result in more stringent limits. The TMDL-based effluent limit is a continuation of the current permit’s total phosphorus 1.0 mg/L and 1.52 kg/L monthly limits. Based on the provisions of Ohio Administrative Code (OAC) rule 3745-33-05(C)(1) which require phosphorus limits be expressed as weekly and monthly limits, new weekly concentration and loading limits are proposed.

**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 (NDPES) 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 3745-33-07(D) 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 3745-1-35. 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 now available on DSW’s web site: [http://www.epa.ohio.gov/dsw/permits/individuals/draftperm.aspx](http://www.epa.ohio.gov/dsw/permits/individuals/draftperm.aspx)

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.
Application No. OH0036021

Issue 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),

Aqua Ohio Wastewater Inc.
Blacklick WWTP

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from the Aqua Ohio Water Co. Inc. - Blacklick Estates WWTP wastewater treatment works located at 4010 Signal Dr., Columbus, Ohio, Franklin County and discharging to Blacklick Creek in accordance with the conditions specified in Parts I, II, III, IV, V, and VI of this permit.

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

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

Craig W. Butler
Director

Total Pages: 61
Part I, A. - INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of the permit and lasting until the end of the 5th month of the permit, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outfall: 4PU00002-001. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

### Table - Final Outfall - 001 - Initial - 001 - Initial

<table>
<thead>
<tr>
<th>Effluent Characteristic</th>
<th>Concentration Specified Units</th>
<th>Discharge Limitations</th>
<th>Monitoring Requirements</th>
<th>Monitoring Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter</td>
<td>Maximum</td>
<td>Minimum</td>
<td>Loading* kg/day</td>
<td>Measuring Frequency</td>
</tr>
<tr>
<td></td>
<td>Weekly</td>
<td>Monthly</td>
<td>Daily</td>
<td>Weekly</td>
</tr>
<tr>
<td>0010 - Water Temperature - C</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>00300 - Dissolved Oxygen - mg/l</td>
<td>-</td>
<td>7.0</td>
<td>-</td>
<td>-</td>
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<tr>
<td>00300 - Dissolved Oxygen - mg/l</td>
<td>-</td>
<td>5.0</td>
<td>-</td>
<td>-</td>
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<tr>
<td>00530 - Total Suspended Solids - mg/l</td>
<td>-</td>
<td>30.0</td>
<td>20.0</td>
<td>-</td>
</tr>
<tr>
<td>00552 - Oil and Grease, Hexane Extr Method - mg/l</td>
<td>10.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>00610 - Nitrogen, Ammonia (NH3) - mg/l</td>
<td>-</td>
<td>7.13</td>
<td>4.75</td>
<td>-</td>
</tr>
<tr>
<td>00610 - Nitrogen, Ammonia (NH3) - mg/l</td>
<td>-</td>
<td>2.3</td>
<td>1.5</td>
<td>-</td>
</tr>
<tr>
<td>00610 - Nitrogen, Ammonia (NH3) - mg/l</td>
<td>-</td>
<td>12.0</td>
<td>8.0</td>
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<tr>
<td>00625 - Nitrogen Kjeldahl, Total - mg/l</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>00630 - Nitrite Plus Nitrate, Total - mg/l</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>00665 - Phosphorus, Total (P) - mg/l</td>
<td>-</td>
<td>-</td>
<td>0.50</td>
<td>-</td>
</tr>
<tr>
<td>00671 - Orthophosphate, Dissolved (as P) - mg/l</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>01074 - Nickel, Total Recoverable - ug/l</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>01094 - Zinc, Total Recoverable - ug/l</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>01113 - Cadmium, Total Recoverable - ug/l</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>01114 - Lead, Total Recoverable - ug/l</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>01118 - Chromium, Total Recoverable - ug/l</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>01119 - Copper, Total Recoverable - ug/l</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Parameter</td>
<td>Concentration Specified Units</td>
<td>Discharge Limitations</td>
<td>Monitoring Requirements</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------</td>
<td>-----------------------</td>
<td>------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>kg/day Loading* kg/day</td>
<td></td>
<td>Frequency Type</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Monitoring</td>
<td></td>
</tr>
<tr>
<td>31648 - E. coli - #/100 ml</td>
<td>- -</td>
<td>362</td>
<td>161</td>
<td>- - -</td>
</tr>
<tr>
<td>50050 - Flow Rate - MGD</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>- - -</td>
</tr>
<tr>
<td>50060 - Chlorine, Total Residual - mg/l</td>
<td>0.021 -</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>50092 - Mercury, Total (Low Level) - ng/l</td>
<td>0.00021 -</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>61425 - Acute Toxicity, Ceriodaphnia dubia - TUa</td>
<td>- -</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>61426 - Chronic Toxicity, Ceriodaphnia dubia - TUc</td>
<td>- -</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>61427 - Acute Toxicity, Pimephales promelas - TUa</td>
<td>- -</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>61428 - Chronic Toxicity, Pimephales promelas - TUc</td>
<td>- -</td>
<td>-</td>
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<td>-</td>
</tr>
<tr>
<td>61941 - pH, Maximum - S.U.</td>
<td>9.0 -</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>61942 - pH, Minimum - S.U.</td>
<td>- 6.5</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>70300 - Residue, Total Filterable - mg/l</td>
<td>- -</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>80082 - CBOD 5 day - mg/l</td>
<td>- -</td>
<td>15.0</td>
<td>10.0</td>
<td>-</td>
</tr>
<tr>
<td>80082 - CBOD 5 day - mg/l</td>
<td>- -</td>
<td>40.0</td>
<td>25.0</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes for station 4PU00002-001:

* Effluent loadings based on average design flow of 1.2 MGD.

a. Total residual chlorine - See Part II, Item K
b. Mercury - See Part II, Item P.
c. Whole effluent toxicity monitoring - See Part II, Item U.
d. Effluent from a 24 hour composite shall be prioritized for whole effluent toxicity testing. If a shortage of effluent exists during the week of whole effluent toxicity testing, multiple grab samples shall be taken for other parameters including ammonia, TSS, CBOD5, or Phosphorus to allow a continuation of sampling with 24 hour composite effluent for whole effluent toxicity. Note any such occurrence in the monthly DMR.
e. Fall/Spring monitoring months consist of March, April, and November.
Winter-Short monitoring months consist of January, February, and December.
f. Dissolved orthophosphate - See Part II, Item N.
### Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning 6 months after the effective date 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: 4PU00002-001. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

#### Table - Final Outfall - 001 - Final

<table>
<thead>
<tr>
<th>Effluent Characteristic</th>
<th>Parameter</th>
<th>Concentration Specified Units</th>
<th>Discharge Limitations</th>
<th>Monitoring Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Maximum Minimum Weekly Monthly</td>
<td>Loading* kg/day Daily Weekly Monthly</td>
<td>Measuring Frequency Sampling Type Monitoring Months</td>
</tr>
<tr>
<td>0010 - Water Temperature - C</td>
<td>- - - - - -</td>
<td>- - - - -</td>
<td>- - - - -</td>
<td>1/Day Continuous All</td>
</tr>
<tr>
<td>00300 - Dissolved Oxygen - mg/l</td>
<td>- 5.0 - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>1/Day Multiple Grab Winter</td>
</tr>
<tr>
<td>00300 - Dissolved Oxygen - mg/l</td>
<td>- 7.0 - -</td>
<td>- - - -</td>
<td>- - - -</td>
<td>1/Day Multiple Grab Summer</td>
</tr>
<tr>
<td>00530 - Total Suspended Solids - mg/l</td>
<td>- - 30.0 20.0</td>
<td>- 136.2 90.8</td>
<td>3/Week 24hr Composite All</td>
<td></td>
</tr>
<tr>
<td>00552 - Oil and Grease, Hexane Extr Method - mg/l</td>
<td>10.0 - -</td>
<td>- - -</td>
<td>- - -</td>
<td>1 / 2 Weeks Grab All</td>
</tr>
<tr>
<td>00610 - Nitrogen, Ammonia (NH₃) - mg/l</td>
<td>- - 2.3 1.5</td>
<td>- 10.4 6.8</td>
<td>3/Week 24hr Composite Summer</td>
<td></td>
</tr>
<tr>
<td>00610 - Nitrogen, Ammonia (NH₃) - mg/l</td>
<td>- - 7.13 4.75</td>
<td>- 32.4 21.6</td>
<td>3/Week 24hr Composite Fall/Spring</td>
<td></td>
</tr>
<tr>
<td>00610 - Nitrogen, Ammonia (NH₃) - mg/l</td>
<td>- - 12.0 8.0</td>
<td>- 54.5 36.3</td>
<td>3/Week 24hr Composite Winter - Short</td>
<td></td>
</tr>
<tr>
<td>00625 - Nitrogen Kjeldahl, Total - mg/l</td>
<td>- - - -</td>
<td>- - -</td>
<td>- - -</td>
<td>1/Month 24hr Composite All</td>
</tr>
<tr>
<td>00630 - Nitrite Plus Nitrate, Total - mg/l</td>
<td>- - - -</td>
<td>- - -</td>
<td>- - -</td>
<td>1/Month 24hr Composite All</td>
</tr>
<tr>
<td>00665 - Phosphorus, Total (P) - mg/l</td>
<td>- - - 0.50</td>
<td>- - 2.3</td>
<td>1/Week 24hr Composite All</td>
<td></td>
</tr>
<tr>
<td>00671 - Orthophosphate, Dissolved (as P) - mg/l</td>
<td>- - - -</td>
<td>- - -</td>
<td>- - -</td>
<td>1/Month Grab All</td>
</tr>
<tr>
<td>01074 - Nickel, Total Recoverable - ug/l</td>
<td>- - - -</td>
<td>- - -</td>
<td>- - -</td>
<td>1/Quarter 24hr Composite Quarterly</td>
</tr>
<tr>
<td>01094 - Zinc, Total Recoverable - ug/l</td>
<td>- - - -</td>
<td>- - -</td>
<td>- - -</td>
<td>1/Quarter 24hr Composite Quarterly</td>
</tr>
<tr>
<td>01113 - Cadmium, Total Recoverable - ug/l</td>
<td>- - - -</td>
<td>- - -</td>
<td>- - -</td>
<td>1/Quarter 24hr Composite Quarterly</td>
</tr>
<tr>
<td>01114 - Lead, Total Recoverable - ug/l</td>
<td>- - - -</td>
<td>- - -</td>
<td>- - -</td>
<td>1/Quarter 24hr Composite Quarterly</td>
</tr>
<tr>
<td>01118 - Chromium, Total Recoverable - ug/l</td>
<td>- - - -</td>
<td>- - -</td>
<td>- - -</td>
<td>1/Quarter 24hr Composite Quarterly</td>
</tr>
<tr>
<td>01119 - Copper, Total Recoverable - ug/l</td>
<td>- - - -</td>
<td>- - -</td>
<td>- - -</td>
<td>1/Month 24hr Composite All</td>
</tr>
<tr>
<td>Parameter</td>
<td>Concentration Specified Units</td>
<td>Loading* kg/day</td>
<td>Measuring Frequency</td>
<td>Sampling Type</td>
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</tr>
<tr>
<td></td>
<td>Maximum Minimum Weekly Monthly Daily Weekly Monthly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31648 - E. coli - #/100 ml</td>
<td>- - 284 126 - - -</td>
<td>3/Week Grab</td>
<td>Summer</td>
<td></td>
</tr>
<tr>
<td>50050 - Flow Rate - MGD</td>
<td>- - - - - - -</td>
<td>1/Day Continuous</td>
<td>All</td>
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</tr>
<tr>
<td>50060 - Chlorine, Total Residual - mg/l</td>
<td>0.021 - - - - - - -</td>
<td>1/Day Multiple Grab</td>
<td>Summer</td>
<td></td>
</tr>
<tr>
<td>50092 - Mercury, Total (Low Level) - ng/l</td>
<td>- - - - - - -</td>
<td>1/Quarter Grab</td>
<td>Quarterly</td>
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<tr>
<td>61425 - Acute Toxicity, Ceriodaphnia dubia - TUa</td>
<td>- - - - - - -</td>
<td>1/Year 24hr Composite</td>
<td>August</td>
<td></td>
</tr>
<tr>
<td>61426 - Chronic Toxicity, Ceriodaphnia dubia - TUb</td>
<td>- - - - - - -</td>
<td>1/Year 24hr Composite</td>
<td>August</td>
<td></td>
</tr>
<tr>
<td>61427 - Acute Toxicity, Pimephales promelas - TUA</td>
<td>- - - - - - -</td>
<td>1/Year 24hr Composite</td>
<td>August</td>
<td></td>
</tr>
<tr>
<td>61428 - Chronic Toxicity, Pimephales promelas - TUb</td>
<td>- - - - - - -</td>
<td>1/Year 24hr Composite</td>
<td>August</td>
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<tr>
<td>61941 - pH, Maximum - S.U.</td>
<td>9.0 - - - - - - -</td>
<td>1/Day Multiple Grab</td>
<td>All</td>
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<tr>
<td>61942 - pH, Minimum - S.U.</td>
<td>- 6.5 - - - - - - -</td>
<td>1/Day Multiple Grab</td>
<td>All</td>
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<tr>
<td>70300 - Residue, Total Filterable - mg/l</td>
<td>- - - - - - -</td>
<td>1/Month 24hr Composite</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>80082 - CBOD 5 day - mg/l</td>
<td>- - 40.0 25.0 - 181.6 113.5</td>
<td>3/Week 24hr Composite</td>
<td>Winter</td>
<td></td>
</tr>
<tr>
<td>80082 - CBOD 5 day - mg/l</td>
<td>- - 15.0 10.0 - 68.1 45.4</td>
<td>3/Week 24hr Composite</td>
<td>Summer</td>
<td></td>
</tr>
</tbody>
</table>

Notes for station 4PU00002-001:

* Effluent loadings based on average design flow of 1.2 MGD.

a. Total residual chlorine - See Part II, Item K
b. Mercury - See Part II, Item P.
c. Whole effluent toxicity monitoring - See Part II, Item U.
d. Effluent from a 24 hour composite shall be prioritized for whole effluent toxicity testing. If a shortage of effluent exists during the week of whole effluent toxicity testing, multiple grab samples shall be taken for other parameters including ammonia, TSS, CBOD5, or Phosphorus to allow a continuation of sampling with 24 hour composite effluent for whole effluent toxicity. Note any such occurrence in the monthly DMR.
e. Fall/Spring monitoring months consist of March, April, and November.
Winter-Short monitoring months consist of January, February, and December.
f. Dissolved orthophosphate - See Part II, Item N.
Part I, B. - SSO MONITORING EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. SSO Monitoring. During the period beginning on the effective date of the permit and lasting until the expiration date, the permittee shall monitor at Station Number 4PU00002-300, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - SSO Monitoring - 300 - Final

<table>
<thead>
<tr>
<th>Effluent Characteristic</th>
<th>Discharge Limitations</th>
<th>Monitoring Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter</td>
<td>Concentration Specified Units</td>
<td>Loading* kg/day</td>
</tr>
<tr>
<td>74062 - Overflow Occurrence - No./Month</td>
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</table>

NOTES for Station Number 4PU00002-300:

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 E and F.
Part I, B. - SLUDGE MONITORING REQUIREMENTS

2. Sludge Monitoring. During the period beginning on the effective date of the permit and lasting until the expiration date, the permittee shall monitor the treatment works' final sludge at Station Number 4PU00002-586, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sludge sampling.

Table - Sludge Monitoring - 586 - Final

<table>
<thead>
<tr>
<th>Effluent Characteristic</th>
<th>Parameter</th>
<th>Concentration Specified Units</th>
<th>Discharge Limitations</th>
<th>Monitoring Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>51129 - Sludge Fee Weight - dry tons</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

NOTES for Station Number 4PU00002-586

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

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

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

d. See Part II, Items Q, R, S, and T.
Part I, B. - SLUDGE MONITORING REQUIREMENTS

3. Sludge Monitoring. During the period beginning on the effective date of the permit and lasting until the expiration date, the permittee shall monitor the treatment works' final sludge at Station Number 4PU00002-588, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sludge sampling.

Table - Sludge Monitoring - 588 - Final

<table>
<thead>
<tr>
<th>Effluent Characteristic</th>
<th>Discharge Limitations</th>
<th>Monitoring Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter</td>
<td>Concentration Specified Units</td>
<td>Loading* kg/day</td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>Minimum</td>
</tr>
<tr>
<td>80991 - Sludge Volume, Gallons - Gals</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

NOTES for Station Number 4PU00002-588:

a. Monitoring is required when sewage sludge is removed from the permittee's facility for transfer to another NPDES permit holder. The total sludge weight or sludge volume transferred to another NPDES permit holder for the entire year shall be reported on the December Discharge Monitoring Report (DMR).

b. If no sewage sludge is removed from the permittee's facility for transfer to another NPDES permit holder during the year, select the "No Discharge" check box on the data entry form and PIN the eDMR.

c. Sludge weight is a calculated total for the year. To convert from gallons of liquid sewage sludge to dry tons of sewage sludge: dry tons = gallons x 8.34 (lbs/gallon) x 0.0005 (tons/lb) x decimal fraction total solids.

d. See Part II, Items Q, R, S, and T.
Part I, B. - INFLUENT MONITORING REQUIREMENTS

4. Influent Monitoring. During the period beginning on the effective date of the permit and lasting until the expiration date, the permittee shall monitor the treatment works' influent wastewater at Station Number 4PU00002-601, 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

<table>
<thead>
<tr>
<th>Effluent Characteristic</th>
<th>Discharge Limitations</th>
<th>Monitoring Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Concentration Specified Units</td>
<td>Loading* kg/day</td>
</tr>
<tr>
<td>00530 - Total Suspended Solids - mg/l</td>
<td>- - - - - - -</td>
<td>- - - - - -</td>
</tr>
<tr>
<td>61941 - pH, Maximum - S.U.</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
</tr>
<tr>
<td>61942 - pH, Minimum - S.U.</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
</tr>
<tr>
<td>80082 - CBOD 5 day - mg/l</td>
<td>- - - - - -</td>
<td>- - - - - -</td>
</tr>
</tbody>
</table>
Part I, B. - UPSTREAM MONITORING REQUIREMENTS

5. Upstream Monitoring. During the period beginning on the effective date of the permit and lasting until the expiration date, the permittee shall monitor the receiving stream, upstream of the point of discharge at Station Number 4PU00002-801, 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

<table>
<thead>
<tr>
<th>Effluent Characteristic</th>
<th>Discharge Limitations</th>
<th>Monitoring Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter</td>
<td>Concentration Specified Units</td>
<td>Loading* kg/day</td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>Minimum</td>
</tr>
<tr>
<td>00010 - Water Temperature - C</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>00300 - Dissolved Oxygen - mg/l</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>00400 - pH - S.U.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>00610 - Nitrogen, Ammonia (NH3) - mg/l</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>00665 - Phosphorus, Total (P) - mg/l</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>31648 - E. coli - #/100 ml</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>61432 - 48-Hr. Acute Toxicity Ceriodaphnia dubia - % Affected</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>61435 - 96-Hr. Acute Toxicity Pimephales promela - % Affected</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>61438 - 7-Day Chronic Toxicity Ceriodaphnia dubia - % Affected</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>61441 - 7-Day Chronic Toxicity Pimephales promelas - % Affected</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

NOTES for Station Number 4PU00002-801:

a. Sampling shall be conducted the same day as 001 and 901.
b. Whole effluent toxicity - See Part II Item U.
Part I, B. - DOWNSTREAM-FARFIELD MONITORING REQUIREMENTS

6. Downstream-Farfield Monitoring. During the period beginning on the effective date of the permit and lasting until the expiration date, the permittee shall monitor the receiving stream, downstream of the point of discharge, at Station Number 4PU00002-901, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - Downstream-Farfield Monitoring - 901 - Final

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Concentration Specified Units</th>
<th>Discharge Limitations</th>
<th>Monitoring Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>00010 - Water Temperature - °C</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>00300 - Dissolved Oxygen - mg/l</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>00400 - pH - S.U.</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>00610 - Nitrogen, Ammonia (NH3) - mg/l</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>00665 - Phosphorus, Total (P) - mg/l</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>00900 - Hardness, Total (CaCO3) - mg/l</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>31648 - E. coli - #/100 ml</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

NOTES for Station Number 4PU00002-901:

a. Sampling shall be conducted the same day as 001 and 801.
Part I, C - Schedule of Compliance

i. E. Coli Final Limits

a. The permittee shall achieve compliance with the final effluent limitations for outfall 4PU00002-001 as specified in Part I.A.2 of this NPDES permit and meet E. coli limits as soon as possible but no later than 6 months from the effective date of this NPDES permit. (Event Code 05699)

b. The permittee shall submit written verification to the Ohio EPA, Central District Office, Division of Surface Water, of the completion of step I.C.i.a within 14 days after achieving the limit.

ii. Whole Effluent Toxicity Evaluation

a. The permittee shall submit to the Ohio EPA, Central District Office, Division of Surface Water, a report within 12 Months regarding the use of treatment additives used, such as ferric chloride and polymer, to determine optimal rates while minimizing any toxicity effects. (Event Code 96299)
Part II, Other Requirements

A. Operator Certification Requirements

1. Classification

a. In accordance with Ohio Administrative Code 3745-7-04, the sewage treatment facility at this facility shall be classified as a Class III facility.

b. All sewerage (collection) systems that are tributary to this treatment works are Class II sewerage systems in accordance with paragraph (B)(1)(a) of rule 3745-7-04 of the Ohio Administrative Code.

2. Operator of Record

a. The permittee shall designate one or more operator of record to oversee the technical operation of the treatment works and sewerage (collection) system in accordance with paragraph (A)(2) of rule 3745-7-02 of the Ohio Administrative Code.

b. Each operator of record shall have a valid certification of a class equal to or greater than the classification of the treatment works as defined in Part II, Item A.1 of this NPDES permit.

c. Within three days of a change in an operator of record, the permittee shall notify the Director of the Ohio EPA of any such change on a form acceptable to Ohio EPA. The appropriate form can be found at the following website:

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

d. Within 60 days of the effective date of this permit, the permittee shall notify the Director of Ohio EPA of the operators of record on a form acceptable to Ohio EPA.

e. The operator of record for a class II, III, or IV treatment works or class II sewerage system may be replaced by a backup 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.

f. Upon proper justification, such as military leave or long term illness, the director may authorize the replacement of the operator of record for a class II, III, or IV treatment works or class II sewerage system by a backup 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 operator of record is physically present at the facility in accordance with the minimum staffing requirements per paragraph (C)(1) of rule 3745-7-04 of the Ohio Administrative Code or the requirements from an approved 3745-7-04(C) minimum staffing hour reduction plan.

b. Sewerage (collection) system Operators of Record are not required to meet minimum staffing requirements in paragraph (C)(1) 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 (such as enforcement status, history of noncompliance, or provisions included in the plan) 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.

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

<table>
<thead>
<tr>
<th>Sampling Station</th>
<th>Description of Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>4PU00002-001</td>
<td>Final effluent from post aeration tank prior to entering Blacklick Creek. (Lat: 39N 52' 43&quot;; Long: 82W 51' 34&quot;)</td>
</tr>
<tr>
<td>4PU00002-300</td>
<td>System wide sanitary sewer overflow occurrences</td>
</tr>
<tr>
<td>4PU00002-586</td>
<td>Sludge hauled to a mixed solid waste sanitary landfill</td>
</tr>
<tr>
<td>4PU00002-588</td>
<td>Sludge transferred to another NPDES permit holder</td>
</tr>
<tr>
<td>4PU00002-601</td>
<td>Plant Influent</td>
</tr>
<tr>
<td>4PU00002-801</td>
<td>Upstream Station, outside the effluent/receiving stream interaction</td>
</tr>
<tr>
<td>4PU00002-901</td>
<td>Downstream station, just north of the Winchester Pike bridge</td>
</tr>
</tbody>
</table>

C. All parameters, except flow, need not be monitored on days when the plant is not normally staffed (Saturdays, Sundays, and Holidays). On those days, report "AN" on the monthly report form.
D. Outfall Signage

The permittee shall maintain a permanent sign 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.

E. Sanitary Sewer Overflow Reporting

A sanitary sewer overflow is an overflow, spill, release, or diversion of wastewater from a sanitary sewer system. SSOs do not include wet weather discharges from combined sewer overflows specifically listed in Part II of this NPDES permit (if any). All SSOs are prohibited.

1. Reporting for SSOs That Imminently and Substantially Endanger Human Health

a) Immediate Notification

You must notify Ohio EPA (1-800-282-9378) and the appropriate Board of Health (i.e., city or county) within 24 hours of learning of any SSO from your sewers or from your maintenance contract areas that may imminently and substantially endanger human health. The telephone report must identify the location, estimated volume and receiving water, if any, of the overflow. An SSO that may imminently and substantially endanger human health includes dry weather overflows, major line breaks, overflow events that result in fish kills or other significant harm, overflows that expose the general public to contact with raw sewage, and overflow events that occur in sensitive waters and high exposure areas such as protection areas for public drinking water intakes and waters where primary contact recreation occurs.
b) Follow-Up Written Report

Within 5 days of the time you become aware of any SSO that may imminently and substantially endanger human health, you must provide the Ohio EPA Central District Office Division of Surface Water a written report that includes:

(i) the estimated date and time when the overflow began and stopped or will be stopped (if known);
(ii) the location of the SSO including an identification number or designation if one exists;
(iii) the receiving water (if there is one);
(iv) an estimate of the volume of the SSO (if known);
(v) a description of the sewer system component from which the release occurred (e.g., manhole, constructed overflow pipe, crack in pipe);
(vi) the cause or suspected cause of the overflow;
(vii) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps; and
(viii) steps taken or planned to mitigate the impact(s) of the overflow and a schedule of major milestones for those steps.

An acceptable 5-day follow-up written report can be filled-in or downloaded from the Ohio EPA Division of Surface Water Permits Program Technical Assistance Web page at http://www.epa.ohio.gov/dsw/permits/technical_assistance.aspx.

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

a) Discharge Monitoring Reports (DMR)

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

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

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

(ii) A table that lists the date that an overflow occurred, the unique ID of the overflow, the name of affected receiving waters (if any), and the estimated volume of the overflow (in millions of gallons). The annual report may summarize information regarding overflows of less than approximately 1,000 gallons.

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

Not later than March 31 of each year, you must submit one copy of the annual report for the previous calendar year. The report may be submitted electronically using the NPDES Annual Sanitary Sewer Overflow Report available through the Ohio EPA eBusiness Center, Division of Surface Water NPDES Permit Applications service. Alternatively, you may submit one hardcopy of the report to the appropriate Ohio EPA district office and one copy to: Ohio EPA; Division of Surface Water; NPDES Permit Unit; P.O. Box 1049; Columbus, OH, 43216-1049. An acceptable annual SSO report can be filled-in or downloaded from the Ohio EPA Division of Surface Water Permits Program Technical Assistance Web page at


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.

F. 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.

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

I. 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.

J. The treatment works must obtain at least 85 percent removal of carbonaceous biochemical oxygen demand (five-day) and suspended solids (see Part III, Item 1).

K. The parameters below have had effluent limitations established that are below the Ohio EPA Quantification Level (OEPA QL) for the approved analytical procedure promulgated at 40 CFR 136. OEPA QLs may be expressed as Practical Quantification Levels (PQL) or Minimum Levels (ML).

Compliance with an effluent limit that is below the OEPA QL is determined in accordance with ORC Section 6111.13 and OAC Rule 3745-33-07(C). For maximum effluent limits, any value reported below the OEPA QL shall be considered in compliance with the effluent limit. For average effluent limits, compliance shall be determined by taking the arithmetic mean of values reported for a specified averaging period, using zero (0) for any value reported at a concentration less than the OEPA QL, and comparing that mean to the appropriate average effluent limit. An arithmetic mean that is less than or equal to the average effluent limit shall be considered in compliance with that limit.

The permittee must utilize the lowest available detection method currently approved under 40 CFR Part 136 for monitoring these parameters.
REPORTING:

All analytical results, even those below the OEPA QL (listed below), shall be reported. Analytical results are to be reported as follows:

1. Results above the QL: Report the analytical result for the parameter of concern.

2. Results above the MDL, but below the QL: Report the analytical result, even though it is below the QL.

3. Results below the MDL: Analytical results below the method detection limit shall be reported as "below detection" using the reporting code "AA".

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>PQL</th>
<th>ML</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Residual Chlorine</td>
<td>0.050 mg/l</td>
<td>--</td>
</tr>
</tbody>
</table>

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

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

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

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

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

O. Quantification Levels

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>QL (ug/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selenium</td>
<td>5</td>
</tr>
<tr>
<td>Silver</td>
<td>1.3</td>
</tr>
</tbody>
</table>

If there is not an available method which are sufficiently sensitive, the method which has the lower QL of the analytical methods approved under 40 C.F.R. Part 136 shall be used.

P. Mercury Analytical Methods

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.

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

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

S. No later than March 1 of each calendar year, the Permittee shall submit a report summarizing the sewage sludge disposal, use, storage, or treatment activities of the Permittee during the previous calendar year. The report shall be submitted through the Ohio EPA eBusiness Center, Division of Surface Water NPDES Permit Applications service.
T. Each day when sewage sludge is removed from the wastewater treatment plant for use or disposal, a representative sample of sewage sludge shall be collected and analyzed for percent total solids. This value of percent total solids shall be used to calculate the total Sewage Sludge Weight (Discharge Monitoring Report code 70316) and/or total Sewage Sludge Fee Weight (Discharge Monitoring Report code 51129) removed from the treatment plant on that day. The results of the daily monitoring, and the weight calculations, shall be maintained on site for a minimum of five years. The test methodology used shall be from the latest edition, Part 2540 G of Standard Methods for the Examination of Water and Wastewater American Public Health Association, American Water Works Association, and Water Environment Federation. To convert from gallons of liquid sewage sludge to dry tons of sewage sludge:  dry tons = gallons x 8.34 (lbs/gallon) x 0.0005 (tons/lb) x decimal fraction total solids.

U. Biomonitoring Program Requirements

The entity shall continue an effluent biomonitoring program to determine the toxicity of the effluent from outfall 4PU00002-001.

General Requirements

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

Testing Requirements

1. Chronic Bioassays

For the life of this permit, the permittee shall conduct annual chronic toxicity tests using Ceriodaphnia dubia and fathead minnows (Pimephales promelas) on effluent samples from outfall 4PU00002-001. These tests shall be conducted as specified in Section 3 of the biomonitoring guidance.

2. Acute Bioassays

For the life of this permit, the permittee shall conduct annual definitive acute toxicity tests using Ceriodaphnia dubia and fathead minnows (Pimephales promelas) on effluent samples from outfall 4PU00002-001. These tests shall be conducted as specified in Section 2 of the biomonitoring guidance. Acute toxicity tests need not be performed for months in which chronic toxicity tests are conducted. Acute endpoints, as described in Section 2.H. of the biomonitoring guidance, shall be derived from the chronic test.
3. Testing of Ambient Water

In conjunction with the acute and chronic toxicity tests, upstream control water shall be collected at a point outside the zone of effluent and receiving water interaction at station 4PU00002-801. Testing of ambient waters shall be done in accordance with Sections 2 and 3 of the biomonitoring guidance.

4. Data Review

a. Reporting

Following completion of each annual bioassay requirement, the permittee shall report results of the tests in accordance with Sections 2.H.1., 2.H.2.a., 3.H.1., and 3.H.2.a. of the biomonitoring guidance, including reporting the results on the monthly DMR and submitting a copy of the complete test report to Ohio EPA, Division of Surface Water. The test report may be submitted electronically using the acute or chronic NPDES Biomonitoring Report Form available through the Ohio EPA eBusiness Center, Division of Surface Water NPDES Permit Applications service. Alternatively, the permittee may submit a hard copy of the report to Ohio EPA, Division of Surface Water, NPDES Permit Unit, P.O. Box 1049, Columbus, OH, 43216-1049. Based on Ohio EPA's evaluation of the results, this permit may be modified to require additional biomonitoring, require a toxicity reduction evaluation, and/or contain whole effluent toxicity limits.

b. Definitions

\[ TU_a = \text{Acute Toxicity Units} = \frac{100}{LC50} \]

\[ TU_c = \text{Chronic Toxicity Units} = \frac{100}{IC25} \]

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

\[ TU_c = \text{Chronic Toxic Units} = \frac{100}{\text{square root of (NOEC x LOEC)}} \]
PART III - GENERAL CONDITIONS

1. DEFINITIONS

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

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

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

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

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

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

"MGD" means million gallons per day.

"mg/l" means milligrams per liter.

"ug/l" means micrograms per liter.

"ng/l" means nanograms per liter.

"S.U." means standard pH unit.

"kg/day" means kilograms per day.

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

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

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

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

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

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

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

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

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
"Sewage sludge" means a solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works as defined in section 6111.01 of the Revised Code. "Sewage sludge" includes, but is not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment processes. "Sewage sludge" does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator, grit and screenings generated during preliminary treatment of domestic sewage in a treatment works, animal manure, residue generated during treatment of animal manure, or domestic septage.

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

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

2. GENERAL EFFLUENT LIMITATIONS

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

A. In amounts that will settle to form putrescent, or otherwise objectionable, sludge deposits; or that will adversely affect aquatic life or water fowl;

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

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

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

E. In amounts that are conducive to the growth of aquatic weeds or algae to the extent that such growths become inimical to more desirable forms of aquatic life, or create conditions that are unsightly, or constitute a nuisance in any other fashion;

F. In amounts that will impair designated instream or downstream water uses.

3. FACILITY OPERATION AND QUALITY CONTROL

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

A. At all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee necessary to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with conditions of the permit.

B. The permittee shall effectively monitor the operation and efficiency of treatment and control facilities and the quantity and quality of the treated discharge.

C. Maintenance of wastewater treatment works that results in degradation of effluent quality shall be scheduled during non-critical water quality periods and shall be carried out in a manner approved by Ohio EPA as specified in the Paragraph in the PART III entitled, "UNAUTHORIZED DISCHARGES".
4. REPORTING

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

http://www.epa.ohio.gov/dsw/edmr/eDMR.aspx

Alternatively, if you are unable to use e-DMR due to a demonstrated hardship, monitoring data may be submitted on paper DMR forms provided by Ohio EPA. Monitoring data shall be typed on the forms. Please contact Ohio EPA, Division of Surface Water at (614) 644-2050 if you wish to receive paper DMR forms.

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

1. For corporations - 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 the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

2. For partnerships - a general partner;

3. For a sole proprietorship - the proprietor; or,

4. For a municipality, state or other public facility - a principal executive officer, a ranking elected official or other duly authorized employee.

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

http://epa.ohio.gov/dsw/edmr/eDMR.aspx

C. DMRs submitted using e-DMR shall be submitted to Ohio EPA by the 20th day of the month following the month-of-interest. DMRs submitted on paper must include the original signed DMR form and shall be mailed to Ohio EPA at the following address so that they are received no later than the 15th day of the month following the month-of-interest:

Ohio Environmental Protection Agency
Lazarus Government Center
Division of Surface Water - PCU
P.O. Box 1049
Columbus, Ohio 43216-1049
D. If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified in Section 5. SAMPLING AND ANALYTICAL METHODS, the results of such monitoring shall be included in the calculation and reporting of the values required in the reports specified above.

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

5. SAMPLING AND ANALYTICAL METHOD

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

6. RECORDING OF RESULTS

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

A. The exact place and date of sampling; (time of sampling not required on EPA 4500)
B. The person(s) who performed the sampling or measurements;
C. The date the analyses were performed on those samples;
D. The person(s) who performed the analyses;
E. The analytical techniques or methods used; and
F. The results of all analyses and measurements.

7. RECORDS RETENTION

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

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

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

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

9. DUTY TO PROVIDE INFORMATION

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

10. RIGHT OF ENTRY

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

A. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.

C. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.

D. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.
11. UNAUTHORIZED DISCHARGES

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

B. Notice

1. Anticipated Bypass - If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

2. Unanticipated Bypass - The permittee shall submit notice of an unanticipated bypass as required in paragraph 12.B (24 hour notice).

C. Prohibition of Bypass

1. Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

   a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

   b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

   c. The permittee submitted notices as required under paragraph 11.B.

2. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 11.C.1.

12. NONCOMPLIANCE NOTIFICATION

A. Exceedance of a Daily Maximum Discharge Limit

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

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

Southeast District Office: sedo24hournpdes@epa.state.oh.us
Southwest District Office: swdo24hournpdes@epa.state.oh.us
Northwest District Office: nwdo24hournpdes@epa.state.oh.us
Northeast District Office: nedo24hournpdes@epa.state.oh.us
Central District Office: cndo24hournpdes@epa.state.oh.us
Central Office: cdo24hournpdes@epa.state.oh.us

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

http://epa.ohio.gov/dsw/permits/individuals.aspx
Or, the permittee may report to the appropriate Ohio EPA district office by telephone toll-free between 8:00 AM and 5:00 PM as follows:

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

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

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

B. Other Permit Violations

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

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

Southeast District Office: sedo24hourpdes@epa.state.oh.us
Southwest District Office: swdo24hourpdes@epa.state.oh.us
Northwest District Office: nwdo24hourpdes@epa.state.oh.us
Northeast District Office: nedo24hourpdes@epa.state.oh.us
Central District Office: cdo24hourpdes@epa.state.oh.us
Central Office: co24hourpdes@epa.state.oh.us

The permittee shall attach a noncompliance report to the e-mail. A noncompliance report form is available on the following web site:

http://www.epa.ohio.gov/dsw/permits/permits.aspx

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

Southeast District Office: (800) 686-7330
Southwest District Office: (800) 686-8930
Northwest District Office: (800) 686-6930
Northeast District Office: (800) 686-6330
Central District Office: (800) 686-2330
Central Office: (614) 644-2001
The permittee shall include the following information in the telephone noncompliance report:

a. The name of the permittee, and a contact name and telephone number;

b. The time(s) at which the discharge occurred, and was discovered;

c. The approximate amount and the characteristics of the discharge;

d. The stream(s) affected by the discharge;

e. The circumstances which created the discharge;

f. The name and telephone number of the person(s) who have knowledge of these circumstances;

g. What remedial steps are being taken; and,

h. The name and telephone number of the person(s) responsible for such remedial steps.

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

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

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

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

2. The cause of the violation;

3. The remedial action being taken;

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

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

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

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

13. RESERVED

14. DUTY TO MITIGATE

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

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

16. DISCHARGE CHANGES

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

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

B. For publicly owned treatment works:

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

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

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

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

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

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

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

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

17. TOXIC POLLUTANTS

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

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

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

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

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

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

19. TRANSFER OF OWNERSHIP OR CONTROL

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

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

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

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

20. OIL AND HAZARDOUS SUBSTANCE LIABILITY

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

21. SOLIDS DISPOSAL

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

22. CONSTRUCTION AFFECTING NAVIGABLE WATERS

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

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

24. STATE LAWS AND REGULATIONS

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

25. PROPERTY RIGHTS

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

26. UPSET

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

27. SEVERABILITY

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

28. SIGNATORY REQUIREMENTS

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

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

29. OTHER INFORMATION

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

B. ORC 6111.99 provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $25,000 per violation.

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

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

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

31. APPLICABLE FEDERAL RULES

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

32. AVAILABILITY OF PUBLIC SEWERS

Not withstanding the issuance or non-issuance of an NPDES permit to a semi-public disposal system, whenever the sewage system of a publicly owned treatment works becomes available and accessible, the permittee operating any semi-public disposal system shall abandon the semi-public disposal system and connect it into the publicly owned treatment works.
Part IV. Storm Water Control Measures and Pollution Prevention Programs

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

A. Control Measures.

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

B. Control Measure Selection and Design Considerations.

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

1. Preventing storm water from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from storm water;

2. Using control measures in combination is more effective than using control measures in isolation for minimizing pollutants in your storm water discharge;

3. Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures that will achieve the limits in this permit;

4. Minimizing impervious areas at your facility and infiltrating runoff onsite (including bioretention cells, green roofs, and pervious pavement, among other approaches) can reduce runoff and improve groundwater recharge and stream base flows in local streams, although care shall be taken to avoid groundwater contamination;

5. Attenuating flow using open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;

6. Conserving and/or restoring of riparian buffers will help protect streams from storm water runoff and improve water quality; and

7. Using treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.
C. Control Measures/Best Management Practices (BMPs)

1. Minimize Exposure. You shall minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff by either locating these industrial materials and activities inside or protecting them with storm resistant coverings (although significant enlargement of impervious surface area is not recommended). In minimizing exposure, you should pay particular attention to the following:

   a. Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas;

   b. Locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas);

   c. Clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants;

   d. Use drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible;

   e. Use spill/overflow protection equipment;

   f. Drain fluids from equipment and vehicles prior to on-site storage or disposal;

   g. Perform all cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also that capture any overspray; and

   h. Ensure that all washwater drains to a proper collection system (i.e., not the storm water drainage system).

   The discharge of vehicle and equipment washwater, including tank cleaning operations, is not authorized by this permit.

2. Good Housekeeping. You shall keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals, keeping materials orderly and labeled, and storing materials in appropriate containers.

3. Maintenance. You shall regularly inspect, test, maintain, and repair all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in storm water discharged to receiving waters. You shall maintain all control measures that are used to achieve the control measures/best management practices (BMPs) required by this permit in effective operating condition. Nonstructural control measures shall also be diligently maintained (e.g., spill response supplies available, personnel appropriately trained). If you find that your
control measures need to be replaced or repaired, you shall make the necessary repairs or modifications as expeditiously as practicable.

4. **Spill Prevention and Response Procedures.** You shall minimize the potential for leaks, spills and other releases that may be exposed to storm water and develop plans for effective response to such spills if or when they occur. At a minimum, you shall implement:
   
   a. Procedures for plainly labeling containers (e.g., “Used Oil,” “Spent Solvents,” “Fertilizers and Pesticides,” etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
   
   b. Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;
   
   c. Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of your storm water pollution prevention team (Part IV.J.1); and
   
   d. Where a leak, spill or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period, you shall notify the Ohio EPA in accordance with the requirements of Part III Item 12 of this permit.

5. **Erosion and Sediment Controls.** You shall stabilize exposed areas and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants. Among other actions you shall take to meet this limit, you shall place flow velocity dissipation devices at discharge locations and within outfall channels where necessary to reduce erosion and/or settle out pollutants. In selecting, designing, installing, and implementing appropriate control measures, you are encouraged to consult with the Ohio Department of Natural Resources (ODNR) Division of Soil and Water Conservation’s Rainwater and Land Development manual ([http://epa.ohio.gov/dsw/storm/technical_guidance.aspx](http://epa.ohio.gov/dsw/storm/technical_guidance.aspx)), U.S. EPA’s internet-based resources relating to BMPs for erosion and sedimentation, including the sector-specific *Industrial Storm Water Fact Sheet Series*, ([www.epa.gov/npdes/stormwater/msgp](http://www.epa.gov/npdes/stormwater/msgp)), *National Menu of Storm Water BMPs* ([www.epa.gov/npdes/stormwater/menuofbmpps](http://www.epa.gov/npdes/stormwater/menuofbmpps)), and *National Management Measures to Control Nonpoint Source Pollution from Urban Areas* ([www.epa.gov/owow/nps/urbanmm/index.html](http://www.epa.gov/owow/nps/urbanmm/index.html)).

6. **Management of Runoff.** You shall divert, infiltrate, reuse, contain, or otherwise reduce storm water runoff, to minimize pollutants in your discharges. In selecting, designing, installing, and implementing appropriate control measures, you are encouraged to consult with the Ohio Department of Natural Resources (ODNR) Division of Soil and Water Conservation’s Rainwater and Land Development manual ([http://epa.ohio.gov/dsw/storm/technical_guidance.aspx](http://epa.ohio.gov/dsw/storm/technical_guidance.aspx)), U.S. EPA’s internet-based resources relating to runoff management, including the sector-specific

7. **Salt Storage Piles or Piles Containing Salt.** You shall enclose or cover storage piles of salt, or piles containing salt, used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces. You shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile.

8. **Sector Specific Control Measures/Best Management Practices (BMPs).** You shall achieve any additional control measures/best management practices (BMPs) stipulated in the relevant sector-specific section(s) of Part IV.K. of this permit.

9. **Employee Training.** You shall train all employees who work in areas where industrial materials or activities are exposed to storm water, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of your Pollution Prevention Team. Training shall cover both the specific control measures used to achieve the conditions in this Part, and monitoring, inspection, planning, reporting, and documentation requirements in other parts of this permit. Ohio EPA requires that training be conducted at least annually (or more often if employee turnover is high).

10. **Non-Storm Water Discharges.** You shall eliminate non-storm water discharges not authorized in Part I and Part II of this NPDES permit. The following are additional non-storm water discharges authorized under this permit:

   a. Discharges from fire-fighting activities (not planned exercises);

   b. Fire hydrant flushings;

   c. Potable water, including water line flushings;

   d. Uncontaminated condensate from air conditioners, coolers/chillers, and other compressors and from the outside storage of refrigerated gases or liquids;

   e. Irrigation drainage;

   f. Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;

   g. Pavement wash waters where no detergents or hazardous cleaning products are used (e.g., bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols, etc.), and the wash waters do not come into contact with oil and grease deposits, sources of pollutants associated with industrial activities (see Part IV.J.2), or any other toxic or hazardous materials, unless residues are first cleaned up using dry clean-up methods (e.g., applying absorbent materials
and sweeping, using hydrophobic mops/rags) and you have implemented appropriate control measures to minimize discharges of mobilized solids and other pollutants (e.g., filtration, detention, settlement);

h. Routine external building washdown/power wash water that does not use detergents or hazardous cleaning products (e.g., those containing bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols, etc.);

i. Uncontaminated ground water or spring water;

j. Foundation or footing drains where flows are not contaminated with process materials; and

k. Incidental windblown mist from cooling towers that collect on rooftops or adjacent portions of your facility, but not intentional discharges from the cooling tower (e.g., “piped” cooling tower blowdowns or drains).

11. Waste, Garbage and Floatable Debris. You shall ensure that waste, garbage, and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting them before they are discharged.


D. Corrective Actions

1. Conditions Requiring Review and Revision to Eliminate Problem. If any of the following conditions occur, you shall review and revise the selection, design, installation, and implementation of your control measures to ensure that the condition is eliminated and will not be repeated in the future:

a. An unauthorized release or discharge (e.g., spill, leak, or discharge of non-storm water not authorized by this or another NPDES permit) occurs at your facility;

b. A discharge violates a numeric effluent limit;

c. You become aware, or Ohio EPA determines, that your control measures are not stringent enough for the discharge to meet applicable water quality standards;

d. An inspection or evaluation of your facility by an Ohio EPA official or local MS4 operator determines that modifications to the control measures are necessary to meet the control measures/best management practices (BMPs) in this permit; or

e. You find in your routine facility inspection or quarterly visual assessment that your control measures are not being properly operated and maintained.
2. **Conditions Requiring Review to Determine if Modifications Are Necessary.** If any of the following conditions occur, you shall review the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the Part IV.A conditions in this permit:

   a. Construction or a change in design, operation, or maintenance at your facility significantly changes the nature of pollutants discharged in storm water from your facility, or significantly increases the quantity of pollutants discharged; or

   b. Sampling results exceeds an applicable benchmark.

3. **Corrective Action Deadlines.** You shall document your discovery of any of the conditions listed in Part IV.D.1 and Part IV.D.2 within 24 hours of making such discovery. Subsequently, within 30 days of such discovery, you shall document any corrective action(s) to be taken to eliminate or further investigate the deficiency, or if no corrective action is needed, the basis for that determination. Specific documentation required within 24 hours and 30 days is detailed in Part IV.D.4. If you determine that changes are necessary following your review, any modifications to your control measures shall be made before the next storm event if possible, or as soon as practicable following that storm event. These time intervals are not grace periods, but are schedules considered reasonable for documenting your findings and for making repairs and improvements. They are included in this permit to ensure that the conditions prompting the need for these repairs and improvements are not allowed to persist indefinitely.

4. **Corrective Action Report.** Within 24 hours of discovery of any condition listed in Part IV.D.1 and Part IV.D.2, you shall document the following information (i.e., question 4 of the Corrective Actions section in the Annual Reporting Form, available at [http://www.epa.state.oh.us/portals/35/permits/IndustrialStormWater_Final_GP_AppI_dec11.pdf](http://www.epa.state.oh.us/portals/35/permits/IndustrialStormWater_Final_GP_AppI_dec11.pdf)):

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

Within 30 days of discovery of any condition listed in Part IV.D.1 and Part IV.D.2, you shall document the following information (i.e., questions 7-11 of the Corrective Actions section in the Annual Reporting Form):

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

You shall include this documentation in an annual report as required in Part V. A.2 and retain onsite with your SWPPP.

5. Effect of Corrective Action. If the event triggering the review is a permit violation (e.g., non-compliance with an effluent limit), correcting it does not remove the original violation. Additionally, failing to take corrective action in accordance with this section is an additional permit violation. Ohio EPA will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations.

6. Substantially Identical Outfalls. If the event triggering corrective action is linked to an outfall that represents other substantially identical outfalls, your review shall assess the need for corrective action for each outfall represented by the outfall that triggered the review. Any necessary changes to control measures that affect these other outfalls shall also be made before the next storm event if possible, or as soon as practicable following that storm event.

E. Inspections

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

1. Routine Facility Inspections.

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

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

   i. The inspection date and time;

   ii. The name(s) and signature(s) of the inspector(s);
iii. Weather information and a description of any discharges occurring at the time of the inspection;

iv. Any previously unidentified discharges of pollutants from the site;

v. Any control measures needing maintenance or repairs;

vi. Any failed control measures that need replacement;

vii. Any incidents of noncompliance observed; and

viii. Any additional control measures needed to comply with the permit requirements.

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

b. Exceptions to Routine Facility Inspections:

*Inactive and Unstaffed Sites:* The requirement to conduct routine facility inspections on a quarterly basis does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to storm water. Such a facility is only required to conduct an annual site inspection in accordance with the requirements of Part IV.E.1. To invoke this exception, you shall maintain a statement in your SWPPP pursuant to Part IV.F indicating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in 40 CFR 122.26(g)(4)(iii). The statement shall be signed and certified in accordance with Appendix B, Subsection 11. If circumstances change and industrial materials or activities become exposed to storm water or your facility becomes active and/or staffed, this exception no longer applies and you shall immediately resume quarterly facility inspections. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to storm water, then you shall include the same signed and certified statement as above and retain it with your records pursuant to Part IV.J.5.

Inactive and unstaffed facilities covered under Sectors D (Asphalt Paving and Roofing Materials and Lubricant Manufacturing), E (Glass, Clay, Cement, Concrete, and Gypsum Products) and J (Non-Metallic Mineral Mining and Dressing), are not required to meet the “no industrial materials or activities exposed to storm water” standard to be eligible for this exception from routine inspections, consistent with the requirements established in relevant sector requirements.

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

2. **Quarterly Visual Assessment of Storm Water Discharges.**

   a. **Quarterly Visual Assessment Procedures**

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

   - Of a sample in a clean, clear glass, or plastic container, and examined in a well-lit area;

   - On samples collected within the first 30 minutes of an actual discharge from a storm event. If it is not possible to collect the sample within the first 30 minutes of discharge, the sample shall be collected as soon as practicable after the first 30 minutes and you shall document why it was not possible to take samples within the first 30 minutes. In the case of snowmelt, samples shall be taken during a period with a measurable discharge from your site; and

   - For storm events, on discharges that occur at least 72 hours (3 days) from the previous discharge. The 72-hour (3-day) storm interval does not apply if you document that less than a 72-hour (3-day) interval is representative for local storm events during the sampling period. If it is not possible to collect the sample on discharges that occur at least 72 hours (3 days) from the previous discharge, the sample shall be collected as close to this storm interval as practicable and you shall document why it was not possible to take samples from a 72 hour (3 day) storm interval.

   - Areas Subject to Snow: In areas subject to snow, at least one quarterly visual assessment shall capture snowmelt discharge.

   - For the following water quality characteristics: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution.

   b. **Quarterly Visual Assessment Documentation**

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

   - Sample location(s);

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

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

c. Exceptions to Quarterly Visual Assessments

The following are exceptions to quarterly visual assessments:

• **Adverse Weather Conditions**: When adverse weather conditions prevent the collection of samples during the quarter, you shall take a substitute sample during the next qualifying storm event. Documentation of the rationale for no visual assessment for the quarter shall be included with your SWPPP records. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make sampling impractical, such as drought or extended frozen conditions.

• **Inactive and unstaffed sites**: The requirement for a quarterly visual assessment does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to storm water. To invoke this exception, you shall maintain a statement in your SWPPP indicating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in 40 CFR 122.26(g)(4)(iii). The statement shall be signed and certified in accordance with Part III.28 of this permit. If circumstances change and industrial materials or activities become exposed to storm water or your facility becomes active and/or staffed, this exception no longer applies and you shall immediately resume quarterly visual assessments. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to storm water, then you shall include the same signed and certified statement as above and retain it with your records.

• **Ohio EPA’s Encouraging Environmental Excellence (E3) Program**: If your facility has been recognized under the Gold and Platinum levels by Ohio EPA’s Encouraging Environmental Excellence (E3) Program, you only need to conduct quarterly visual assessment of storm water discharges for two quarters each year.
F. Storm Water Pollution Prevention Plan (SWPPP)

A storm water pollution prevention plan (SWPPP) shall be developed to address each outfall that discharges to waters of the state that contains storm water associated with industrial activity. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. The SWPPP shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Facilities must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

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

G. Deadlines for SWPPP Preparation and Compliance.

1. The plan for a storm water discharge associated with industrial activity:
   a. Shall be prepared within six months of the effective date of this permit (and updated based on facility or materials handling changes as specified in Part IV, Item I);
   b. Shall provide for implementation and compliance with the terms of the plan within twelve months of the effective date of this permit.

2. Upon showing of good cause, the Director may establish a later date for preparing and compliance with a plan for a storm water discharge associated with industrial activity.

H. Signature and Plan Review.

1. The plan shall be signed and dated in accordance with Part III, Item 28, and be retained on-site at the facility which generates the storm water discharge.

2. The permittee shall make plans immediately available upon request to the Ohio EPA Director, or authorized representative, or Regional Administrator of U.S. EPA, a local agency approving storm water management plans, or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system, to the operator of the municipal system.

3. The Director may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this Part. Within 30 days of such notification from the Director, the
permittee shall make the required changes to the plan and shall submit to the Director a written certification that the requested changes have been made.

4. All storm water pollution prevention plans required under this permit are considered reports that shall be available to the public under Section 308(b) of the Act. Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from those staff cleared for CBI review within Ohio EPA. An interested party wishing a copy of a discharger’s SWPPP will have to contact the Ohio EPA to obtain a copy.

I. Keeping SWPPP Current

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

Amendments to the plan may be reviewed by Ohio EPA in the same manner as Part IV.H above.

J. Contents of SWPPP.

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

1. Pollution Prevention Team. You shall identify the staff members (by name or title) that comprise the facility’s storm water pollution prevention team as well as their individual responsibilities. Your storm water pollution prevention team is responsible for assisting the facility manager in developing and revising the facility’s SWPPP as well as maintaining control measures and taking corrective actions where required. Each member of the storm water pollution prevention team shall have ready access to either an electronic or paper copy of applicable portions of this permit and your SWPPP.

2. Description of Potential Pollutant Sources. You shall document at your facility where industrial materials or activities are exposed to storm water and from which allowable non-storm water discharges are released. Industrial materials or activities, include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes: and intermediate products, by-products, final product or waste product. For each area identified, the description shall include, at a minimum:

   a. Site Description. Your SWPPP shall include:

      i. A description of the industrial activities at your facility;

      ii. A general location map (e.g. U.S. Geologic Survey (USGS) quadrangle map) with enough detail to identify the location of your facility and all receiving waters for your storm water discharges.
iii. A site map showing

- The size of the property in acres;
- The location and extent of significant structures and impervious surfaces;
- Directions of storm water flow (use arrows);
- Locations of all existing structural control measures;
- Locations of all receiving waters in the immediate vicinity of your facility;
- Locations of all storm water conveyances including ditches, pipes and swales;
- Locations of potential pollutant sources identified under Part IV J. 2.b;
- Locations where significant spills or leaks identified under Part IV J. 2.b. have occurred;
- Locations of all storm water monitoring points;
- Locations of storm water inlets and outfalls, with a unique identification code for each outfall (e.g. Outfall 001, Outfall 002, etc), indicating any outfalls that are considered substantially identical to another outfall, and an approximate outline of the areas draining to each outfall;
- Municipal separate storm sewer systems, where your storm water discharges to them;
- Locations and descriptions of all non-storm water discharges identified under Part IV. C. 10;
- Locations of the following activities where such activities are exposed to precipitation
  - Fueling stations;
  - Vehicle and equipment maintenance and/or cleaning areas;
  - Loading/unloading areas;
  - Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
  - Transfer areas for substances in bulk;
  - Machinery; and
• Locations and sources of run-on to your site from adjacent property that contains significant quantities of pollutants.

b. Inventory of Exposed Materials. This includes a list of industrial activities exposed to storm water (e.g., material storage; equipment fueling, maintenance, and cleaning; cutting steel beams). This also includes a list of the pollutant(s) or pollutant constituents (e.g., crankcase oil, zinc, sulfuric acid, and cleaning solvents) associated with each identified activity. The pollutant list shall include all significant materials that have been handled, treated, stored, or disposed, and that have been exposed to storm water in the three years prior to the data you prepare of amend your SWPPP.

c. Spills and Leaks. You shall document where potential spills and leaks could occur that could contribute pollutants to storm water discharges, and the corresponding outfall(s) that would be affected by such spills and leaks. You shall document all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a storm water conveyance, in the three years prior to the date you prepare or amend your SWPPP. Note that significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC Section 9602. This permit does not relieve you of the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 relating to spills or other releases of oil or hazardous substances.

d. Sampling Data. A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility.

e. Non-Storm Water Discharges. You shall document that you have evaluated for the presence of non-storm water discharges, except for those listed in Part I and Part IV.C.10, and that all unauthorized discharges have been eliminated. Documentation of your evaluation shall include: 1) The date of any evaluation; 2) A description of the evaluation criteria used; 3) A list of the outfalls or onsite drainage points that were directly observed during the evaluation; 4) The different types of non-storm water discharge(s) and source locations; and 5) The action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified. For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an NPDES permit application was submitted for an unauthorized cooling water discharge.

f. Salt Storage. You shall document the location of any storage piles containing salt used for deicing or other commercial or industrial purposes.

3. Description of Control Measures. You shall document the location and type of control measures you have installed and implemented at your site to achieve the control measures/best management practices (BMPs) in Part IV.C, and where applicable, in Part IV.K. You shall describe how you
addressed the control measure selection and design considerations in Part IV.B. This documentation shall describe how the control measures at your site address both the pollutant sources identified in Part IV.J.2 and any storm water run-on that commingles with any discharges covered under this permit.

4. Schedules and Procedures.

a. Pertaining to Control Measures used to Comply with the Control Measures/Best Management Practices (BMPs). The following shall be documented in your SWPPP:

i. Good Housekeeping (See Part IV.C.2) – A schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers.

ii. Maintenance (See Part IV.C.3) – Preventative maintenance procedures, including regular inspections, testing, maintenance, and repair of all industrial equipment and systems, and control measures, to avoid situations that may result in leaks, spills, and other releases, and any back-up practices in place should a runoff event occur while a control measure is off-line;

iii. Spill Prevention and Response Procedures (See Part IV.C.4) – Procedures for preventing and responding to spills and leaks. You may reference the existence of other plans for Spill Prevention Control and Countermeasure (SPCC) developed for the facility under Section 311 of the CWA or BMP programs otherwise required by an NPDES permit for the facility, provided that you keep a copy of that other plan onsite (hard copy or electronic) and make it available for review consistent with Part IV.J.5; and

iv. Employee Training (See Part IV.C.9) – A schedule for all types of necessary training.

b. Pertaining to Monitoring and Inspection. Where applicable, you shall document in your SWPPP your procedures for conducting analytical storm water monitoring. You shall document in your SWPPP your procedures for performing, as appropriate, the two types of inspections specified by this permit, including: 1) Routine facility inspections (See Part IV.E.1) and 2) Quarterly visual assessment of storm water discharges (See Part IV.E.2).

5. Documentation Requirements. You are required to keep inspection, monitoring, and certification records with your SWPPP that together keep your records complete and up-to-date, and demonstrate your full compliance with the conditions of this permit. You shall retain a copy of the current SWPPP required by this permit at the facility, and it shall be immediately available to Ohio EPA; a local agency approving storm water management plans; and the operator of an MS4 receiving discharges from the site. Ohio EPA may provide access to portions of your SWPPP to a member of the public upon request. Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from those staff cleared for CBI review within Ohio EPA. Your current SWPPP or certain information from your current SWPPP shall be made available to the public, except any confidential business information (CBI) or restricted information, but you must clearly identify those portions of the SWPPP that are being withheld from public access. See

K. Sector-Specific Requirements

Sector T – Treatment Works.

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

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

   a. Control Measures. (See also Part IV.C) In addition to the other control measures, consider the following: routing contaminated storm water to the treatment works; or covering exposed materials (i.e., from the following areas: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station).

   b. Employee Training. (See also Part IV.C.9) At a minimum, training shall address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and controls; fueling procedures; general good housekeeping practices; and proper procedures for using fertilizer, herbicides, and pesticides.

3. Additional SWPPP Requirements.
   a. Drainage Area Site Map. (See also Part IV.J.2.a.) Document in your SWPPP where any of the following may be exposed to precipitation or surface runoff: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and storage areas for process chemicals, petroleum products, solvents, fertilizers, herbicides, and pesticides.

   b. Potential Pollutant Sources. (See also Part IV.J.3.) Document in your SWPPP the following additional sources and activities that have potential pollutants associated with them, as applicable: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and access roads and rail lines.

   c. Wastewater and Washwater Requirements. Keep a copy of all your current NPDES permits issued for wastewater and industrial, vehicle and equipment washwater discharges or, if an
NPDES permit has not yet been issued, a copy of the pending application(s) with your SWPPP. If the washwater is handled in another manner, the disposal method shall be described and all pertinent documentation shall be retained onsite.

4. **Additional Inspection Requirements.**

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

A. Reporting and Recordkeeping

1. **Reporting Benchmark Monitoring Data to Ohio EPA.** Reserved.

2. **Annual Report.** You shall complete an annual report using the Annual Reporting Form provided by Ohio EPA at the following location:

   [http://www.epa.ohio.gov/portals/35/permits/OHR000006/ARForm.docx](http://www.epa.ohio.gov/portals/35/permits/OHR000006/ARForm.docx)

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

B. **Storm Water Monitoring Requirements - Reserved.**
Part VI. Definitions and Acronyms

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

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

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

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

**Director** – the Director of the Ohio Environmental Protection Agency (Ohio EPA).

**Discharge** – when used without qualification, means the “discharge of a pollutant.” See 40 CFR 122.2.

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

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

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

**U.S. EPA Approved or Established Total Maximum Daily Loads (TMDLs)** – “U.S. EPA Approved TMDLs” are those that are developed by a State and approved by U.S. EPA. “U.S. EPA Established TMDLs” are those that are developed by U.S. EPA.

**Existing Discharger** – an operator applying for coverage under this permit for discharges authorized previously under an NPDES general or individual permit.
Facility or Activity – any NPDES “point source” (including land or appurtenances thereto) that is subject to regulation under the NPDES program. See 40 CFR 122.2.

Federal Facility – any buildings, installations, structures, land, public works, equipment, aircraft, vessels, and other vehicles and property, owned by, or constructed or manufactured for the purpose of leasing to, the federal government.

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

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

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

Industrial Storm Water – storm water runoff from industrial activity.

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

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

(ii) Designed or used for collecting or conveying storm water;

(iii) Which is not a combined sewer; and

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

New Discharger – a facility from which there is a discharge, that did not commence the discharge at a particular site prior to August 13, 1979, which is not a new source, and which has never received a finally effective NPDES permit for discharges at that site. See 40 CFR 122.2.
New Source – any building, structure, facility, or installation from which there is or may be a “discharge of pollutants,” the construction of which commenced:

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


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

Ohio EPA – the Ohio Environmental Protection Agency.

Operator – any entity with a storm water discharge associated with industrial activity that meets either of the following two criteria:

(i) The entity has operational control over industrial activities, including the ability to modify those activities; or

(ii) The entity has day-to-day operational control of activities at a facility necessary to ensure compliance with the permit (e.g., the entity is authorized to direct workers at a facility to carry out activities required by the permit).

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

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

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

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

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

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

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

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

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

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

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

**Storm Water** – storm water runoff, snow melt runoff, and surface runoff and drainage. See 40 CFR 122.26(b)(13).

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

**Storm Water Discharges Associated with Industrial Activity** – the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under Part 122. For the categories of industries identified in this section, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at part 401 of this chapter); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located on plant lands separate from the plant’s industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities include those that are federally, State, or municipally owned or operated that meet the description of the facilities listed in 40 CFR 122.26(b)(14).

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

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

**Water Quality Impaired** – See ‘Impaired Water’.

**Water Quality Standards** – A water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses. States and U.S. EPA adopt water quality standards to protect public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act (See CWA sections 101(a)2 and 303(c)). Water quality standards also include an antidegradation policy. See P.U.D. o. 1 of Jefferson County et al v. Wash Dept of Ecology et al, 511 US 701, 705 (1994).
“You” and “Your” – as used in this permit are intended to refer to the permittee, the operator, or the discharger as the context indicates and that party’s facility or responsibilities. The use of “you” and “your” refers to a particular facility and not to all facilities operated by a particular entity. For example, “you shall submit” means the permittee shall submit something for that particular facility. Likewise, “all your discharges” would refer only to discharges at that one facility.
ABBREVIATIONS AND ACRONYMS

BAT – Best Available Technology Economically Achievable

BOD5 – Biochemical Oxygen Demand (5-day test)

BMP – Best Management Practice

BPJ – Best Professional Judgment

BPT – Best Practicable Control Technology Currently Available

CERCLA – Comprehensive Environmental Response, Compensation and Liability Act

CGP – Construction General Permit

COD – Chemical Oxygen Demand

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

CWT – Centralized Waste Treatment

DMR – Discharge Monitoring Report

U.S. EPA – U. S. Environmental Protection Agency

FWS – U. S. Fish and Wildlife Service

LA – Load Allocations

MDMR – MSGP Discharge Monitoring Report

MGD – Million Gallons per Day

MOS – Margin of Safety

MS4 – Municipal Separate Storm Sewer System

MSDS – Material Safety Data Sheet

MSGP – Multi-Sector General Permit

NAICS – North American Industry Classification System

NMFS – U. S. National Marine Fisheries Service

NOI – Notice of Intent
NOT – Notice of Termination

NPDES – National Pollutant Discharge Elimination System

NRC – National Response Center

NTU – Nephelometric Turbidity Unit

OMB – U. S. Office of Management and Budget

ORW – Outstanding Resource Water

OSM – U. S. Office of Surface Mining

POTW – Publicly Owned Treatment Works

RCRA – Resource Conservation and Recovery Act

RQ – Reportable Quantity

SARA – Superfund Amendments and Reauthorization Act

SIC – Standard Industrial Classification

SMCRA – Surface Mining Control and Reclamation Act

SPCC – Spill Prevention, Control, and Countermeasures

SWPPP – Storm Water Pollution Prevention Plan

TMDL – Total Maximum Daily Load

TSDF – Treatment, Storage, or Disposal Facility

TSS – Total Suspended Solids

USGS – United States Geological Survey

WLA – Wasteload Allocation

WQS – Water Quality Standard
National Pollutant Discharge Elimination System (NPDES) Permit Program

FACT SHEET

Regarding an NPDES Permit To Discharge to Waters of the State of Ohio
for Aqua Ohio Wastewater, Inc. Blacklick Estates Waste Water Treatment Plant (WWTP)

Public Notice No.: 18-07-040
Public Notice Date: July 17, 2018
Comment Period Ends: August 17, 2018

Ohio EPA Permit No.: 4PU00002*LD
Application No.: OH0036021

Name and Address of Applicant:
Aqua Ohio Wastewater, Inc.
5481 Buenos Aires Boulevard
Westerville, OH 43081

Name and Address of Facility Where Discharge Occurs:
Aqua Ohio Water Co. Inc. Blacklick WWTP
4010 Signal Dr.
Columbus, OH 43232
Franklin County

Receiving Water: Blacklick Creek

Subsequent Stream Network: Big Walnut Creek, Scioto River

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

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

No antidegradation review was necessary.

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

Ohio EPA reviews the need for water-quality-based limits on a pollutant-by-pollutant basis. Wasteload allocations (WLAs) are used to develop these limits based on the pollutants that have been detected in the

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discharge, and the receiving water’s assimilative capacity. The assimilative capacity depends on the flow in the water receiving the discharge, and the concentration of the pollutant upstream. The greater the upstream flow, and the lower the upstream concentration, the greater the assimilative capacity is. Assimilative capacity may represent dilution (as in allocations for metals), or it may also incorporate the break-down of pollutants in the receiving water (as in allocations for oxygen-demanding materials).

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

SUMMARY OF PERMIT CONDITIONS

Proposed changes to the renewed permit are listed below. For justification of these changes, please see the section titled “Reasonable Potential/Effluent Limits/Management Decisions” on page 11 of this document.

Limit Changes
- More Restrictive
  - Outfall 001 – E. coli weekly and monthly limits

Monitoring Changes
- Outfall 001
  - Removed: Bis(2-ethylhexyl) Phthalate
- Outfall 601
  - Different Monitoring Method: pH is proposed to change from “Grab” to “Multiple Grab”.
- Outfall 801
  - Less Frequent: Temperature, dissolved oxygen, pH, ammonia, and E. coli.
- Outfall 901
  - New: Total phosphorus
  - Less Frequent: Temperature, dissolved oxygen, pH, ammonia, and E. coli.

Compliance Schedule (Part I.C. of the permit)
- E. coli: A 6-month compliance schedule to meet final limits is proposed.
- Whole Effluent Toxicity: A 12-month compliance schedule is proposed to determine toxicity sources.

Changed Part II Language
- Removed – Language regarding sampling bis(2-ethylhexyl) phthalate.
- Added – Quantification levels for selenium and silver; Part II Item O.

Added – Storm Water Language
- New storm water language has been added in Parts IV, V and VI.
Continued conditions from the current permit
- Limits Below Quantification; Part II Item K – Total Residual Chlorine
- Whole effluent toxicity; Part II Item U
- Outfall signage; Part II Item D
- Minimum Staffing and Operator of Record; Part II Item A
- Sludge Monitoring Requirements; Part II Items Q, R, S, and T.
- Mercury analytical methods: Part II Item P.
- Sanitary sewer overflow requirements: Part II Items E and F.
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PROCEDURES FOR PARTICIPATION IN THE FORMULATION OF FINAL DETERMINATIONS

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

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

Requests for public meetings shall be in writing and shall state the action of the Director objected to, the questions to be considered, and the reasons the action is contested. Such requests should be addressed 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 in person or by mail no later than 30 days after the date of this Public Notice. Deliver or mail all comments to:

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

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

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

For additional information about this fact sheet or the draft permit, contact Cole Miller at (614) 728-3846 or cole.miller@epa.ohio.gov.

INFORMATION REGARDING CERTAIN WATER QUALITY BASED EFFLUENT LIMITS

This draft permit may contain proposed water-quality-based effluent limits (WQBELs) for parameters that are not priority pollutants. (See the following link for a list of the priority pollutants: http://epa.ohio.gov/portals/35/pretreatment/Pretreatment_Program_Priority_Pollutant_Detection_Limits.pdf.) In accordance with ORC 6111.03(J)(3), the Director established these WQBELs after considering, to the extent consistent with the Federal Water Pollution Control Act, evidence relating to the technical feasibility and economic reasonableness of removing the polluting properties from those wastes and to evidence relating to conditions calculated to result from that action and their relation to benefits to the people of the state and to accomplishment of the purposes of this chapter. This determination was made based on data and information available at the time the permit was drafted, which included the contents of the timely submitted NPDES permit renewal application, along with any and all pertinent information available to the Director.
This public notice allows the permittee to provide to the Director for consideration during this public comment period additional site-specific pertinent and factual information with respect to the technical feasibility and economic reasonableness for achieving compliance with the proposed final effluent limitations for these parameters. The permittee shall deliver or mail this information to:

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

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

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

Alternately, the applicant may propose the development of site-specific WQS pursuant to OAC 3745-1-39. The permittee shall submit written notification regarding their intent to develop site specific WQS for parameters that are not priority pollutants to the above address no later than 30 days after the Public Notice Date.
LOCATION OF DISCHARGE/RECEIVING WATER USE CLASSIFICATION
Blacklick Estates WWTP discharges to Blacklick Creek at river mile (RM) 4.85. Figure 1 shows the approximate location of the facility.

This segment of the Blacklick Creek is described by Ohio EPA River Code: 02-130, Hydrologic Unit Code: 05060001-15-04, County: Franklin, Ecoregion: Eastern Corn Belt Plains. Blacklick Creek is designated for the following uses under Ohio’s WQS (OAC 3745-1-09): Warmwater Habitat, Agricultural Water Supply, Industrial Water Supply and Primary Contact Recreation.

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

FACILITY DESCRIPTION
Blacklick Estates WWTP was constructed in 1962 and last upgraded in 1996. The average design flow is 1.2 million gallons per day (MGD). Blacklick Estates WWTP serves Blacklick Estates, Madison Township, and Truro Township and has the following treatment processes which are shown on Figure 2:

- Influent Pumping
- Fines Screens
- Grit Removal
- Activated Sludge
- Chemical Precipitation of Phosphorus
- Secondary Clarification
- Disinfection (Chlorination / Dechlorination)
- Post-aeration

Solid stream processes include aerobic sludge holding and mechanical dewatering. Sludge is hauled by Republic Waste to the SWACO landfill or transferred to another NPDES permit holder (Quasar). Table 1 shows the last five years of sludge removed from Blacklick Estates WWTP.

DESCRIPTION OF EXISTING DISCHARGE
Monitoring Locations
Blacklick Estates WWTP monitors the following:

- **Treated Wastewater** – Outfall 001 after post-aeration
- **Raw Wastewater** – Outfall 601
- **Sanitary Sewer Overflows** – Outfall 300 – Only one reported SSO in the last 5 years.
- **Sludge Stations**
  - Outfall 586 – Disposal of dewatered sludge to a sanitary landfill
  - Outfall 588 – Transfer of dewatered sludge to another NPDES permit holder.
- **Ambient Monitoring Stations**
  - Outfall 801 – Upstream monitoring station
  - Outfall 901 – Downstream monitoring station after mixing near the Winchester Pike bridge.

Compliance and Permitting
Blacklick Estates WWTP had 19 reported effluent violations in the last 5 years, with violations occurring in nine separate months (see Table 2). The violations are largely attributed to high flow rates which can
result in shorter treatment times. During higher flows the operations staff turn off blowers to retain biomass in the system. Extended periods of this approach can adversely affect ammonia and CBOD removal.

**Wastewater Characteristics**

The facility discharges an average of approximately 0.9 MGD with a maximum flow rate of 4.17 MGD during the last five years. Blacklick Estates’ potable water is supplied via groundwater with hardness removed via nanofiltration which is similar to reverse osmosis. There are no industrial users within the service area and therefore, Blacklick Estates does not have any form of a pretreatment program.

See the following tables for additional information on the discharges for the period of April 2013 through March 2018:

- Table 3 – Flow rate statistics
- Table 4 – Calculated phosphorus loadings
- Table 5 – Unaltered Discharge Monitoring Report (DMR) data with current limits provided for comparison
- Table 6 – Summary of whole effluent toxicity (WET) tests of the final effluent

Blacklick Estates WWTP has no bypasses and has 100% separated sewers in the collection system. There is an estimated 266,000 gallons per day (GPD) of inflow and infiltration (I&I) in the sewerage system.

**ASSESSMENT OF IMPACT ON RECEIVING WATERS**

**Overview**

The Big Walnut Creek watershed assessment unit, which includes Blacklick Creek in the vicinity of Blacklick Estates WWTP, is listed as impaired for Aquatic Life and Recreation on Ohio’s 303(d) list.

A Total Daily Maximum Load (TMDL) report was approved for Blacklick Creek in September 2005. An assessment of the impact of a permitted point source on the immediate receiving waters includes an evaluation of the available chemical/physical, biological, and habitat data which have been collected by Ohio EPA pursuant to the Five-Year Basin Approach for Monitoring and NPDES Reissuance. Other data may be used provided it was collected in accordance with Ohio EPA methods and protocols as specified by the Ohio WQS and Ohio EPA guidance documents. Other information which may be evaluated includes but is not limited to: NPDES permittee self-monitoring data; effluent and mixing zone bioassays conducted by Ohio EPA, the permittee, or U.S. EPA.

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

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

Three attainment status results are possible at each sampling location - full, partial, or non-attainment. Full attainment means that all of the applicable indices meet the biocriteria. Partial attainment means that one or more of the applicable indices fails to meet the biocriteria. Nonattainment means that either none of the applicable indices meet the biocriteria or one of the organism groups indicates poor or very poor performance. An aquatic life use attainment table (see Table 7) is constructed based on the sampling results and is arranged from upstream to downstream and includes the sampling locations indicated by river mile, the applicable biological indices, the use attainment status (i.e., full, partial, or non), the Qualitative Habitat Evaluation Index, and comments and observations for each sampling location.

**Discharge Assessment**

According to Section 5.2.2 of the Big Walnut Creek TMDL, causes of aquatic life use impairment in Blacklick Creek are attributed to ammonia, nutrients, and organic enrichment. In addition, Blacklick Creek is listed as impaired for recreational use. The TMDL identifies wastewater treatment plants and home sewage treatment systems as the sources of pollutants attributable to the recreational and aquatic life use impairment status in Blacklick Creek.

As a solution to the impairment, TMDL Tables 5.2.F and 7.1.A propose monthly phosphorus limits of 0.5 mg/L and 2.3 kg/day, and an annual phosphorus loading limit of 829 kg/year. The TMDL’s proposed limits are based on Blacklick Estates’ average design flow of 1.2 MGD. Blacklick Estates WWTP has reported an annual median phosphorus concentration of between 0.21 mg/L and 0.30 mg/L during the last five years and has reported a maximum of 346 kg/year (see Table 4 and Attachment 2).

The biological assessments which resulted in a TMDL were done in 2000. Ohio EPA has since conducted additional biological assessment between 2012 – 2015 (see Table 7 and Attachment 3). In all sampling events there was partial or non-significant deviation from the biocriteria within the macroinvertebrate (insect) community which recovered in three out of four sampling events approximately 2 miles downstream of the discharge. While Blacklick Estates WWTP is likely contributing to the impairment, habitat is also contributing with poor riparian, siltation, and erosion. The draft permit proposes to continue the phosphorus limits based on the TMDL.

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

**DEVELOPMENT OF WATER-QUALITY-BASED EFFLUENT LIMITS**

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

**Parameter Selection**

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

<table>
<thead>
<tr>
<th>Self-monitoring data (DMR)</th>
<th>April 2013 through March 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Data</td>
<td>2017</td>
</tr>
</tbody>
</table>

*Fact Sheet for NPDES Permit Renewal, Blacklick Estates WWTP, 2018*  
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All of the parameters sampled as part of the application were either already submitted via the self-monitoring data or were results with less than detection.

**Statistical Outliers and Other Non-representative Data**

The data were examined and the following values were removed from the evaluation as non-representative data:

**Copper** – May 5, 2015; 150 µg/L

The value was 2.6 times the next nearest value and the most recent 2.5 years of data were below detect. The removal increased the model $R^2$ value but resulted in lower PEQ values which caused the risk grouping to go from group 5 to group 4.

**Mercury** – August 7, 2013; 35.8 ng/L

The value was 5.7 times the next nearest value. The removal significantly increased the model $R^2$ value from 0.75 to 0.94 but resulted in a lower $PEQ_{ave}$ value of 3.3 ng/L from 7.1 ng/L. The water quality criteria for mercury is 12 ng/L. The risk assessment went from group 4 to group 3.

**Total Dissolved Solids** – July 1, 2015; 230 mg/L

The value was approximately one-third of a typical result. The removal significantly increased the $R^2$ value but did not result in a change in the risk assessment groupings.

**Projected Effluent Quality (PEQ)**

Ohio EPA evaluates the available data to statistically estimate the typical concentration level of each pollutant. This estimation of effluent quality is called the Projected Effluent Quality (PEQ). 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 11 summarizes the chemical specific data for outfall 001 by presenting the average and maximum PEQ values.

For more information on PEQ calculations, see Modeling Guidance #1 at the following webpage:


**Preliminary determinations to development of water quality-based effluent limitations**

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 (see Table 8). If both the $PEQ_{avg}$ and $PEQ_{max}$ values are less than 25 percent of their respective WQS, the pollutant does not have the reasonable potential to cause or contribute to exceedances of WQS, and no WLA is done for that parameter. If either $PEQ_{avg}$ or $PEQ_{max}$ is greater than 25 percent of the applicable WQS, a WLA is conducted to determine whether the parameter exhibits reasonable potential and needs to have a limit or if monitoring is required.

**Wasteload Allocation (WLA)**

For those parameters that require a WLA, Ohio EPA also considers the flows and upstream (background) sampling data already present upstream of Blacklick Estates WWTP’s discharge point (Table 9). The purpose of a WLA is to determine how much of each pollutant Blacklick Estates WWTP can discharge without exceeding water quality standards in the receiving stream during low-flow conditions to prevent excursions of water quality criteria.

Most pollutants, such as metals, are allocated by a mass-balance method because they do not break down in the receiving water. For free flowing streams, WLAs using this method are done using the following general equation (see OAC rule 3745-2-05 for more details):
Discharger WLA Concentration = \( \frac{WQC \cdot (Q_{eff} + Q_{up}) - WQ_{up} \cdot Q_{up}}{Q_{eff}} \)

Where:

- \(WQC\) = Water quality criterion
- \(Q_{eff}\) = Average Design Flow
- \(Q_{up}\) = Per cent of the stream design flow
- \(WQ_{up}\) = Background water quality

The following dischargers in Blacklick Creek were considered interactive (see Figure 3):

- Fairfield County Tussing Road WRC
- Blacklick Estates WWTP

These facilities were allocated together for most parameters due to the size of the plant discharges, the flows of the Blacklick Creek and the relatively close proximity of the two plants. The exception was the ammonia-N WLA, which was done separately for each facility because ammonia-N is considered to be a non-conservative parameter.

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

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

<table>
<thead>
<tr>
<th>Waterbody Use</th>
<th>Flow Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic life</td>
<td>Average Annual 7Q10</td>
</tr>
<tr>
<td>Toxics (metals, WET, organics, etc.)</td>
<td>Maximum Annual 1Q10</td>
</tr>
<tr>
<td>Ammonia</td>
<td>Average Summer 30Q10</td>
</tr>
<tr>
<td>Agricultural Water Supply</td>
<td>Harmonic mean flow</td>
</tr>
<tr>
<td>Human Health (nondrinking)</td>
<td>Harmonic mean flow</td>
</tr>
</tbody>
</table>

Allocations are developed using a percentage of stream design flow as specified in Table 9, and allocations cannot exceed the Inside Mixing Zone Maximum (IMZM) criteria.

The data used in the WLA are listed in Table 8 and Table 9. The WLA results to maintain all applicable criteria are presented in Table 10.

**REASONABLE POTENTIAL/EFFLUENT LIMITS/MANAGEMENT DECISIONS**

After calculating the appropriate WLA, the reasonable potential of a discharger to exceed the WLA, and thereby exceeding the WQS, must also be determined. For the allocated parameters, the preliminary effluent limits
(PEL) based on the most restrictive average and maximum WLAs are selected from Table 10. Reasonable potential is determined through a comparison of each pollutant’s PEQs and their respective PELs. The average PEL (PEL_{avg}) is compared to the average PEQ (PEQ_{avg}) and the PEL_{max} is compared to the PEQ_{max}.

The parameters are assigned into groups based on the calculated percentage of the allocated value [{(PEQ_{avg} ÷ PEL_{avg}) \times 100, or (PEQ_{max} ÷ PEL_{max}) \times 100}]. The PEQs and the reasonable potential outcome is presented in Table 11 and the groupings mean the following:

- **Group 1** – No numeric criteria is available for the pollutant
- **Group 2** – Monitoring is optional. The PEQ is less than 25% of the WQC.
- **Group 3** – Monitoring evaluation is recommended. The PEQ is less than 50% of the PEL.
- **Group 4** – Monitoring is required. The PEQ is greater than or equal to 50% of the PEL.
- **Group 5** – Monitoring and limits are required. The PEQ is greater than or equal to 100% of the PEL or greater than or equal to 75% of the PEL and the discharger takes a certain percent of the allowable load of the receiving stream.

The final effluent limits are determined by evaluating the groupings in conjunction with other applicable rules and regulations. Table 12 presents the final effluent limits and monitoring requirements proposed for Blacklick Estates WWTP outfall 001 and the basis for their recommendation. Unless otherwise indicated, the monitoring frequencies proposed in the permit are continued from the existing permit.

**Outfall 001**

**Limits Based on Plant Design**

- **Total Residual Chlorine, 5-day Carbonaceous Biochemical Oxygen Demand, Ammonia, Total Suspended Solids, and Dissolved Oxygen**

  The limits proposed for these parameters are all based on plant design criteria and are protective of WQS.

  The CBOD_{5,day} limit was initially included during the 2000 permit derivation to be protective of in-stream dissolved concentrations.

**Limits Based on TMDL**

- **Total Phosphorus**

  The limit proposed for this parameter is based on the Big Walnut TMDL and is a continuation of the current permit limit. See discussion on page 9 for more information on the impact of the discharge on Blacklick Creek.

**Limits Based on WQS**

- **Oil and Grease, Escherichia coli, and pH**

  The limits proposed for these parameters are based on WQS (OAC 3745-1-35 and 37). Primary contact recreation E. coli standards apply to Blacklick Creek.

  New WQS for E. coli for receiving waters formerly designated as Class B or C Primary Contact Recreation waters became effective in April 2016, and a compliance schedule is proposed for meeting these new final effluent limits. The schedule provides time during the summer disinfection season for the plant to evaluate the ability of its existing disinfection system to achieve the new limits and to make operational changes or equipment upgrades if necessary. Based on best technical judgment, it is proposed that the plant comply with its current E. coli limits during the interim period.

**Monitoring – Group 4 Parameters**

- **Copper and Total Dissolved Solids**
The Ohio EPA risk assessment (Table 11) places copper and total dissolved solids in group 4. This placement support that these parameters are present in the discharge in amounts that have significant potential to cause or contribute to WQS exceedances. Monitoring for group 4 pollutants (where PEQ exceeds 50 percent of the WLA) is required by OAC 3745-33-07(A)(2). Continued monthly monitoring is proposed.

**Monitoring – Whole Effluent Toxicity (WET)**

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

WQS for WET are expressed in Ohio’s narrative “free from” WQS rule [OAC 3745-1-04(D)]. These “free froms” are translated into toxicity units (TUₐ) by the associated WQS Implementation Rule (OAC 3745-2-09). Acute toxicity levels are represented by acute toxicity units (TUₐ) while chronic toxicity levels are represented by chronic toxicity units (TUₐ).

Based on evaluating the WET data presented in Table 6 and other pertinent data under the provisions of OAC 3745-33-07(B), the Blacklick Estates WWTP is placed in Category 3 for both Ceriodaphnia dubia (waterflea) and Pimephales promelas (fathead minnow). No limits are proposed but a schedule of compliance is proposed to have the facility 1) investigate treatment additives; 2) determine if they are causing the toxicity; and 3) adjust dosage rates to reduce the likelihood of pass through.

**Monitoring – Group 2 and 3 parameters with proposed monitoring**

*Nickel, Zinc, Cadmium, Lead, Chromium, and Mercury*

The Ohio EPA risk assessment (Table 11) places these parameters 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. Quarterly monitoring is proposed to document that these pollutants continue to remain at low levels.

**Monitoring – Nutrients**

*Orthophosphate*

Monitoring for dissolved orthophosphate (as P) is required by Ohio Senate Bill 1 (ORC 6111.03), which was signed by the Governor on April 2, 2015. Monitoring for orthophosphate will further develop nutrient datasets for dissolved reactive phosphorus that are used in stream and watershed assessments and studies. Because Ohio EPA monitoring, as well as other in-stream monitoring, is taken by grab sample, grab samples are proposed for orthophosphate to maintain consistent data. The grab samples must be filtered within 15 minutes of collection using a 0.45-micron filter. The filtered sample must be analyzed within 48 hours.

*Total Nitrogen Kjeldahl (TKN) and Nitrite plus Nitrate*

Based on best technical judgement, monitoring for these parameters is proposed to continue. The purpose of the monitoring is to maintain a nutrient data set for use in a future water quality study.

**Monitoring – Plant Performance**

*Flow Rate and Temperature*

Monitoring for these parameters is proposed to continue in order to evaluate the performance of the treatment plant.

**No Monitoring – Group 2 and 3 parameters without proposed monitoring**

*Bis(2-ethylhexyl) Phthalate*
The Ohio EPA risk assessment (Table 11) places this parameter in group 2. This placement support that this parameter does not have the reasonable potential to contribute to WQS exceedances. Monitoring is proposed to be removed.

Selenium and Silver

These parameters were sampled as part of the additional sampling required by the application rules [40 CFR 122.21(j)(4)(iv)]. The three sampling results for both parameters were less than detection. However, the sampling methodology was not sensitively sensitive to determine reasonable potential compared to the water quality criteria. While no monitoring is proposed, a special condition is proposed to require sufficiently sensitive methods used for the next application for renewal.

Outfall 601

This outfall monitors the influent which is the raw wastewater before it receives water. The current permit monitoring is proposed to continue to determine removal efficiencies for secondary treatment regulations. The sampling type for pH is proposed to be changed from grab to multiple grab samples which would align with Ohio EPA sampling guidance.

Sewage Sludge

Limits and monitoring requirements proposed for the disposal of sewage sludge by the following management practices are based on OAC 3745-40.

Outfall 586 – Disposal via municipal landfill

The permittee primarily disposes of sewage sludge via municipal landfill. Outfall 586 is proposed to characterize the quantity of sludge disposed.

Outfall 588 – Transfer to another NPDES permit holder

The permittee may need to transfer sewage sludge to another NPDES permit holder such as Quasar. Outfall 588 is proposed to characterize the quantity of sludge transferred.

Blacklick Creek Monitoring

Blacklick Estates WWTP monitors Blacklick Creek to determine in-stream conditions to assess how the discharge is impacting the stream.

Outfall 801 – Upstream Monitoring and Outfall 901 – Downstream Monitoring

Monitoring for both stations are proposed to continue. Water temperature, dissolved oxygen, pH, ammonia, and E. coli are proposed to be reduced from weekly monitoring to monthly monitoring which aligns with the Ohio EPA monitoring frequency guidance.

New monthly monitoring for total phosphorus is proposed for the downstream monitoring station (Outfall 901).

OTHER REQUIREMENTS

Compliance Schedule

E. coli Limits

A 6-month compliance schedule is proposed for Blacklick Estates WWTP to meet the new weekly and monthly average concentration limits for E. coli. In the interim, the current limit will continue. Details are in Part I.C of the permit.

Whole Effluent Toxicity

Within 12 months, the permittee shall initiate an evaluation of treatment additives used, such as ferric chloride and polymer, in order to reduce WET toxicity. Details are in Part I.C of the permit.
Part II Requirements

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

Operator Certification and Operator of Record
Operator certification requirements have been included in Part II of the permit in accordance with OAC 3745-7-02. These rules require the Blacklick Estates WWTP to have a Class III wastewater treatment plant operator in charge of the sewage treatment plant operations discharging through outfall 001. These rules also require the permittee to designate one or more operator of record to oversee the technical operation of the “treatment works” and “sewerage system”.

Method Detection Limit
Part II of the permit includes a condition requiring the Blacklick Estates WWTP to use laboratory analytical methods with an appropriate MDL for silver, selenium, and mercury.

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

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

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Dry Tons Removed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>108</td>
</tr>
<tr>
<td>2014</td>
<td>83.6</td>
</tr>
<tr>
<td>2015</td>
<td>81.9</td>
</tr>
<tr>
<td>2016</td>
<td>47.6</td>
</tr>
<tr>
<td>2017</td>
<td>75.3</td>
</tr>
</tbody>
</table>

Table 2. Effluent Violations for Outfall 001

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. coli</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Ammonia</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Oil and Grease</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Phosphorus, Total</td>
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<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 3. Average Annual Effluent Flow Rates

<table>
<thead>
<tr>
<th>Flow Rate (Million Gallons per Day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>2013</td>
</tr>
<tr>
<td>2014</td>
</tr>
<tr>
<td>2015</td>
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<tr>
<td>2016</td>
</tr>
<tr>
<td>2017</td>
</tr>
<tr>
<td>2018</td>
</tr>
</tbody>
</table>

Table 4. Calculated Phosphorus Loadings from 2013 - 2017

<table>
<thead>
<tr>
<th>Year</th>
<th># of Samples</th>
<th>Median Flow (MGD)</th>
<th>Median Phosphorus Median Daily Results</th>
<th>Total Load Reported (kg/day)</th>
<th>Estimated Annual Total Phosphorus Load (kg/day)</th>
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<td>Concentration (mg/L)</td>
<td>Loading (kg/day)</td>
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* Assume the median phosphorus load for days where a sample was not taken.
  Total Load Reported + [Median Loading (kg/day) * (365 days - # of Samples)]
  MGD = million gallons per day

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Table 5. Effluent Characterization Using Self-Monitoring Data

<table>
<thead>
<tr>
<th>Outfall</th>
<th>Parameter</th>
<th>Unit</th>
<th>Current Limits</th>
<th># Obs</th>
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<th>Data Range</th>
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<td>mg/L</td>
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Fact Sheet for NPDES Permit Renewal, Blacklick Estates WWTP, 2018
Page 20 of 35
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<th>95th</th>
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<td>102</td>
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<td>6.5&lt;sup&gt;*&lt;/sup&gt;</td>
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<td>CBOD 5 day - Summer</td>
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<td>15.0&lt;sup&gt;W&lt;/sup&gt;</td>
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<tr>
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<td>kg/day</td>
<td>113.5</td>
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<td>40.0&lt;sup&gt;W&lt;/sup&gt;</td>
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<td>1</td>
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## Current Limits

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<th># Obs</th>
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<th>95th</th>
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<td>Monitoring Only</td>
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<td>92</td>
<td>272</td>
<td>2900</td>
<td>0 - 24200</td>
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* = For pH minimum and dissolved oxygen, 5th percentile shown in place of 95th percentile.
TR = Total Recoverable
w = weekly average
m = Minimum limit
Table 6. Summary of Acute and Chronic Toxicity Results

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<th>Pimephales Promelas</th>
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<td>Chronic (Tuₐ)</td>
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<td>AA</td>
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<td>8/7/2015</td>
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<td>8/8/2016</td>
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<td>8/7/2017</td>
<td>1.4</td>
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WLA Tuₐ = 3.98
WLA Tuₐ = 1.0

Where:

- AA = non-detection; analytical method detection limit of 0.2 Tuₐ, 1.0 Tuₐ
- Tuₐ = acute toxicity unit
  - = 100 / LC₅₀
  - LC₅₀ = Concentration of effluent having 50% chance of causing death to aquatic life for the most sensitive test species.
- Tuₐ = chronic toxicity unit
  - = 100 / IC₂₅
  - For C. dubia
    - = Minimum {100 / IC₂₅, [100 / geometric mean (NOEC, LOEC)]}
- IC₂₅ = Concentration of effluent which causes a 25% reduction in growth or reproduction of test organisms
- NOEC = No observed effect concentration
- LOEC = Lowest observed effect concentration
### Table 7. Use Attainment Table

<table>
<thead>
<tr>
<th>River Mile</th>
<th>Description</th>
<th>Year</th>
<th>Attainment Status</th>
<th>IBI</th>
<th>MIwb</th>
<th>ICI a</th>
<th>QHEI</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.3</td>
<td>Upstream Tussing Road WRF</td>
<td>2000</td>
<td>Full</td>
<td>39 ns</td>
<td>8.0 ns</td>
<td>48</td>
<td>76.5</td>
</tr>
<tr>
<td>11.25</td>
<td>Upstream Tussing Road WRF, at Tussing Road</td>
<td>2014</td>
<td>Full</td>
<td>50</td>
<td>9.7</td>
<td>36</td>
<td>73</td>
</tr>
<tr>
<td>11.14</td>
<td>Tussing Road WRF Mixing Zone</td>
<td>2000</td>
<td>N/A</td>
<td>40</td>
<td>7</td>
<td>F/F</td>
<td>--</td>
</tr>
<tr>
<td>11.0</td>
<td>Downstream Tussing Road WRF</td>
<td>2014</td>
<td>Full</td>
<td>--</td>
<td>--</td>
<td>40</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2000</td>
<td>Full</td>
<td>44</td>
<td>8.6</td>
<td>38</td>
<td>70</td>
</tr>
<tr>
<td>10.2</td>
<td>Blacklick Creek at Clubhouse Lane</td>
<td>2014</td>
<td>Full</td>
<td>52</td>
<td>8.7</td>
<td>42</td>
<td>82.5</td>
</tr>
<tr>
<td>8.8</td>
<td>Blacklick Creek East of Brice at Refugee Road</td>
<td>2014</td>
<td>Full</td>
<td>50</td>
<td>9.3</td>
<td>48</td>
<td>88.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2000</td>
<td>Full</td>
<td>46</td>
<td>9.4</td>
<td>40</td>
<td>70.5</td>
</tr>
<tr>
<td>4.83</td>
<td>Blacklick Estates Mixing Zone</td>
<td>2000</td>
<td>N/A</td>
<td>39</td>
<td>8.5</td>
<td>F/F</td>
<td>--</td>
</tr>
<tr>
<td>4.8</td>
<td>Downstream Blacklick Estates WWTP</td>
<td>2015</td>
<td>Partial</td>
<td>48</td>
<td>9.31</td>
<td>26*</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2014</td>
<td>Full</td>
<td>46</td>
<td>10.0</td>
<td>32**</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2012</td>
<td>Partial</td>
<td>49</td>
<td>9.13</td>
<td>26*</td>
<td>71.8</td>
</tr>
<tr>
<td>4.6</td>
<td>Downstream Blacklick Estates WWTP</td>
<td>2000</td>
<td>Partial</td>
<td>46</td>
<td>8.9</td>
<td>26*</td>
<td>69</td>
</tr>
<tr>
<td>4.35</td>
<td>South of Whitehall at Winchester Pike</td>
<td>2015</td>
<td>Full</td>
<td>42</td>
<td>8.46</td>
<td>44</td>
<td>72.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2012</td>
<td>Partial</td>
<td>40</td>
<td>8.69</td>
<td>26*</td>
<td>78.8</td>
</tr>
<tr>
<td>2.6</td>
<td>Upstream Hamilton Road</td>
<td>2000</td>
<td>Full</td>
<td>43</td>
<td>8.4</td>
<td>42</td>
<td>78</td>
</tr>
<tr>
<td>2.4</td>
<td>Groveport, behind Ohio EPA Building</td>
<td>2015</td>
<td>Full</td>
<td>42</td>
<td>7.76ns</td>
<td>46</td>
<td>64.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2014</td>
<td>Full</td>
<td>--</td>
<td>--</td>
<td>48</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2012</td>
<td>Partial</td>
<td>48</td>
<td>9.8</td>
<td>26*</td>
<td>80.5</td>
</tr>
</tbody>
</table>

Note: All monitoring stations above is designated as Warmwater Habitat (WWH) aquatic life use and located in Eastern Corn Belt Plain ecoregion.

* Narrative evaluation based on qualitative macroinvertebrate sample (F = Fair)

ns - Nonsignificant departure from biocriteria (<4 IBI or ICI units, or <0.5 MIwb units).

- Index of Biotic Integrity (IBI) Biocriteria = 40
- Modified Index of Well-being (MIwb) Criteria = 8.3
- Invertebrate Community Index (ICI) Criteria = 36

* - Indicates significant departure from applicable biocriteria (>4 IBI or ICI units, or >0.5 MIwb units).

N/A - An attainment status is not applicable

QHEI = Qualitative Habitat Evaluation Index
## Table 8. Water Quality Criteria in the Study Area

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Human Average</th>
<th>Aquatic Maximum</th>
<th>Inside Average</th>
<th>Aquatic Maximum</th>
<th>Inside Mixing Zone Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia-S</td>
<td>mg/L</td>
<td>--</td>
<td>1.9</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Ammonia-W</td>
<td>mg/L</td>
<td>--</td>
<td>5.5</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Bis(2-ethylhexyl)phthalate</td>
<td>µg/L</td>
<td>59</td>
<td>8.4</td>
<td>1100</td>
<td>2100</td>
<td>2100</td>
</tr>
<tr>
<td>Cadmium - TR</td>
<td>µg/L</td>
<td>--</td>
<td>6.7</td>
<td>19</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>Chlorine - TR Res</td>
<td>mg/L</td>
<td>--</td>
<td>0.011</td>
<td>0.019</td>
<td>0.038</td>
<td>0.038</td>
</tr>
<tr>
<td>Chromium - TR</td>
<td>µg/L</td>
<td>--</td>
<td>240</td>
<td>5100</td>
<td>10000</td>
<td>10000</td>
</tr>
<tr>
<td>Copper - TR</td>
<td>µg/L</td>
<td>1300</td>
<td>500</td>
<td>28</td>
<td>47</td>
<td>93</td>
</tr>
<tr>
<td>Dissolved solids (ave)</td>
<td>mg/L</td>
<td>--</td>
<td>1500</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Lead - TR</td>
<td>µg/L</td>
<td>--</td>
<td>33</td>
<td>620</td>
<td>1200</td>
<td>1200</td>
</tr>
<tr>
<td>Mercury - TR (BCC)</td>
<td>ng/L</td>
<td>12</td>
<td>910</td>
<td>1700</td>
<td>3400</td>
<td>3400</td>
</tr>
<tr>
<td>Nickel - TR</td>
<td>µg/L</td>
<td>4600</td>
<td>200</td>
<td>150</td>
<td>1400</td>
<td>2800</td>
</tr>
<tr>
<td>Nitrate-N + Nitrite-N</td>
<td>mg/L</td>
<td>--</td>
<td>100</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>mg/L</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Zinc - TR</td>
<td>µg/L</td>
<td>69000</td>
<td>25000</td>
<td>350</td>
<td>350</td>
<td>710</td>
</tr>
<tr>
<td>Whole Effluent Toxicity, Acute</td>
<td>TUₐ</td>
<td>--</td>
<td>--</td>
<td>0.3</td>
<td>1.0</td>
<td>--</td>
</tr>
<tr>
<td>Whole Effluent Toxicity, Chronic</td>
<td>TUₑ</td>
<td>--</td>
<td>1.0</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

B  Bioaccumulative Chemical of Concern (BCC)
C  Carcinogen
Table 9. Instream Conditions and Discharger Flow

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Value</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upstream flows:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blacklick Creek above Fairfield County Tussing Rd.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1Q10</td>
<td>cfs</td>
<td>annual</td>
<td>0.80 USGS gage #03228700, 1950-1972 data</td>
</tr>
<tr>
<td>7Q10</td>
<td>cfs</td>
<td>annual</td>
<td>0.89 USGS gage #03228700, 1950-1972 data</td>
</tr>
<tr>
<td>30Q10</td>
<td>cfs</td>
<td>summer</td>
<td>1.13 USGS gage #03228700, 1950-1972 data</td>
</tr>
<tr>
<td></td>
<td>cfs</td>
<td>winter</td>
<td>3.54 USGS gage #03228700, 1950-1972 data</td>
</tr>
<tr>
<td>Harmonic Mean Flow</td>
<td>cfs</td>
<td>annual</td>
<td>3.46 USGS gage #03228700, 1950-1972 data</td>
</tr>
<tr>
<td>Mixing Assumption (Blackick Creek)</td>
<td>%</td>
<td>average</td>
<td>100 Stream-to-discharge ratio</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>maximum</td>
<td>100 Stream-to-discharge ratio</td>
</tr>
<tr>
<td>Fairfield County Tussing Rd. WWTP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outfall 001 flow rate</td>
<td>cfs</td>
<td>design</td>
<td>4.64 (3.0) NPDES permit application</td>
</tr>
<tr>
<td>Aqua Ohio – Blacklick Estates WWTP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outfall 001 flow rate</td>
<td>(MGD)</td>
<td>design</td>
<td>1.86 (1.2) NPDES permit application</td>
</tr>
<tr>
<td>Instream Hardness</td>
<td>mg/l</td>
<td>annual</td>
<td>358 Blacklick Creek 901; 20 values, 2013-2018</td>
</tr>
</tbody>
</table>

Background Water Quality for the study area:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Value</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia</td>
<td>mg/l</td>
<td>summer</td>
<td>0.05 DMR 801; 48 values, 28&lt;MDL, 2011-16</td>
</tr>
<tr>
<td>Ammonia</td>
<td>mg/l</td>
<td>winter</td>
<td>0.05 DMR 801; 35 values, 19&lt;MDL, 2011-16</td>
</tr>
<tr>
<td>Arsenic</td>
<td>μg/l</td>
<td>annual</td>
<td>2.15 STORET; 50 values, 16&lt;MDL, 2000-10</td>
</tr>
<tr>
<td>Barium</td>
<td>μg/l</td>
<td>annual</td>
<td>88.5 STORET; 26 values, 0&lt;MDL, 2000-10</td>
</tr>
<tr>
<td>Bis(2-ethylhexyl) phthalate</td>
<td>μg/l</td>
<td>annual</td>
<td>0 No representative data available.</td>
</tr>
<tr>
<td>Cadmium</td>
<td>μg/l</td>
<td>annual</td>
<td>0 STORET; 26 values, 26&lt;MDL, 2000-10</td>
</tr>
<tr>
<td>Chlorine, Total Residual</td>
<td>mg/l</td>
<td>annual</td>
<td>0 No representative data available.</td>
</tr>
<tr>
<td>Chromium</td>
<td>μg/l</td>
<td>annual</td>
<td>0 STORET; 26 values, 26&lt;MDL, 2000-10</td>
</tr>
<tr>
<td>Copper</td>
<td>μg/l</td>
<td>annual</td>
<td>5 STORET; 26 values, 23&lt;MDL, 2000-10</td>
</tr>
<tr>
<td>Cyanide, free</td>
<td>μg/l</td>
<td>annual</td>
<td>0 No representative data available.</td>
</tr>
<tr>
<td>Hexavalent Chromium (dissolved)</td>
<td>μg/l</td>
<td>annual</td>
<td>0 No representative data available.</td>
</tr>
<tr>
<td>Lead</td>
<td>μg/l</td>
<td>annual</td>
<td>0 STORET; 26 values, 26&lt;MDL, 2000-10</td>
</tr>
<tr>
<td>Nickel</td>
<td>μg/l</td>
<td>annual</td>
<td>20 STORET; 26 values, 24&lt;MDL, 2000-10</td>
</tr>
<tr>
<td>Strontium</td>
<td>μg/l</td>
<td>annual</td>
<td>395 STORET; 26 values, 0&lt;MDL, 2000-10</td>
</tr>
<tr>
<td>Total Filterable Residue</td>
<td>mg/l</td>
<td>annual</td>
<td>516 STORET; 25 values, 0&lt;MDL, 2000-10</td>
</tr>
<tr>
<td>Zinc</td>
<td>μg/l</td>
<td>annual</td>
<td>5 STORET; 26 values, 18&lt;MDL, 2000-10</td>
</tr>
</tbody>
</table>

MDL = method detection limit
NPDES = National Pollutant Discharge Elimination System
STORET = United States Environmental Protection Agency Storage and Retrieval Data Warehouse
USGS = United States Geological Survey
Table 10. Summary of Effluent Limits to Maintain Applicable Water Quality Criteria

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Outside Mixing Zone Criteria</th>
<th>Inside Mixing Zone Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>Maximum</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Human Health</td>
<td>Agri Supply</td>
</tr>
<tr>
<td>Chlorine, Total Residual</td>
<td>mg/l</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Copper</td>
<td>μg/l</td>
<td>1989</td>
<td>763</td>
</tr>
<tr>
<td>Mercury&lt;sup&gt;C&lt;/sup&gt;</td>
<td>ng/l</td>
<td>12</td>
<td>10000</td>
</tr>
<tr>
<td>Total Filterable Residue</td>
<td>mg/l</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Whole Effluent Toxicity, Acute</td>
<td>TU&lt;sub&gt;a&lt;/sub&gt;</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Whole Effluent Toxicity, Chronic</td>
<td>TU&lt;sub&gt;c&lt;/sub&gt;</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

<sup>A</sup> These are the only parameters which required waste load allocations

<sup>C</sup> Bioaccumulative Chemical of concern (BCC).
Table 11. Parameter Assessment

### Group 2 - Parameters with PEQ < 25% of WQS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th># obs</th>
<th># &gt; MDL</th>
<th>Average PEQ</th>
<th>WQS</th>
<th>%</th>
<th>Maximum PEQ</th>
<th>PWSOMZM</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia-S</td>
<td>mg/L</td>
<td>241</td>
<td>197</td>
<td>0.49</td>
<td>1.9AL</td>
<td>26</td>
<td>1.05</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Ammonia-W</td>
<td>mg/L</td>
<td>181</td>
<td>148</td>
<td>0.89</td>
<td>5.5AL</td>
<td>16</td>
<td>1.82</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Bis(2-ethylhexyl)phthalate</td>
<td>µg/L</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>8.4AL</td>
<td>0</td>
<td>0</td>
<td>1100</td>
<td>0</td>
</tr>
<tr>
<td>Cadmium - TR</td>
<td>µg/L</td>
<td>18</td>
<td>1</td>
<td>0.66</td>
<td>6.7AL</td>
<td>10</td>
<td>0.91</td>
<td>19</td>
<td>5</td>
</tr>
<tr>
<td>Chromium - TR</td>
<td>µg/L</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>100Ag</td>
<td>0</td>
<td>0</td>
<td>5100</td>
<td>0</td>
</tr>
<tr>
<td>Lead - TR</td>
<td>µg/L</td>
<td>23</td>
<td>2</td>
<td>4.93</td>
<td>33AL</td>
<td>15</td>
<td>6.76</td>
<td>620</td>
<td>1</td>
</tr>
<tr>
<td>Nickel - TR</td>
<td>µg/L</td>
<td>20</td>
<td>1</td>
<td>14.3</td>
<td>150AL</td>
<td>10</td>
<td>19.6</td>
<td>1400</td>
<td>1</td>
</tr>
<tr>
<td>Nitrate-N + Nitrite-N</td>
<td>mg/L</td>
<td>60</td>
<td>60</td>
<td>16.1</td>
<td>100Ag</td>
<td>16</td>
<td>22</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Zinc - TR</td>
<td>µg/L</td>
<td>20</td>
<td>19</td>
<td>41.9</td>
<td>350AL</td>
<td>12</td>
<td>64.5</td>
<td>350</td>
<td>18</td>
</tr>
</tbody>
</table>

### Group 3 - Parameters with PEQ < 50% of PEL

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th># obs</th>
<th># &gt; MDL</th>
<th>Average PEQ</th>
<th>PEL</th>
<th>%</th>
<th>Maximum PEQ</th>
<th>PELOMZM</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercury - TR (BCC)</td>
<td>ng/L</td>
<td>20</td>
<td>19</td>
<td>3.28</td>
<td>12HH</td>
<td>27</td>
<td>5.17</td>
<td>1700</td>
<td>0</td>
</tr>
</tbody>
</table>

### Group 4 - Monitoring Required - Parameters with PEQ ≥ 50%, but < 100% of PEL

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th># obs</th>
<th># &gt; MDL</th>
<th>Average PEQ</th>
<th>PEL</th>
<th>%</th>
<th>Maximum PEQ</th>
<th>PEL</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine</td>
<td>mg/L</td>
<td>644</td>
<td>630</td>
<td>0.02</td>
<td>0.044AL</td>
<td>53</td>
<td>0.029</td>
<td>0.038</td>
<td>75</td>
</tr>
<tr>
<td>Copper - TR</td>
<td>µg/L</td>
<td>59</td>
<td>13</td>
<td>21.3</td>
<td>40AL</td>
<td>53</td>
<td>32.9</td>
<td>67</td>
<td>49</td>
</tr>
<tr>
<td>Dissolved solids (ave)</td>
<td>mg/L</td>
<td>52</td>
<td>52</td>
<td>893</td>
<td>1635AL</td>
<td>55</td>
<td>1050</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

1 = The average criteria are protective of long-term conditions. The letters next to the WQS/PEL indicate the most restrictive standard. Water uses to protect include:

- **Ag** = Agricultural or Industrial Water Supply
- **HH** = Human Health
- **AL** = Aquatic Life
- **WL** = Wildlife

2 = The maximum criteria are protective of short-term toxicity to aquatic life.

- **OMZM** = Outside Mixing Zone Maximum
- **IMZM** = Inside Mixing Zone Maximum - More restrictive than OMZM in situations where dilution is available

Other Abbreviations / Acronyms:

- **BCC** = Bioaccumulative Chemical of Concern
- **MDL** = Method Detection Limit
- **obs** = Observations (i.e., sampling events)
- **PEL** = Preliminary Effluent Limit
- **PEQ** = Projected Effluent Quality
- **WQS** = Water Quality Standard

---

*Fact Sheet for NPDES Permit Renewal, Blacklick Estates WWTP, 2018*

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Table 12. Final Effluent Limits

<table>
<thead>
<tr>
<th>Outfall</th>
<th>Parameter</th>
<th>Units</th>
<th>Concentration</th>
<th>Loading&lt;sup&gt;A&lt;/sup&gt;</th>
<th>Basis</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>30 Day Average</td>
<td>Daily Maximum</td>
<td>30 Day Average</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>001</td>
<td>Water Temperature</td>
<td>°C</td>
<td>Monitoring Only</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>Dissolved Oxygen – Summer</td>
<td>mg/L</td>
<td>--</td>
<td>7.0&lt;sup&gt;™&lt;/sup&gt;</td>
<td>PD</td>
</tr>
<tr>
<td></td>
<td>Dissolved Oxygen – Winter</td>
<td>mg/L</td>
<td>--</td>
<td>5.0&lt;sup&gt;™&lt;/sup&gt;</td>
<td>PD</td>
</tr>
<tr>
<td></td>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>20.0</td>
<td>30.0&lt;sup&gt;™&lt;/sup&gt;</td>
<td>90.8</td>
</tr>
<tr>
<td></td>
<td>Oil and Grease</td>
<td>mg/L</td>
<td>--</td>
<td>10</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Nitrogen, Ammonia - Fall/Spring</td>
<td>mg/L</td>
<td>4.75</td>
<td>7.13&lt;sup&gt;™&lt;/sup&gt;</td>
<td>21.6</td>
</tr>
<tr>
<td></td>
<td>Nitrogen, Ammonia – Summer</td>
<td>mg/L</td>
<td>1.5</td>
<td>2.3&lt;sup&gt;™&lt;/sup&gt;</td>
<td>6.8</td>
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<tr>
<td></td>
<td>Nitrogen, Ammonia – Winter-Short</td>
<td>mg/L</td>
<td>8.0</td>
<td>12.0&lt;sup&gt;™&lt;/sup&gt;</td>
<td>36.3</td>
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<tr>
<td></td>
<td>Nitrogen Kjeldahl, Total</td>
<td>mg/L</td>
<td>Monitoring Only</td>
<td></td>
<td>BTJ</td>
</tr>
<tr>
<td></td>
<td>Nitrite Plus Nitrate, Total</td>
<td>mg/L</td>
<td>Monitoring Only</td>
<td></td>
<td>BTJ</td>
</tr>
<tr>
<td>001</td>
<td>Phosphorus, Total</td>
<td>mg/L</td>
<td>0.50</td>
<td>--</td>
<td>2.3</td>
</tr>
<tr>
<td></td>
<td>Orthophosphate, Dissolved</td>
<td>mg/L</td>
<td>Monitoring Only</td>
<td></td>
<td>SB1</td>
</tr>
<tr>
<td></td>
<td>Nickel, TR</td>
<td>µg/L</td>
<td>Monitoring Only</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>Zinc, TR</td>
<td>µg/L</td>
<td>Monitoring Only</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>Cadmium, TR</td>
<td>µg/L</td>
<td>Monitoring Only</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>Lead, TR</td>
<td>µg/L</td>
<td>Monitoring Only</td>
<td></td>
<td>M</td>
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<tr>
<td></td>
<td>Chromium, TR</td>
<td>µg/L</td>
<td>Monitoring Only</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>Copper, TR</td>
<td>µg/L</td>
<td>Monitoring Only</td>
<td></td>
<td>RP</td>
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<tr>
<td></td>
<td>E. coli - Summer</td>
<td>#/100 mL</td>
<td>126</td>
<td>284&lt;sup&gt;™&lt;/sup&gt;</td>
<td>--</td>
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<tr>
<td></td>
<td>Flow Rate</td>
<td>MGD</td>
<td>Monitoring Only</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>Chlorine, Total Residual - Summer</td>
<td>mg/L</td>
<td>--</td>
<td>0.021</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Mercury, Total</td>
<td>ng/L</td>
<td>Monitoring Only</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>Acute Toxicity, Ceriodaphnia dubia</td>
<td>TUa</td>
<td>Monitoring Only</td>
<td></td>
<td>WET</td>
</tr>
<tr>
<td></td>
<td>Chronic Toxicity, Ceriodaphnia dubia</td>
<td>TUc</td>
<td>Monitoring Only</td>
<td></td>
<td>WET</td>
</tr>
<tr>
<td></td>
<td>Acute Toxicity, Pimephales promelas</td>
<td>TUa</td>
<td>Monitoring Only</td>
<td></td>
<td>WET</td>
</tr>
</tbody>
</table>
### Chronic Toxicity, Pimephales promelas

<table>
<thead>
<tr>
<th></th>
<th>TUc</th>
<th>Monitoring Only</th>
<th>WET</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH, Maximum</td>
<td>S.U.</td>
<td>--</td>
<td>9.0</td>
</tr>
<tr>
<td>pH, Minimum</td>
<td>S.U.</td>
<td>--</td>
<td>6.5&lt;sup&gt;m&lt;/sup&gt;</td>
</tr>
<tr>
<td>Residue, Total Filterable</td>
<td>mg/L</td>
<td>Monitoring Only</td>
<td>RP</td>
</tr>
<tr>
<td>CBOD 5 day – Summer</td>
<td>mg/L</td>
<td>10.0</td>
<td>15.0&lt;sup&gt;w&lt;/sup&gt;</td>
</tr>
<tr>
<td>CBOD 5 day – Winter</td>
<td>mg/L</td>
<td>25.0</td>
<td>40.0&lt;sup&gt;w&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

**A**  Effluent loadings based on average design discharge flow of 1.2 MGD.

**b**  Definitions:

- **BPT** = Best Practicable Waste Treatment Technology, 40 CFR Part 133, Secondary Treatment Regulation
- **BTJ** = Best Technical Judgment
- **CFR** = Code of Federal Regulations
- **M** = Division of Surface Water NPDES Permit Guidance 1: Monitoring frequency requirements for Sanitary Discharges
- **NPDES** = National Pollutant Discharge Elimination System
- **OAC** = Ohio Administrative Code
- **PD** = Plant Design (OAC 3745-33-05(E))
- **RP** = Reasonable Potential for requiring water quality-based effluent limits and monitoring requirements in permits (OAC 3745-33-07(A))
- **SB1** = Implementation of Senate Bill 1 (ORC 6111.03)
- **TMDL** = Total Maximum Daily Load
- **WET** = Minimum testing requirements for whole effluent toxicity [OAC 3745-33-07(B)(11)]
- **WQS** = Ohio Water Quality Standards (OAC 3745-1)

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

**m**  Daily minimum limit.

**w**  7 day average limit.
**Attachment 1. Daily Phosphorus Performance of Blacklick Creek Point Sources**

*Note:* The boxes are the range of the 25th – 75th percentiles. The line in the middle of the box is the median value. The vertical dash line is the interquartile range and all points above or below the vertical dash line are potential outliers.
Attachment 2. Aquatic Life Biocriteria in Blacklick Creek

Blacklick Creek Biocriteria Profile

---

Fact Sheet for NPDES Permit Renewal, Blacklick Estates WWTP, 2018
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## Attachment 3. Toxicity Evaluation

<table>
<thead>
<tr>
<th></th>
<th>Water Flea (Ceriodaphnia dubia)</th>
<th>Fathead Minnow (Pimephales promelas)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acute (TU)</td>
<td>Chronic (TU)</td>
</tr>
<tr>
<td>WLA (TU)</td>
<td>1.0</td>
<td>3.98</td>
</tr>
<tr>
<td>Total # of Tests</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Maximum Value (TU)</td>
<td>1.4</td>
<td>2.8</td>
</tr>
<tr>
<td># of Results ≥ WLA</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>% of Results ≥ WLA</td>
<td>20%</td>
<td>0%</td>
</tr>
<tr>
<td>Geometric Mean</td>
<td>0.30</td>
<td>1.5</td>
</tr>
<tr>
<td>Average Exceedance</td>
<td>0.06</td>
<td>0</td>
</tr>
<tr>
<td>(% of Results ≥ WLA x Geometric Mean)</td>
<td></td>
<td></td>
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<tr>
<td>Average Exceedance ÷ WLA</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>Hazard Category</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

**Note:** Downstream attainment was not considered a factor because the list of cause of impairment did not list a point source and therefore, it is not believed that Blacklick Estates WWTP. Therefore, the effluent toxicity was given the primary weight in determining reasonable potential.

### Hazard Category Evaluation for: Acute C. dubia

<table>
<thead>
<tr>
<th>Attribute Evaluated</th>
<th>Hazard Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of Toxicity</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Adequately</td>
</tr>
<tr>
<td></td>
<td>Documented</td>
</tr>
</tbody>
</table>

(A) Effluent Toxicity

- (1) Minimum # of tests
- (2) % of tests Greater than WLA
- (3) Average Exceedance / WLA
  - (a) Acute
  - (b) Chronic
- (4) Maximum Result

### Hazard Category Evaluation for: Chronic C. dubia

<table>
<thead>
<tr>
<th>Attribute Evaluated</th>
<th>Hazard Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of Toxicity</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Adequately</td>
</tr>
<tr>
<td></td>
<td>Documented</td>
</tr>
</tbody>
</table>

(A) Effluent Toxicity

- (1) Minimum # of tests
- (2) % of tests Greater than WLA
- (3) Average Exceedance / WLA
  - (a) Acute
  - (b) Chronic
- (4) Maximum Result

---

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_Page 33 of 35_
### Hazard Category Evaluation for: Acute *P. promelas*

<table>
<thead>
<tr>
<th>Attribute Evaluated</th>
<th>Hazard Category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Degree of Toxicity</td>
<td>Adequately Documented</td>
</tr>
<tr>
<td>(A) Effluent Toxicity</td>
<td></td>
</tr>
<tr>
<td>(1) Minimum # of tests</td>
<td>3</td>
</tr>
<tr>
<td>(2) % of tests Greater than WLA</td>
<td>&gt; 30</td>
</tr>
<tr>
<td>(3) Average Exceedance / WLA</td>
<td>(a) Acute</td>
</tr>
<tr>
<td></td>
<td>(b) Chronic</td>
</tr>
<tr>
<td></td>
<td>(4) Maximum Result</td>
</tr>
</tbody>
</table>

### Hazard Category Evaluation for: Chronic *P. promelas*

<table>
<thead>
<tr>
<th>Attribute Evaluated</th>
<th>Hazard Category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Degree of Toxicity</td>
<td>Adequately Documented</td>
</tr>
<tr>
<td>(A) Effluent Toxicity</td>
<td></td>
</tr>
<tr>
<td>(1) Minimum # of tests</td>
<td>3</td>
</tr>
<tr>
<td>(2) % of tests Greater than WLA</td>
<td>&gt; 30</td>
</tr>
<tr>
<td>(3) Average Exceedance / WLA</td>
<td>(a) Acute</td>
</tr>
<tr>
<td></td>
<td>(b) Chronic</td>
</tr>
<tr>
<td></td>
<td>(4) Maximum Result</td>
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Addendum 1. Acronyms

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