

Application Type Renewal  
Facility Type Industrial  
Major / Minor Minor

**NPDES PERMIT FACT SHEET  
INDIVIDUAL INDUSTRIAL WASTE (IW)  
AND IW STORMWATER**

Application No. PA0239046  
APS ID 1107403  
Authorization ID 1473083

**Applicant and Facility Information**

|                           |                                                                      |                  |                                                                  |
|---------------------------|----------------------------------------------------------------------|------------------|------------------------------------------------------------------|
| Applicant Name            | <u>JMS Manufacturing LLC</u>                                         | Facility Name    | <u>Ridgway Powdered Metals</u>                                   |
| Applicant Address         | <u>417 Thorn Street Suite 300</u><br><u>Sewickley, PA 15143-1509</u> | Facility Address | <u>6931 Ridgway Saint Marys Road</u><br><u>Ridgway, PA 15853</u> |
| Applicant Contact         | <u>Jeremy Gabler</u>                                                 | Facility Contact | <u>Jeremy Gabler</u>                                             |
| Applicant Phone           | <u>(814) 772-5551</u>                                                | Facility Phone   | <u>(814) 772-5551</u>                                            |
| Client ID                 | <u>369202</u>                                                        | Site ID          | <u>259589</u>                                                    |
| SIC Code                  | <u>3399</u>                                                          | Municipality     | <u>Ridgway Township</u>                                          |
| SIC Description           | <u>Manufacturing - Primary Metal Products,<br/>Nec</u>               | County           | <u>Elk</u>                                                       |
| Date Application Received | <u>January 22, 2024</u>                                              | EPA Waived?      | <u>Yes</u>                                                       |
| Date Application Accepted | <u>January 22, 2024</u>                                              | If No, Reason    | <u></u>                                                          |
| Purpose of Application    | <u>NPDES Renewal.</u>                                                |                  |                                                                  |

**Summary of Review**

JMS Manufacturing LLC (JMS) has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of its NPDES permit renewal. The permit was last reissued on June 17, 2019 and became effective on July 1, 2019. The permit expired on June 30, 2024.

Based on the review, it is recommended that the permit be drafted.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

| Approve | Deny | Signatures                                                              | Date         |
|---------|------|-------------------------------------------------------------------------|--------------|
| X       |      | <i>Jinsu Kim</i><br>Jinsu Kim / Environmental Engineering Specialist    | May 20, 2025 |
| X       |      | Adam Olesnanik<br>Adam Olesnanik, P.E. / Environmental Engineer Manager | May 22, 2025 |

**Discharge, Receiving Waters and Water Supply Information**

|                                                         |                                               |                              |                                                                |
|---------------------------------------------------------|-----------------------------------------------|------------------------------|----------------------------------------------------------------|
| Outfall No.                                             | 001                                           | Design Flow (MGD)            | 0.0091                                                         |
| Latitude                                                | 41° 25' 32.00"                                | Longitude                    | -78° 42' 52.00"                                                |
| Quad Name                                               | -                                             | Quad Code                    | -                                                              |
| Wastewater Description: Noncontact Cooling Water (NCCW) |                                               |                              |                                                                |
| Receiving Waters                                        | Small ditch to Elk Creek (CWF)                | Stream Code                  | 50459                                                          |
| NHD Com ID                                              | 102665463                                     | RMI                          | 2.3                                                            |
| Drainage Area                                           | 59.2                                          | Yield (cfs/mi <sup>2</sup> ) | 0.07                                                           |
| Q <sub>7-10</sub> Flow (cfs)                            | 4.32                                          | Q <sub>7-10</sub> Basis      | Streamstats - Elk Creek                                        |
| Elevation (ft)                                          | 1420                                          | Slope (ft/ft)                | 0.00428                                                        |
| Watershed No.                                           | 17-A                                          | Chapter 93 Class.            | CWF                                                            |
| Existing Use                                            | -                                             | Existing Use Qualifier       | -                                                              |
| Exceptions to Use                                       | -                                             | Exceptions to Criteria       | -                                                              |
| Assessment Status                                       | Attaining Use(s)                              |                              |                                                                |
| Cause(s) of Impairment                                  | -                                             |                              |                                                                |
| Source(s) of Impairment                                 | -                                             |                              |                                                                |
| TMDL Status                                             | Final (6/20/2006)*                            | Name                         | Elk Creek TMDL (Elk County) 50459<br>(impaired for AMD metals) |
| Nearest Downstream Public Water Supply Intake           | Pennsylvania American Water Company - Clarion |                              |                                                                |
| PWS Waters                                              | Clarion River                                 | Flow at Intake (cfs)         | 90.7                                                           |
| PWS RMI                                                 | 33.3                                          | Distance from Outfall (mi)   | 66.0                                                           |

**Drainage Area**

The discharge is to a small ditch and then to Elk Creek at RM 2.3. A drainage area upstream of the point of discharge is estimated to be 59.2 sq.mi. according to USGS StreamStats available at <https://streamstats.usgs.gov/ss/>.

**Streamflow**

USGS StreamStats produced a Q<sub>7-10</sub> flow of 4.32 cfs at the point of discharge.

**Elk Creek**

According to 25 Code § 93.9r, Elk Creek has a protected water use of cold water fishery (CWF). Clarion River which is a main stem of Elk Creek has also a protected water use of CWF. Therefore, no special protection water is impacted by this discharge. According to DEP's 2024 Integrated Water Quality Report, Elk Creek near the point of discharge is not impaired for aquatic life use but is in fact impaired for fish consumption due to Mercury as a result of atmospheric deposition. DEP developed a Total Maximum Daily Load (TMDL) for Elk Creek watershed on March 28, 2005 to address impairments resulted from acid drainage from abandoned coal mines within the Elk Creek watershed. The more details on this TMDL will be addressed later in this fact sheet.

**Public Water Supply Intake**

The fact sheet developed for the last permit renewal indicates that the nearest downstream public water supply intake is PA American Water on Clarion River approximately 66 miles from the discharge point. Given the distance, the discharge is not expected to adversely affect the intake.

**Facility Information**

JMS owns a powder metal parts manufacturing plant known as Ridgway Powdered Metals. According to the application, parts are compacted and sintered at an average temperature of 2070 °F. The sintering furnace contains cooling chambers that the parts pass through to reduce the temperature of the parts. This non-contact cooling water is then emptied into the holding pond. According to the application, about 0.0210 MGD of non-contact cooling water is generated as an average. Well water is used for this process. There is no treatment unit for this non-contact cooling water other than the pond that allows additional cooling and settling before discharges to a small ditch before Elk Creek. Sanitary wastewater is discharged to two septic systems comprised of holding tanks and leach fields according to the recent inspection report. This report also indicates that no chemicals are added to non-contact cooling water.

**Compliance History**

Compliance History

| Summary of DMRs:        | A summary of past 12 month DMR data is presented on the next page.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        |                     |       |              |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |  |  |        |                     |  |  |        |                                           |  |  |        |                     |  |  |        |                     |  |  |
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| Summary of Inspections: | 12/28/2022: DEP conducted a routine inspection and identified a number of violations at the time of inspection. A full report will be available for file review.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |        |                     |       |              |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |  |  |        |                     |  |  |        |                                           |  |  |        |                     |  |  |        |                     |  |  |
| Other Comments:         | <p>The facility had a number of permit violations since the last permit reissuance. These violations are shown below.</p> <table><thead><tr><th>Date</th><th>Description</th><th>Date2</th><th>Description2</th></tr></thead><tbody><tr><td>Nov-19</td><td>Late DMR Submission</td><td>Jan-23</td><td>Late DMR Submission</td></tr><tr><td>Feb-20</td><td>Late DMR Submission</td><td>May-23</td><td>Late DMR Submission</td></tr><tr><td>May-21</td><td>Late DMR Submission</td><td>Nov-23</td><td>Late DMR Submission</td></tr><tr><td>May-21</td><td>Sample type not in accordance with permit</td><td>Dec-23</td><td>Late DMR Submission</td></tr><tr><td>Jun-21</td><td>Late DMR Submission</td><td>Mar-24</td><td>Late DMR Submission</td></tr><tr><td>Jun-21</td><td>Sample type not in accordance with permit</td><td>Apr-24</td><td>Late DMR Submission</td></tr><tr><td>Jul-21</td><td>Late DMR Submission</td><td>Jun-24</td><td>Late DMR Submission</td></tr><tr><td>Jul-21</td><td>Sample type not in accordance with permit</td><td>Aug-24</td><td>Late DMR Submission</td></tr><tr><td>Aug-21</td><td>Late DMR Submission</td><td>Sep-24</td><td>Late DMR Submission</td></tr><tr><td>Oct-21</td><td>Late DMR Submission</td><td>Oct-24</td><td>Late DMR Submission</td></tr><tr><td>Nov-21</td><td>Late DMR Submission</td><td>Nov-24</td><td>Late DMR Submission</td></tr><tr><td>Dec-21</td><td>Late DMR Submission</td><td>Jan-25</td><td>Late DMR Submission</td></tr><tr><td>Mar-22</td><td>Late DMR Submission</td><td>Feb-25</td><td>Late DMR Submission</td></tr><tr><td>Apr-22</td><td>Late DMR Submission</td><td></td><td></td></tr><tr><td>Jun-22</td><td>Late DMR Submission</td><td></td><td></td></tr><tr><td>Aug-22</td><td>Sample type not in accordance with permit</td><td></td><td></td></tr><tr><td>Sep-22</td><td>Late DMR Submission</td><td></td><td></td></tr><tr><td>Oct-22</td><td>Late DMR Submission</td><td></td><td></td></tr></tbody></table> <p>DEP's database shows there is no open violation associated with this facility or permittee.</p> | Date   | Description         | Date2 | Description2 | Nov-19 | Late DMR Submission | Jan-23 | Late DMR Submission | Feb-20 | Late DMR Submission | May-23 | Late DMR Submission | May-21 | Late DMR Submission | Nov-23 | Late DMR Submission | May-21 | Sample type not in accordance with permit | Dec-23 | Late DMR Submission | Jun-21 | Late DMR Submission | Mar-24 | Late DMR Submission | Jun-21 | Sample type not in accordance with permit | Apr-24 | Late DMR Submission | Jul-21 | Late DMR Submission | Jun-24 | Late DMR Submission | Jul-21 | Sample type not in accordance with permit | Aug-24 | Late DMR Submission | Aug-21 | Late DMR Submission | Sep-24 | Late DMR Submission | Oct-21 | Late DMR Submission | Oct-24 | Late DMR Submission | Nov-21 | Late DMR Submission | Nov-24 | Late DMR Submission | Dec-21 | Late DMR Submission | Jan-25 | Late DMR Submission | Mar-22 | Late DMR Submission | Feb-25 | Late DMR Submission | Apr-22 | Late DMR Submission |  |  | Jun-22 | Late DMR Submission |  |  | Aug-22 | Sample type not in accordance with permit |  |  | Sep-22 | Late DMR Submission |  |  | Oct-22 | Late DMR Submission |  |  |
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| Nov-19                  | Late DMR Submission                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Jan-23 | Late DMR Submission |       |              |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |  |  |        |                     |  |  |        |                                           |  |  |        |                     |  |  |        |                     |  |  |
| Feb-20                  | Late DMR Submission                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | May-23 | Late DMR Submission |       |              |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |  |  |        |                     |  |  |        |                                           |  |  |        |                     |  |  |        |                     |  |  |
| May-21                  | Late DMR Submission                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Nov-23 | Late DMR Submission |       |              |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |  |  |        |                     |  |  |        |                                           |  |  |        |                     |  |  |        |                     |  |  |
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| Dec-21                  | Late DMR Submission                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Jan-25 | Late DMR Submission |       |              |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |  |  |        |                     |  |  |        |                                           |  |  |        |                     |  |  |        |                     |  |  |
| Mar-22                  | Late DMR Submission                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Feb-25 | Late DMR Submission |       |              |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |  |  |        |                     |  |  |        |                                           |  |  |        |                     |  |  |        |                     |  |  |
| Apr-22                  | Late DMR Submission                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |                     |       |              |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |  |  |        |                     |  |  |        |                                           |  |  |        |                     |  |  |        |                     |  |  |
| Jun-22                  | Late DMR Submission                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |                     |       |              |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |  |  |        |                     |  |  |        |                                           |  |  |        |                     |  |  |        |                     |  |  |
| Aug-22                  | Sample type not in accordance with permit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |        |                     |       |              |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |  |  |        |                     |  |  |        |                                           |  |  |        |                     |  |  |        |                     |  |  |
| Sep-22                  | Late DMR Submission                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |                     |       |              |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |  |  |        |                     |  |  |        |                                           |  |  |        |                     |  |  |        |                     |  |  |
| Oct-22                  | Late DMR Submission                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |                     |       |              |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                                           |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |        |                     |  |  |        |                     |  |  |        |                                           |  |  |        |                     |  |  |        |                     |  |  |

Effluent Data

DMR Data for Outfall 001 (from April 1, 2024 to March 31, 2025)

| Parameter                             | MAR-25 | FEB-25 | JAN-25 | DEC-24 | NOV-24 | OCT-24 | SEP-24 | AUG-24 | JUL-24 | JUN-24 | MAY-24 | APR-24 |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Flow (MGD)<br>Average Monthly         | 0.025  | 0.023  | 0.021  | 0.021  | 0.021  | 0.024  | 0.026  | 0.027  | 0.024  | 0.0227 | 0.022  | 0.021  |
| pH (S.U.)<br>Instantaneous<br>Minimum | 8.4    | 8.2    | 8.2    | 8.3    | 8.3    | 8.3    | 8.2    | 8.3    | 8.1    | 7.8    | 8.1    | 8.2    |
| pH (S.U.)<br>Instantaneous<br>Maximum | 8.4    | 8.2    | 8.2    | 8.3    | 8.3    | 8.3    | 8.2    | 8.3    | 8.1    | 7.8    | 8.1    | 8.2    |

**Existing Effluent Limits and Monitoring Requirements**

The table below summarizes effluent limits and monitoring requirements specified in the existing permit.

| Parameter  | Effluent Limitations                |                   |                       |                    |         |                     | Monitoring Requirements                            |                            |
|------------|-------------------------------------|-------------------|-----------------------|--------------------|---------|---------------------|----------------------------------------------------|----------------------------|
|            | Mass Units (lbs/day) <sup>(1)</sup> |                   | Concentrations (mg/L) |                    |         |                     | Minimum <sup>(2)</sup><br>Measurement<br>Frequency | Required<br>Sample<br>Type |
|            | Average<br>Monthly                  | Average<br>Weekly | Minimum               | Average<br>Monthly | Maximum | Instant.<br>Maximum |                                                    |                            |
| Flow (MGD) | Report                              | XXX               | XXX                   | XXX                | XXX     | XXX                 | 1/month                                            | Measured                   |
| pH (S.U.)  | XXX                                 | XXX               | 6.0<br>Inst Min       | XXX                | XXX     | 9.0                 | 1/month                                            | Grab                       |

**Development of Effluent Limitations**

|                                |                                 |                          |                 |
|--------------------------------|---------------------------------|--------------------------|-----------------|
| <b>Outfall No.</b>             | 001                             | <b>Design Flow (MGD)</b> | .0091           |
| <b>Latitude</b>                | 41° 25' 32.00"                  | <b>Longitude</b>         | -78° 42' 52.00" |
| <b>Wastewater Description:</b> | Noncontact Cooling Water (NCCW) |                          |                 |

**Technology-Based Limitations**

Any industrial wastewater facilities are generally regulated by effluent standards found in 25 Pa. Code §§ 92a.48 and 95.2. These standards are as follows:

| Parameter               | Limit (mg/l)     | SBC               | Federal Regulation | State Regulation           |
|-------------------------|------------------|-------------------|--------------------|----------------------------|
| ELGs                    |                  |                   | 40 CFR § 430.00    | 25 Pa. Code § 92a.48(a)(1) |
| pH                      | 6.0 – 9.0 (S.U.) | Minimum – Maximum | -                  | 25 Pa. Code § 95.2 (1)     |
| Oil and Grease          | 15               | Average Monthly   | -                  | 25 Pa. Code § 95.2 (2)(ii) |
|                         | 30               | Daily Maximum     |                    | 25 Pa. Code § 95.2 (2)(ii) |
| Dissolved Iron          | 7.0              | Maximum           | -                  | 25 Pa. Code § 95.2 (4)     |
| Total Residual Chlorine | 0.5              | Average Monthly   | -                  | 25 Pa. Code § 92a.48(b)(2) |

According to the EPA's 2011 Effluent Guidelines Plan – 2011 Annual Review Report Appendix A, facilities under the SIC Code 3399 are subject to the federal ELGs for Nonferrous Metals Forming and Metal Powders (i.e., 40 CFR § 471.00). However, no Effluent Limitation Guidelines (ELGs) are applicable since the facility does not discharge process wastewater and it is only non-contact cooling water. Also, since the facility does not use chlorine, total residual chlorine (TRC) effluent limitation is not applicable. For oil and grease, no oil bearing wastewater will be discharged from this facility; therefore, effluent limitation is not applicable.

25 Pa. Code § 95.2 (4) recommends a maximum of 7.0 mg/L for dissolved iron for all industrial wastewater. However, the sample results provided in the application have a dissolved iron level of 0.129 mg/L. Accordingly, in the opinion of the Department, dissolved iron is not a parameter of concern.

In general, temperature requirements are imposed in the NPDES permit for heated wastewater (cooling water) discharges from industrial facilities. However, considering the quantity and frequency of cooling water discharges, temperature is not a parameter of concern. A significant cooling is also expected in the existing pond.

**Water Quality-Based Limitations***WQM 7.0*

CBOD5 and NH3-N are not pollutants of concern for noncontact cooling water and no chemicals are currently added to this noncontact cooling water. Therefore, WQM 7.0 modeling is not necessary and permit requirements for these pollutants are not recommended.

*Toxics*

Maximum concentrations of toxic pollutants reported on the application were entered into DEP's Toxics Management Spreadsheet (TMS). TMS output shows that there are no pollutants of concern and no water quality based effluent limits are required.

**Additional Considerations***Flow Monitoring*

Flow monitoring will remain in the permit and is required by 40 CFR § 122.44(i)(1)(ii).

*Elk Creek Watershed TMDL*

DEP developed a TMDL in 2005 to address impairments identified within the Elk Creek Watershed TMDL. These impairments are caused by metals (iron, manganese, aluminum) as a result of abandoned coalmines. The TMDL does not include the wasteload allocation for this discharge. Given the nature of discharge which is noncontact cooling water, the discharge is not expected to significantly contribute to impairments within this watershed. The Elk Creek at the point of

discharge is attaining its uses. Sample data provided with the application shows the discharge contains < 0.25 mg/L of Aluminum, 0.10 mg/L of Manganese, and 0.112 mg/L of Iron. These values are well below current water quality criteria. No further requirements are therefore recommended at this time.

*Anti-Degradation Requirements*

The effluent limits for this discharge have been developed to ensure the existing in-stream uses and the level of water quality necessary to protect the existing uses are maintained and protected. No High Quality Waters are impacted by this discharge. No Exceptional Value Waters are impacted by this discharge.

*Anti-Backsliding Requirements*

Unless stated otherwise in this fact sheet, permit requirements proposed in this fact sheet are at least as stringent as existing permit requirements.

**Proposed Effluent Limitations and Monitoring Requirements**

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

**Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.**

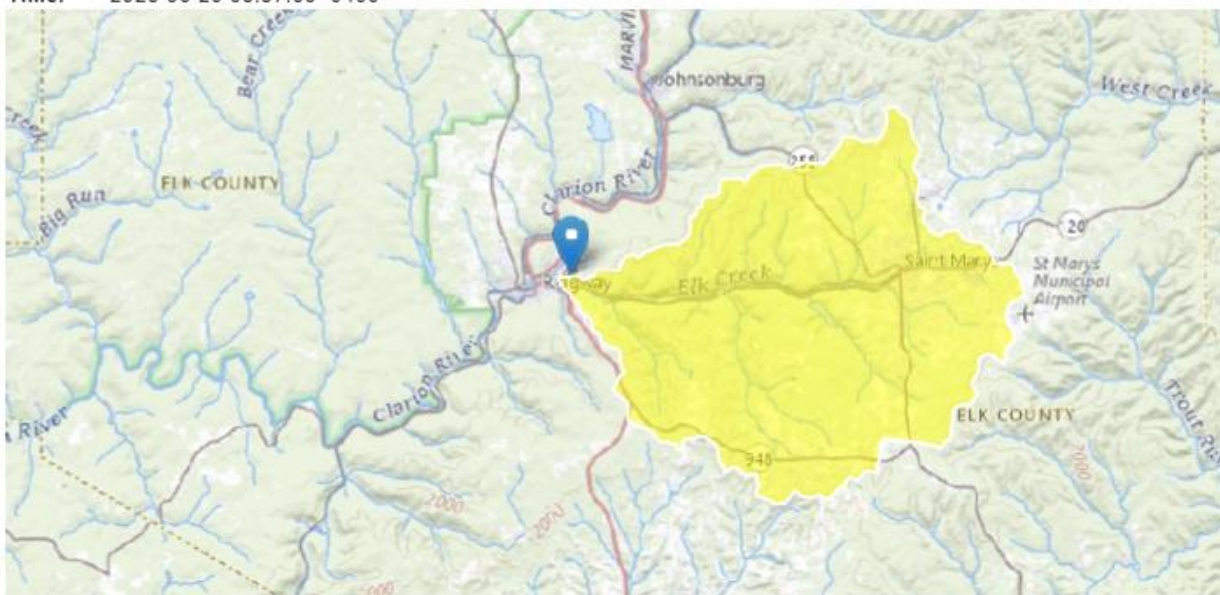
| Parameter  | Effluent Limitations                |                   |                       |                    |         |                     | Monitoring Requirements                            |                            |
|------------|-------------------------------------|-------------------|-----------------------|--------------------|---------|---------------------|----------------------------------------------------|----------------------------|
|            | Mass Units (lbs/day) <sup>(1)</sup> |                   | Concentrations (mg/L) |                    |         |                     | Minimum <sup>(2)</sup><br>Measurement<br>Frequency | Required<br>Sample<br>Type |
|            | Average<br>Monthly                  | Average<br>Weekly | Minimum               | Average<br>Monthly | Maximum | Instant.<br>Maximum |                                                    |                            |
| Flow (MGD) | Report                              | XXX               | XXX                   | XXX                | XXX     | XXX                 | 1/month                                            | Measured                   |
| pH (S.U.)  | XXX                                 | XXX               | 6.0<br>Inst Min       | XXX                | XXX     | 9.0                 | 1/month                                            | Grab                       |



| Tools and References Used to Develop Permit |                                                                                                                                                                                                                    |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/>                    | WQM for Windows Model (see Attachment <span style="background-color: yellow;">      </span> )                                                                                                                      |
| <input type="checkbox"/>                    | Toxics Management Spreadsheet (see Attachment <span style="background-color: yellow;">      </span> )                                                                                                              |
| <input type="checkbox"/>                    | TRC Model Spreadsheet (see Attachment <span style="background-color: yellow;">      </span> )                                                                                                                      |
| <input type="checkbox"/>                    | Temperature Model Spreadsheet (see Attachment <span style="background-color: yellow;">      </span> )                                                                                                              |
| <input type="checkbox"/>                    | Water Quality Toxics Management Strategy, 361-0100-003, 4/06.                                                                                                                                                      |
| <input type="checkbox"/>                    | Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.                                                                                                             |
| <input type="checkbox"/>                    | Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.                                                                                                                                                |
| <input type="checkbox"/>                    | Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.                                                                                                                  |
| <input type="checkbox"/>                    | Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.                                                                                                                       |
| <input type="checkbox"/>                    | Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.                                                                                                      |
| <input type="checkbox"/>                    | Pennsylvania CSO Policy, 386-2000-002, 9/08.                                                                                                                                                                       |
| <input type="checkbox"/>                    | Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.                                                                                                                                        |
| <input type="checkbox"/>                    | Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.                                                                                           |
| <input type="checkbox"/>                    | Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.                                                                                                                                              |
| <input type="checkbox"/>                    | Implementation Guidance Design Conditions, 386-2000-007, 9/97.                                                                                                                                                     |
| <input type="checkbox"/>                    | Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.                                                    |
| <input type="checkbox"/>                    | Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.                                                                             |
| <input type="checkbox"/>                    | Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.                                                                   |
| <input type="checkbox"/>                    | Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.                                                              |
| <input type="checkbox"/>                    | Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.                                                                                                                                    |
| <input type="checkbox"/>                    | Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.                                             |
| <input type="checkbox"/>                    | Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.                                                                                                                           |
| <input type="checkbox"/>                    | Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.                                                                                                                                              |
| <input type="checkbox"/>                    | Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.                                                                                                       |
| <input type="checkbox"/>                    | Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 386-2000-020, 10/97.       |
| <input type="checkbox"/>                    | Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.                                                                               |
| <input type="checkbox"/>                    | Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 386-2000-010, 3/1999. |
| <input type="checkbox"/>                    | Design Stream Flows, 386-2000-003, 9/98.                                                                                                                                                                           |
| <input type="checkbox"/>                    | Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.                                     |
| <input type="checkbox"/>                    | Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.                                                                                                                         |
| <input type="checkbox"/>                    | Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.                                                                                                                   |
| <input type="checkbox"/>                    | SOP: <span style="background-color: yellow;">      </span>                                                                                                                                                         |
| <input type="checkbox"/>                    | Other: <span style="background-color: yellow;">      </span>                                                                                                                                                       |

## StreamStats Report

Region ID: PA  
Workspace ID: PA20250520123727291000  
Clicked Point (Latitude, Longitude): 41.42556, -78.71432  
Time: 2025-05-20 08:37:50 -0400



[+ Collapse All](#)

### > Basin Characteristics

| Parameter Code | Parameter Description                   | Value | Unit         |
|----------------|-----------------------------------------|-------|--------------|
| DRNAREA        | Area that drains to a point on a stream | 59.2  | square miles |
| ELEV           | Mean Basin Elevation                    | 1870  | feet         |
| PRECIP         | Mean Annual Precipitation               | 45    | inches       |

### General Disclaimers

Parameter values have been edited, computed flows may not apply.

## ➤ Low-Flow Statistics

## Low-Flow Statistics Parameters [Low Flow Region 3]

| Parameter Code | Parameter Name            | Value | Units        | Min Limit | Max Limit |
|----------------|---------------------------|-------|--------------|-----------|-----------|
| DRNAREA        | Drainage Area             | 59.2  | square miles | 2.33      | 1720      |
| ELEV           | Mean Basin Elevation      | 1870  | feet         | 898       | 2700      |
| PRECIP         | Mean Annual Precipitation | 45    | inches       | 38.7      | 47.9      |

## Low-Flow Statistics Flow Report [Low Flow Region 3]

PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error, PC: Percent Correct, RMSE: Root Mean Squared Error, PseudoR<sup>2</sup>: Pseudo R Squared (other -- see report)

| Statistic               | Value | Unit               | SE | ASEp |
|-------------------------|-------|--------------------|----|------|
| 7 Day 2 Year Low Flow   | 8.27  | ft <sup>3</sup> /s | 43 | 43   |
| 30 Day 2 Year Low Flow  | 11.4  | ft <sup>3</sup> /s | 38 | 38   |
| 7 Day 10 Year Low Flow  | 4.32  | ft <sup>3</sup> /s | 54 | 54   |
| 30 Day 10 Year Low Flow | 5.55  | ft <sup>3</sup> /s | 49 | 49   |
| 90 Day 10 Year Low Flow | 7.9   | ft <sup>3</sup> /s | 41 | 41   |

*Low-Flow Statistics Citations*

**Stuckey, M.H., 2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (<http://pubs.usgs.gov/sir/2006/5130/>)**

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Application Version: 4.29.1

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1

1





Toxics Management Spreadsheet  
Version 1.4, May 2023

## Discharge Information

Instructions Discharge Stream

Facility: Ridgway Powdered MetalsNPDES Permit No.: PA0239046Outfall No.: 001Evaluation Type Major Sewage / Industrial WasteWastewater Description: NCCW

| Discharge Characteristics |                  |          |                            |     |     |     |                          |                |
|---------------------------|------------------|----------|----------------------------|-----|-----|-----|--------------------------|----------------|
| Design Flow (MGD)*        | Hardness (mg/l)* | pH (SU)* | Partial Mix Factors (PMFs) |     |     |     | Complete Mix Times (min) |                |
|                           |                  |          | AFC                        | CFC | THH | CRL | Q <sub>7-10</sub>        | Q <sub>R</sub> |
| 0.0091                    | 100              | 7        |                            |     |     |     |                          |                |

|                     |                                 |      |   | 0 if left blank |                    | 0.5 if left blank |             | 0 if left blank |           |           | 1 if left blank |     |              |            |
|---------------------|---------------------------------|------|---|-----------------|--------------------|-------------------|-------------|-----------------|-----------|-----------|-----------------|-----|--------------|------------|
| Discharge Pollutant |                                 |      |   | Units           | Max Discharge Conc | Trib Conc         | Stream Conc | Daily CV        | Hourly CV | Stream CV | Fate Coeff      | FOS | Criteria Mod | Chem Trans |
| Group 1             | Total Dissolved Solids (PWS)    | mg/L |   | 302             |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Chloride (PWS)                  | mg/L |   | 62.9            |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Bromide                         | mg/L |   | 0.44            |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Sulfate (PWS)                   | mg/L |   | 16.6            |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Fluoride (PWS)                  | mg/L |   | 0.32            |                    |                   |             |                 |           |           |                 |     |              |            |
| Group 2             | Total Aluminum                  | µg/L | < | 250             |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Antimony                  | µg/L | < | 20              |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Arsenic                   | µg/L | < | 10              |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Barium                    | µg/L |   | 0.158           |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Beryllium                 | µg/L | < | 1               |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Boron                     | µg/L |   | 69.9            |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Cadmium                   | µg/L | < | 2               |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Chromium (III)            | µg/L | < | 8               |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Hexavalent Chromium             | µg/L | < | 50              |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Cobalt                    | µg/L | < | 20              |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Copper                    | µg/L | < | 6               |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Free Cyanide                    | µg/L |   |                 |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Cyanide                   | µg/L |   |                 |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Dissolved Iron                  | µg/L |   | 129             |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Iron                      | µg/L |   | 112             |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Lead                      | µg/L | < | 10              |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Manganese                 | µg/L |   | 100             |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Mercury                   | µg/L |   | 0.0002          |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Nickel                    | µg/L | < | 20              |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Phenols (Phenolics) (PWS) | µg/L |   | 0.05            |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Selenium                  | µg/L | < | 8               |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Silver                    | µg/L | < | 4               |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Thallium                  | µg/L | < | 0.02            |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Zinc                      | µg/L | < | 10              |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Total Molybdenum                | µg/L | < | 20              |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Acrolein                        | µg/L | < | 1               |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Acrylamide                      | µg/L | < | 1               |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Acrylonitrile                   | µg/L | < | 1               |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Benzene                         | µg/L | < | 1               |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Bromoform                       | µg/L | < | 1               |                    |                   |             |                 |           |           |                 |     |              |            |
|                     | Carbon Tetrachloride            | µg/L | < | 1               |                    |                   |             |                 |           |           |                 |     |              |            |

Page 2



Page 3



Toxics Management Spreadsheet  
Version 1.4, May 2023

Stream / Surface Water Information

Ridgway Powdered Metals, NPDES Permit No. PA0239046, Outfall 001

Instructions

Discharge

Stream

Receiving Surface Water Name: Elk Creek

No. Reaches to Model: 1

☒ Statewide Criteria

☐ Great Lakes Criteria

☐ ORSANCO Criteria

| Location           | Stream Code * | RMI * | Elevation (ft) * | DA (mi <sup>2</sup> ) * | Slope (ft/ft) | PWS Withdrawal (MGD) | Apply Fish Criteria * |
|--------------------|---------------|-------|------------------|-------------------------|---------------|----------------------|-----------------------|
| Point of Discharge | 050459        | 2.3   | 1420             | 59.2                    |               |                      | Yes                   |
| End of Reach 1     | 050459        | 0     | 1368             | 63.5                    |               |                      | Yes                   |

Q<sub>7-10</sub>

| Location           | RMI | LFY (cfs/mi <sup>2</sup> ) * | Flow (cfs) |           | W/D Ratio | Width (ft) | Depth (ft) | Velocity (fps) | Travel Time (days) | Tributary |    | Stream   |    | Analysis |    |
|--------------------|-----|------------------------------|------------|-----------|-----------|------------|------------|----------------|--------------------|-----------|----|----------|----|----------|----|
|                    |     |                              | Stream     | Tributary |           |            |            |                |                    | Hardness  | pH | Hardness | pH | Hardness | pH |
| Point of Discharge | 2.3 | 0.07                         |            |           |           |            |            |                |                    |           |    | 100      | 7  |          |    |
| End of Reach 1     | 0   | 0.07                         |            |           |           |            |            |                |                    |           |    | 100      | 7  |          |    |

Q<sub>h</sub>

| Location           | RMI | LFY (cfs/mi <sup>2</sup> ) * | Flow (cfs) |           | W/D Ratio | Width (ft) | Depth (ft) | Velocity (fps) | Travel Time (days) | Tributary |    | Stream   |    | Analysis |    |
|--------------------|-----|------------------------------|------------|-----------|-----------|------------|------------|----------------|--------------------|-----------|----|----------|----|----------|----|
|                    |     |                              | Stream     | Tributary |           |            |            |                |                    | Hardness  | pH | Hardness | pH | Hardness | pH |
| Point of Discharge | 2.3 |                              |            |           |           |            |            |                |                    |           |    |          |    |          |    |
| End of Reach 1     | 0   |                              |            |           |           |            |            |                |                    |           |    |          |    |          |    |



Toxics Management Spreadsheet  
Version 1.4, May 2023

Model Results

Ridgway Powdered Metals, NPDES Permit No. PA0239046, Outfall 001

Instructions Results

RETURN TO INPUTS

SAVE AS PDF

PRINT

All Inputs Results Limits

Hydrodynamics

Wasteload Allocations

CCT (min): 15 PMF: 0.609 Analysis Hardness (mg/l): 100 Analysis pH: 7.00

| Pollutants                      | Stream Conc (µg/L) | Stream CV | Trib Conc (µg/L) | Fate Coef | WQC (µg/L)  | WQ Obj (µg/L) | WLA (µg/L) | Comments                         |
|---------------------------------|--------------------|-----------|------------------|-----------|-------------|---------------|------------|----------------------------------|
| Total Dissolved Solids (PWS)    | 0                  | 0         |                  | 0         | N/A         | N/A           | N/A        |                                  |
| Chloride (PWS)                  | 0                  | 0         |                  | 0         | N/A         | N/A           | N/A        |                                  |
| Sulfate (PWS)                   | 0                  | 0         |                  | 0         | N/A         | N/A           | N/A        |                                  |
| Fluoride (PWS)                  | 0                  | 0         |                  | 0         | N/A         | N/A           | N/A        |                                  |
| Total Aluminum                  | 0                  | 0         |                  | 0         | 750         | 750           | 135,159    |                                  |
| Total Antimony                  | 0                  | 0         |                  | 0         | 1,100       | 1,100         | 198,234    |                                  |
| Total Arsenic                   | 0                  | 0         |                  | 0         | 340         | 340           | 61,272     |                                  |
| Total Barium                    | 0                  | 0         |                  | 0         | 21,000      | 21,000        | 3,784,461  |                                  |
| Total Boron                     | 0                  | 0         |                  | 0         | 8,100       | 8,100         | 1,459,721  |                                  |
| Total Cadmium                   | 0                  | 0         |                  | 0         | 2,014       | 2,13          | 384        |                                  |
| Total Chromium (III)            | 0                  | 0         |                  | 0         | 569,763     | 1,803         | 324,932    | Chem Translator of 0.944 applied |
| Hexavalent Chromium             | 0                  | 0         |                  | 0         | 16          | 16.3          | 2,936      | Chem Translator of 0.316 applied |
| Total Cobalt                    | 0                  | 0         |                  | 0         | 95          | 95.0          | 17,120     | Chem Translator of 0.982 applied |
| Total Copper                    | 0                  | 0         |                  | 0         | 13,439      | 14.0          | 2,523      | Chem Translator of 0.96 applied  |
| Dissolved Iron                  | 0                  | 0         |                  | 0         | N/A         | N/A           | N/A        |                                  |
| Total Iron                      | 0                  | 0         |                  | 0         | N/A         | N/A           | N/A        |                                  |
| Total Lead                      | 0                  | 0         |                  | 0         | 64,581      | 81.6          | 14,713     | Chem Translator of 0.791 applied |
| Total Manganese                 | 0                  | 0         |                  | 0         | N/A         | N/A           | N/A        |                                  |
| Total Mercury                   | 0                  | 0         |                  | 0         | 1,400       | 1.85          | 287        | Chem Translator of 0.85 applied  |
| Total Nickel                    | 0                  | 0         |                  | 0         | 468,236     | 469           | 84,551     | Chem Translator of 0.998 applied |
| Total Phenols (Phenolics) (PWS) | 0                  | 0         |                  | 0         | N/A         | N/A           | N/A        |                                  |
| Total Selenium                  | 0                  | 0         |                  | 0         | N/A         | N/A           | N/A        | Chem Translator of 0.922 applied |
| Total Silver                    | 0                  | 0         |                  | 0         | 3,217       | 3.78          | 682        | Chem Translator of 0.85 applied  |
| Total Thallium                  | 0                  | 0         |                  | 0         | 65          | 65.0          | 11,714     |                                  |
| Total Zinc                      | 0                  | 0         |                  | 0         | 117,180     | 120           | 21,592     | Chem Translator of 0.978 applied |
| Acrolein                        | 0                  | 0         |                  | 0         | 3           | 3.0           | 541        |                                  |
| Acrylamide                      | 0                  | 0         |                  | 0         | N/A         | N/A           | N/A        |                                  |
| Acrylonitrile                   | 0                  | 0         |                  | 0         | 650,120,202 | 650           | 117,138    |                                  |

Page 7

|            |                   |        |                               |                   |
|------------|-------------------|--------|-------------------------------|-------------------|
| <b>CFC</b> | CCT (min): 40.470 | PMF: 1 | Analysis Hardness (mg/l): 100 | Analysis pH: 7.00 |
|------------|-------------------|--------|-------------------------------|-------------------|

|                |   |   |  |   |     |     |
|----------------|---|---|--|---|-----|-----|
| Fluoride (PWS) | 0 | 0 |  | 0 | N/A | N/A |
| Model Results  |   |   |  |   |     |     |

0.000

|               |   |   |   |   |           |     |     |
|---------------|---|---|---|---|-----------|-----|-----|
| Phenanthrene  | 0 | 0 | 0 | 1 | 5/20/2025 | 1.0 | 295 |
| Model Results |   |   |   |   |           |     |     |

Page 9

| THH                             | CCT (min):         | 40.470    | PMF:             | 1         | Analysis Hardness (mg/l): | N/A           | Analysis pH: | N/A | Comments |
|---------------------------------|--------------------|-----------|------------------|-----------|---------------------------|---------------|--------------|-----|----------|
| Pollutants                      | Stream Conc (µg/L) | Stream CV | Trib Conc (µg/L) | Fate Coef | WQC (µg/L)                | WQ Obj (µg/L) | WLA (µg/L)   |     |          |
| Total Dissolved Solids (PWS)    | 0                  | 0         |                  | 0         | 500,000                   | 500,000       | N/A          |     |          |
| Chloride (PWS)                  | 0                  | 0         |                  | 0         | 250,000                   | 250,000       | N/A          |     |          |
| Sulfate (PWS)                   | 0                  | 0         |                  | 0         | 250,000                   | 250,000       | N/A          |     |          |
| Fluoride (PWS)                  | 0                  | 0         |                  | 0         | 2,000                     | 2,000         | N/A          |     |          |
| Total Aluminum                  | 0                  | 0         |                  | 0         | N/A                       | N/A           | N/A          |     |          |
| Total Antimony                  | 0                  | 0         |                  | 0         | 5.6                       | 5.6           | 1,654        |     |          |
| Total Arsenic                   | 0                  | 0         |                  | 0         | 10                        | 10.0          | 2,954        |     |          |
| Total Barium                    | 0                  | 0         |                  | 0         | 2,400                     | 2,400         | 708,879      |     |          |
| Total Boron                     | 0                  | 0         |                  | 0         | 3,100                     | 3,100         | 915,635      |     |          |
| Total Cadmium                   | 0                  | 0         |                  | 0         | N/A                       | N/A           | N/A          |     |          |
| Total Chromium (III)            | 0                  | 0         |                  | 0         | N/A                       | N/A           | N/A          |     |          |
| Hexavalent Chromium             | 0                  | 0         |                  | 0         | N/A                       | N/A           | N/A          |     |          |
| Total Cobalt                    | 0                  | 0         |                  | 0         | N/A                       | N/A           | N/A          |     |          |
| Total Copper                    | 0                  | 0         |                  | 0         | N/A                       | N/A           | N/A          |     |          |
| Dissolved Iron                  | 0                  | 0         |                  | 0         | 300                       | 300           | 88,610       |     |          |
| Total Iron                      | 0                  | 0         |                  | 0         | N/A                       | N/A           | N/A          |     |          |
| Total Lead                      | 0                  | 0         |                  | 0         | N/A                       | N/A           | N/A          |     |          |
| Total Manganese                 | 0                  | 0         |                  | 0         | 1,000                     | 1,000         | 295,366      |     |          |
| Total Mercury                   | 0                  | 0         |                  | 0         | 0.050                     | 0.05          | 14.8         |     |          |
| Total Nickel                    | 0                  | 0         |                  | 0         | 610                       | 610           | 180,173      |     |          |
| Total Phenols (Phenolics) (PWS) | 0                  | 0         |                  | 0         | 5                         | 5.0           | N/A          |     |          |
| Total Selenium                  | 0                  | 0         |                  | 0         | N/A                       | N/A           | N/A          |     |          |
| Total Silver                    | 0                  | 0         |                  | 0         | N/A                       | N/A           | N/A          |     |          |



|                                 |   |   |   |   |   |   |   |   |        |        |           |  |
|---------------------------------|---|---|---|---|---|---|---|---|--------|--------|-----------|--|
| Total Thallium                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0      | 0.24   | 70.9      |  |
| Total Zinc                      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0      | N/A    | N/A       |  |
| Acrolein                        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3      | 3.0    | 886       |  |
| Acrylamide                      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Acrylonitrile                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Benzene                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Bromoform                       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Carbon Tetrachloride            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Chlorobenzene                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100    | 100.0  | 29,537    |  |
| Chlorodibromomethane            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| 2-Chloroethyl Vinyl Ether       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Chloroform                      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5.7    | 5.7    | 1,684     |  |
| Dichlorobromomethane            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| 1,2-Dichloroethane              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| 1,1-Dichloroethylene            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33     | 33.0   | 9,747     |  |
| 1,2-Dichloropropane             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| 1,3-Dichloropropylene           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Ethylbenzene                    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68     | 68.0   | 20,085    |  |
| Methyl Bromide                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100    | 100.0  | 29,537    |  |
| Methyl Chloride                 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Methylene Chloride              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| 1,1,2,2-Tetrachloroethane       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Tetrachloroethylene             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Toluene                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 57     | 57.0   | 16,836    |  |
| 1,2-trans-Dichloroethylene      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100    | 100.0  | 29,537    |  |
| 1,1,1-Trichloroethane           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10,000 | 10,000 | 2,953,663 |  |
| 1,1,2-Trichloroethane           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Trichloroethylene               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Vinyl Chloride                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| 2-Chlorophenol                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30     | 30.0   | 8,861     |  |
| 2,4-Dichlorophenol              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10     | 10.0   | 2,954     |  |
| 2,4-Dimethylphenol              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100    | 100.0  | 29,537    |  |
| 4,6-Dinitro-o-Cresol            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2      | 2.0    | 591       |  |
| 2,4-Dinitrophenol               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10     | 10.0   | 2,954     |  |
| 2-Nitrophenol                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| 4-Nitrophenol                   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| 2,4,6-Trichlorophenol           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Acenaphthene                    | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70     | 70.0   | 20,676    |  |
| Anthracene                      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 300    | 300    | 88,610    |  |
| Benzidine                       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Benzo(a)Anthracene              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Benzo(a)Pyrene                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Benzo(k)Fluoranthene            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Bis(2-Chloroethyl)Ether         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Bis(2-Chloroisopropyl)Ether     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 200    | 200    | 59,073    |  |
| Bis(2-Ethylhexyl)Phthalate      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |
| Bis(4-Ethylphenyl) Phenyl Ether | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A    | N/A    | N/A       |  |

|                           |   |   |   |   |   |   |       |       |         |  |
|---------------------------|---|---|---|---|---|---|-------|-------|---------|--|
| Butyl Benzyl Phthalate    | 0 | 0 | 0 | 0 | 0 | 0 | 0.1   | 0.1   | 29.5    |  |
| 2-Chloronaphthalene       | 0 | 0 | 0 | 0 | 0 | 0 | 800   | 800   | 236,293 |  |
| Chrysene                  | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| Dibenz(a,h)Anthracene     | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| 1,2-Dichlorobenzene       | 0 | 0 | 0 | 0 | 0 | 0 | 1,000 | 1,000 | 295,366 |  |
| 1,3-Dichlorobenzene       | 0 | 0 | 0 | 0 | 0 | 0 | 7     | 7.0   | 2,068   |  |
| 1,4-Dichlorobenzene       | 0 | 0 | 0 | 0 | 0 | 0 | 300   | 300   | 88,610  |  |
| 3,3-Dichlorobenzidine     | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| Diethyl Phthalate         | 0 | 0 | 0 | 0 | 0 | 0 | 600   | 600   | 177,220 |  |
| Dimethyl Phthalate        | 0 | 0 | 0 | 0 | 0 | 0 | 2,000 | 2,000 | 590,733 |  |
| Di-n-Butyl Phthalate      | 0 | 0 | 0 | 0 | 0 | 0 | 20    | 20.0  | 5,907   |  |
| 2,4-Dinitrotoluene        | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| 2,6-Dinitrotoluene        | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| 1,2-Diphenylhydrazine     | 0 | 0 | 0 | 0 | 0 | 0 | 20    | 20.0  | 5,907   |  |
| Fluoranthene              | 0 | 0 | 0 | 0 | 0 | 0 | 50    | 50.0  | 14,768  |  |
| Fluorene                  | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| Hexachlorobenzene         | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| Hexachlorobutadiene       | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| Hexachlorocyclopentadiene | 0 | 0 | 0 | 0 | 0 | 0 | 4     | 4.0   | 1,181   |  |
| Hexachloroethane          | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| Indeno(1,2,3-cd)Pyrene    | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| Isophorone                | 0 | 0 | 0 | 0 | 0 | 0 | 34    | 34.0  | 10,042  |  |
| Naphthalene               | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| Nitrobenzene              | 0 | 0 | 0 | 0 | 0 | 0 | 10    | 10.0  | 2,954   |  |
| n-Nitrosodimethylamine    | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| n-Nitrosodi-n-Propylamine | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| n-Nitrosodiphenylamine    | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| Phenanthrene              | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| Pyrene                    | 0 | 0 | 0 | 0 | 0 | 0 | 20    | 20.0  | 5,907   |  |
| 1,2,4-Trichlorobenzene    | 0 | 0 | 0 | 0 | 0 | 0 | 0.07  | 0.07  | 20.7    |  |
| Aldrin                    | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| alpha-BHC                 | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| beta-BHC                  | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| gamma-BHC                 | 0 | 0 | 0 | 0 | 0 | 0 | 4.2   | 4.2   | 1,241   |  |
| Chlordane                 | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| 4,4-DDT                   | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| 4,4-DDE                   | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| 4,4-DDD                   | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| Dieldrin                  | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| alpha-Endosulfan          | 0 | 0 | 0 | 0 | 0 | 0 | 20    | 20.0  | 5,907   |  |
| beta-Endosulfan           | 0 | 0 | 0 | 0 | 0 | 0 | 20    | 20.0  | 5,907   |  |
| Endosulfan Sulfate        | 0 | 0 | 0 | 0 | 0 | 0 | 20    | 20.0  | 5,907   |  |
| Endrin                    | 0 | 0 | 0 | 0 | 0 | 0 | 0.03  | 0.03  | 8.86    |  |
| Endrin Aldehyde           | 0 | 0 | 0 | 0 | 0 | 0 | 1     | 1.0   | 295     |  |
| Heptachlor                | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| Heptachlor Epoxide        | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |
| Model Results PCBs, Total | 0 | 0 | 0 | 0 | 0 | 0 | N/A   | N/A   | N/A     |  |



|                             |  |   |   |  |  |   |         |         |        |  |
|-----------------------------|--|---|---|--|--|---|---------|---------|--------|--|
| Methyl Chloride             |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| Methylene Chloride          |  | 0 | 0 |  |  | 0 | 20      | 20.0    | 36.589 |  |
| 1,1,2,2-Tetrachloroethane   |  | 0 | 0 |  |  | 0 | 0.2     | 0.2     | 366    |  |
| Tetrachloroethylene         |  | 0 | 0 |  |  | 0 | 10      | 10.0    | 18,294 |  |
| Toluene                     |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| 1,2-Trans-Dichloroethylene  |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| 1,1,1-Trichloroethane       |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| 1,1,2-Trichloroethane       |  | 0 | 0 |  |  | 0 | 0.55    | 0.55    | 1,006  |  |
| Trichloroethylene           |  | 0 | 0 |  |  | 0 | 0.6     | 0.6     | 1,098  |  |
| Vinyl Chloride              |  | 0 | 0 |  |  | 0 | 0.02    | 0.02    | 36.6   |  |
| 2-Chlorophenol              |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| 2,4-Dichlorophenol          |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| 2,4-Dimethylphenol          |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| 4,6-Dinitro-o-Cresol        |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| 2,4-Dinitrophenol           |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| 2-Nitrophenol               |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| 4-Nitrophenol               |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| 2,4,6-Trichlorophenol       |  | 0 | 0 |  |  | 0 | 1.5     | 1.5     | 2,744  |  |
| Acenaphthene                |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| Anthracene                  |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| Benzidine                   |  | 0 | 0 |  |  | 0 | 0.0001  | 0.0001  | 0.18   |  |
| Benzo(a)Anthracene          |  | 0 | 0 |  |  | 0 | 0.001   | 0.001   | 1.83   |  |
| Benzo(a)Pyrene              |  | 0 | 0 |  |  | 0 | 0.0001  | 0.0001  | 0.18   |  |
| Benzo(k)Fluoranthene        |  | 0 | 0 |  |  | 0 | 0.01    | 0.01    | 18.3   |  |
| Bis(2-Chloroethyl)Ether     |  | 0 | 0 |  |  | 0 | 0.03    | 0.03    | 54.9   |  |
| Bis(2-Chloroisopropyl)Ether |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| Bis(2-Ethylhexyl)Phthalate  |  | 0 | 0 |  |  | 0 | 0.32    | 0.32    | 585    |  |
| 4-Bromophenyl Phenyl Ether  |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| Butyl Benzyl Phthalate      |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| 2-Chloronaphthalene         |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| Chrysene                    |  | 0 | 0 |  |  | 0 | 0.12    | 0.12    | 220    |  |
| Dibenzo(a,h)Anthracene      |  | 0 | 0 |  |  | 0 | 0.0001  | 0.0001  | 0.18   |  |
| 1,2-Dichlorobenzene         |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| 1,3-Dichlorobenzene         |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| 1,4-Dichlorobenzene         |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| 3,3'-Dichlorobenzidine      |  | 0 | 0 |  |  | 0 | 0.05    | 0.05    | 91.5   |  |
| Diethyl Phthalate           |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| Dimethyl Phthalate          |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| Di-n-Butyl Phthalate        |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| 2,4-Dinitrotoluene          |  | 0 | 0 |  |  | 0 | 0.05    | 0.05    | 91.5   |  |
| 2,6-Dinitrotoluene          |  | 0 | 0 |  |  | 0 | 0.05    | 0.05    | 91.5   |  |
| 1,2-Diphenylhydrazine       |  | 0 | 0 |  |  | 0 | 0.03    | 0.03    | 54.9   |  |
| Fluoranthene                |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| Fluorene                    |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |
| Hexachlorobenzene           |  | 0 | 0 |  |  | 0 | 0.00008 | 0.00008 | 0.15   |  |
| Hexachlorobutadiene         |  | 0 | 0 |  |  | 0 | 0.01    | 0.01    | 18.3   |  |
| Hexachlorocyclopentadiene   |  | 0 | 0 |  |  | 0 | N/A     | N/A     | N/A    |  |

☐ Recommended WQBELs & Monitoring Requirements

4

Page 15

[illegible]☐ Other Pollutants without Limits or Monitoring

The following pollutants do not require effluent limits or monitoring based on water quality because reasonable potential to exceed water quality criteria was not determined and the discharge concentration was less than thresholds for monitoring, or the pollutant was not detected and a sufficiently sensitive analytical method was used (e.g., <= Target QL).

| Pollutants                        | Governing<br>WQBEL | Units | Comments                   |
|-----------------------------------|--------------------|-------|----------------------------|
| Total Dissolved Solids (PWS)      | N/A                | N/A   | PWS Not Applicable         |
| Chloride (PWS)                    | N/A                | N/A   | PWS Not Applicable         |
| Bromide                           | N/A                | N/A   | No WQS                     |
| Sulfate (PWS)                     | N/A                | N/A   | PWS Not Applicable         |
| Fluoride (PWS)                    | N/A                | N/A   | PWS Not Applicable         |
| Total Aluminum                    | 86,632             | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Total Antimony                    | 1,654              | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Total Arsenic                     | 2,954              | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Total Barium                      | 708,879            | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Total Beryllium                   | N/A                | N/A   | No WQS                     |
| Total Boron                       | 472,586            | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Total Cadmium                     | 79.9               | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Total Chromium (III)              | 25,455             | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Hexavalent Chromium               | 1,882              | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Total Cobalt                      | 5,612              | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Total Copper                      | 1,617              | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Dissolved Iron                    | 88,610             | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Total Iron                        | 443,049            | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Total Lead                        | 940                | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Total Manganese                   | 295,366            | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Total Mercury                     | 14.8               | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Total Nickel                      | 15,407             | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Total Phenolics (Phenolics) (PWS) |                    | µg/L  | PWS Not Applicable         |
| Total Selenium                    | 1,474              | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Total Silver                      | 437                | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Total Thallium                    | 70.9               | µg/L  | Discharge Conc < TOL       |
| Total Zinc                        | 13,840             | µg/L  | Discharge Conc ≤ 10% WQBEL |
| Total Molybdenum                  | N/A                | N/A   | No WQS                     |
| Acrolein                          | 347                | µg/L  | Discharge Conc < TOL       |
| Acrylamide                        | 128                | µg/L  | Discharge Conc ≤ 25% WQBEL |
| Acrylonitrile                     | 110                | µg/L  | Discharge Conc < TOL       |

Model Results

|                             |           |      |                            |
|-----------------------------|-----------|------|----------------------------|
| Benzene                     | 1.061     | µg/L | Discharge Conc ≤ 25% WQBEL |
| Bromoform                   | 12.806    | µg/L | Discharge Conc ≤ 25% WQBEL |
| Carbon Tetrachloride        | 732       | µg/L | Discharge Conc ≤ 25% WQBEL |
| Chlorobenzene               | 29.537    | µg/L | Discharge Conc ≤ 25% WQBEL |
| Chlorodibromomethane        | 1.464     | µg/L | Discharge Conc ≤ 25% WQBEL |
| Chloroethane                | N/A       | N/A  | No WQS                     |
| 2-Chloroethyl Vinyl Ether   | 1,033.782 | µg/L | Discharge Conc < TQL       |
| Chloroform                  | 1.684     | µg/L | Discharge Conc ≤ 25% WQBEL |
| Dichlorobromomethane        | 1.738     | µg/L | Discharge Conc ≤ 25% WQBEL |
| 1,1-Dichloroethane          | N/A       | N/A  | No WQS                     |
| 1,2-Dichloroethane          | 18.112    | µg/L | Discharge Conc ≤ 25% WQBEL |
| 1,1-Dichloroethylene        | 9.747     | µg/L | Discharge Conc ≤ 25% WQBEL |
| 1,2-Dichloropropane         | 1.647     | µg/L | Discharge Conc ≤ 25% WQBEL |
| 1,3-Dichloropropylene       | 494       | µg/L | Discharge Conc ≤ 25% WQBEL |
| 1,4-Dioxane                 | N/A       | N/A  | No WQS                     |
| Ethylbenzene                | 20.085    | µg/L | Discharge Conc ≤ 25% WQBEL |
| Methyl Bromide              | 29.537    | µg/L | Discharge Conc ≤ 25% WQBEL |
| Methyl Chloride             | 1,624.514 | µg/L | Discharge Conc ≤ 25% WQBEL |
| Methylene Chloride          | 36.589    | µg/L | Discharge Conc ≤ 25% WQBEL |
| 1,1,2,2-Tetrachloroethane   | 366       | µg/L | Discharge Conc ≤ 25% WQBEL |
| Tetrachloroethylene         | 18.294    | µg/L | Discharge Conc ≤ 25% WQBEL |
| Toluene                     | 16.836    | µg/L | Discharge Conc ≤ 25% WQBEL |
| 1,2-Trans-Dichloroethylene  | 29.537    | µg/L | Discharge Conc ≤ 25% WQBEL |
| 1,1,1-Trichloroethane       | 180.173   | µg/L | Discharge Conc ≤ 25% WQBEL |
| 1,1,2-Trichloroethane       | 1,006     | µg/L | Discharge Conc ≤ 25% WQBEL |
| Trichloroethylene           | 1,098     | µg/L | Discharge Conc ≤ 25% WQBEL |
| Vinyl Chloride              | 36.6      | µg/L | Discharge Conc ≤ 25% WQBEL |
| 2-Chlorophenol              | 8.861     | µg/L | Discharge Conc < TQL       |
| 2,4-Dichlorophenol          | 2.954     | µg/L | Discharge Conc < TQL       |
| 2,4-Dimethylphenol          | 29.537    | µg/L | Discharge Conc < TQL       |
| 4,6-Dinitro-o-Cresol        | 591       | µg/L | Discharge Conc < TQL       |
| 2,4-Dinitrophenol           | 2,954     | µg/L | Discharge Conc < TQL       |
| 2-Nitrophenol               | 472.586   | µg/L | Discharge Conc < TQL       |
| 4-Nitrophenol               | 138.822   | µg/L | Discharge Conc < TQL       |
| 2,4,6-Trichlorophenol       | 2,744     | µg/L | Discharge Conc < TQL       |
| Acenaphthene                | 5,021     | µg/L | Discharge Conc < TQL       |
| Acenaphthylene              | N/A       | N/A  | No WQS                     |
| Anthracene                  | 88.610    | µg/L | Discharge Conc < TQL       |
| Benzidine                   | 0.18      | µg/L | Discharge Conc < TQL       |
| Benzo(a)Anthracene          | 1.83      | µg/L | Discharge Conc < TQL       |
| Benzo(a)Pyrene              | 0.18      | µg/L | Discharge Conc < TQL       |
| Benzo(ghi)Perylene          | N/A       | N/A  | No WQS                     |
| Benzo(k)Fluoranthene        | 18.3      | µg/L | Discharge Conc < TQL       |
| Bis(2-Chloroethoxy)Methane  | N/A       | N/A  | No WQS                     |
| Bis(2-Chloroethyl)Ether     | 54.9      | µg/L | Discharge Conc < TQL       |
| Bis(2-Chloroisopropyl)Ether | 59.073    | µg/L | Discharge Conc < TQL       |
| Bis(2-Ethylhexyl)Phthalate  | 585       | µg/L | Discharge Conc ≤ 25% WQBEL |

|                             |         |      |                      |
|-----------------------------|---------|------|----------------------|
| 4-Bromophenyl Phenyl Ether  | 15,950  | µg/L | Discharge Conc < TQL |
| Butyl Benzyl Phthalate      | 29.5    | µg/L | Discharge Conc < TQL |
| 2-Chloronaphthalene         | 236,293 | µg/L | Discharge Conc < TQL |
| 4-Chlorophenyl Phenyl Ether | N/A     | N/A  | No WQS               |
| Chrysene                    | 220     | µg/L | Discharge Conc < TQL |
| Dibenz(a,h)Anthracene       | 0.18    | µg/L | Discharge Conc < TQL |
| 1,2-Dichlorobenzene         | 47,259  | µg/L | Discharge Conc < TQL |
| 1,3-Dichlorobenzene         | 2,068   | µg/L | Discharge Conc < TQL |
| 1,4-Dichlorobenzene         | 44,305  | µg/L | Discharge Conc < TQL |
| 3,3-Dichlorobenzidine       | 91.5    | µg/L | Discharge Conc < TQL |
| Diethyl Phthalate           | 177,220 | µg/L | Discharge Conc < TQL |
| Dimethyl Phthalate          | 147,683 | µg/L | Discharge Conc < TQL |
| Di-n-Butyl Phthalate        | 5,907   | µg/L | Discharge Conc < TQL |
| 2,4-Dinitrotoluene          | 91.5    | µg/L | Discharge Conc < TQL |
| 2,6-Dinitrotoluene          | 91.5    | µg/L | Discharge Conc < TQL |
| Di-n-Octyl Phthalate        | N/A     | N/A  | No WQS               |
| 1,2-Diphenylhydrazine       | 54.9    | µg/L | Discharge Conc < TQL |
| Fluoranthene                | 5,907   | µg/L | Discharge Conc < TQL |
| Fluorene                    | 14,768  | µg/L | Discharge Conc < TQL |
| Hexachlorobenzene           | 0.15    | µg/L | Discharge Conc < TQL |
| Hexachlorobutadiene         | 18.3    | µg/L | Discharge Conc < TQL |
| Hexachlorocyclopentadiene   | 295     | µg/L | Discharge Conc < TQL |
| Hexachloroethane            | 183     | µg/L | Discharge Conc < TQL |
| Indeno(1,2,3-cd)Pyrene      | 1.83    | µg/L | Discharge Conc < TQL |
| Isophorone                  | 10,042  | µg/L | Discharge Conc < TQL |
| Naphthalene                 | 12,701  | µg/L | Discharge Conc < TQL |
| Nitrobenzene                | 2,954   | µg/L | Discharge Conc < TQL |
| n-Nitrosodimethylamine      | 1.28    | µg/L | Discharge Conc < TQL |
| n-Nitrosodi-n-Propylamine   | 9.15    | µg/L | Discharge Conc < TQL |
| n-Nitrosodiphenylamine      | 6,037   | µg/L | Discharge Conc < TQL |
| Phenanthrene                | 295     | µg/L | Discharge Conc < TQL |
| Pyrene                      | 5,907   | µg/L | Discharge Conc < TQL |
| 1,2,4-Trichlorobenzene      | 20.7    | µg/L | Discharge Conc < TQL |
| Aldrin                      | 0.001   | µg/L | Discharge Conc < TQL |
| alpha-BHC                   | 0.73    | µg/L | Discharge Conc < TQL |
| beta-BHC                    | 14.6    | µg/L | Discharge Conc < TQL |
| gamma-BHC                   | 110     | µg/L | Discharge Conc < TQL |
| delta BHC                   | N/A     | N/A  | No WQS               |
| Chlordane                   | 0.55    | µg/L | Discharge Conc < TQL |
| 4,4-DDT                     | 0.055   | µg/L | Discharge Conc < TQL |
| 4,4-DDE                     | 0.037   | µg/L | Discharge Conc < TQL |
| 4,4-DDD                     | 0.18    | µg/L | Discharge Conc < TQL |
| Dieldrin                    | 0.002   | µg/L | Discharge Conc < TQL |
| alpha-Endosulfan            | 16.5    | µg/L | Discharge Conc < TQL |
| beta-Endosulfan             | 16.5    | µg/L | Discharge Conc < TQL |
| Endosulfan Sulfate          | 5,907   | µg/L | Discharge Conc < TQL |
| Model Results               | 8.86    | µg/L | Discharge Conc < TQL |



|                    |       |      |                      |
|--------------------|-------|------|----------------------|
| Endrin Aldehyde    | 295   | µg/L | Discharge Conc < TQL |
| Heptachlor         | 0.011 | µg/L | Discharge Conc < TQL |
| Heptachlor Epoxide | 0.055 | µg/L | Discharge Conc < TQL |
| PCB-1016           | N/A   | N/A  | No WQS               |
| PCB-1221           | N/A   | N/A  | No WQS               |
| PCB-1232           | N/A   | N/A  | No WQS               |
| PCB-1242           | N/A   | N/A  | No WQS               |
| PCB-1248           | N/A   | N/A  | No WQS               |
| PCB-1254           | N/A   | N/A  | No WQS               |
| PCB-1260           | N/A   | N/A  | No WQS               |
| PCBs, Total        | 0.12  | µg/L | Discharge Conc < TQL |

Model Results

5/20/2025

Page 19