Pennsylvania Department of Environmental Protection

Northeast Regional Office
CLEAN WATER PROGRAM

| | | | |
|---|---|---|---|
| Application Type | **Renewal** | Application No. | **PA0062529** |
| Facility Type | **Industrial** | APS ID | **613192** |
| Major / Minor | **Minor** | Authorization ID | **1455865** |

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

## Applicant and Facility Information

| | | | |
|---|---|---|---|
| Applicant Name | **Schuylkill County Municipal Authority** | Facility Name | **Broad Mountain WTP** |
| Applicant Address | 221 South Centre Street | Facility Address | 1371 State Route 61 Highway 17 (North) |
| | Pottsville, PA 17901-3506 | | Pottsville, PA 17901 |
| Applicant Contact | Patrick M. Caulfield, Executive Director | Facility Contact | Troy K. Miller, Environmental Manager |
| Applicant Phone | (570) 622-8240 | Facility Phone | (570) 622-8240 |
| Client ID | 5024 | Site ID | 444514 |
| SIC Code | 4941 | Municipality | Blythe Township |
| SIC Description | Trans. & Utilities - Water Supply | County | Schuylkill |
| Date Application Received | September 20, 2023 | EPA Waived? | Yes |
| Date Application Accepted | September 27, 2023 | If No, Reason | - |

Purpose of Application: Renewal of NPDES permit for discharge of treated sewage.

## Summary of Review

The applicant is requesting the renewal of an NPDES permit to discharge process wastewater into Wolf Creek, a Cold-Water Fishery, Migratory Fish (CWF, MF) receiving stream in State Water Plan Basin 3-A (Schuylkill River). As per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than its designated use. This stream segment is not designated as a naturally reproducing trout stream as per PA Fish & Boat Commission. This discharge is not expected to affect public water supplies.

Limits for pH, Total Suspended Solids (TSS), Total Iron, and Total Manganese are technology-based limits obtained from the 1997 DEP "Technology-Based Control Requirements for Water Treatment Plant Wastes" (doc no. 362-2183-003). These limits have been maintained in this permit renewal.

The Total Residual Chlorine (TRC) Calculation Spreadsheet recommends stricter limitations than the previous permit. The permittee will be required to meet the new water quality-based limits for TRC starting three years after the effective date of the permit (see Part C.III.). TRC limitations from the previously issued permit are in effect for the first three years after the permit effective date.

Pollutant sampling results submitted with the permit application were entered into the Toxic Management Spreadsheet (TMS). The TMS recommended limits for Dissolved Iron, Total Thallium, and Total Zinc and monitoring/reporting for Total Aluminum. The permittee was given the opportunity to conduct a minimum of 10 additional effluent samples for these parameters. The permittee was also informed that when a pollutant tests as non-detect, the Department must use the laboratory quantitation limit (or reporting limit) as the pollutant concentration for modeling purposes. For example, the Target QL Value for Total Thallium is 2.0 µg/L; however, it appeared the QL used in the initial sample results was 3.0 µg/L. It was suggested that if the permittee chooses to conduct the ten (10) additional samples, then the lower laboratory quantitation limits for each parameter should be used.

| Approve | Deny | Signatures | Date |
|---|---|---|---|
| X | | Allison Seyfried Zukosky / Project Manager | October 22, 2025 |
| X | | Edward Dudick, P.E. / Environmental Engineer Manager | October 22, 2025 |

**Summary of Review**

The permittee collected 10 additional samples during March 2025 through May 2025 and provided the results to the Department via email on October 2, 2025. The summary of the sample results can be found in the table on page 4 of this fact sheet. These updated sample results were used to re-run the modeling.

Please note that the same QL that was used for the initial Total Thallium sampling was used again in the additional sampling.

The updated modeling indicated that limitations should be established for Total Thallium and stricter limitations than the previous permit should be established for Total Zinc. Monitoring/reporting was also still recommended for Dissolved Iron. Therefore, the Total Thallium and Total Zinc limitations were added to the permit and will come into effect three years after the permit effective date. Monitoring/reporting requirements are included in the permit for Total Thallium until the limitations come into effect. The Total Zinc limitations from the previous permit are still in effect until the new limitations begin. Monitoring/reporting was also added for Dissolved Iron beginning at the permit effective date.

The Total Aluminum limitations from the previous permit will be maintained in this permit. Modeling did not recommend stricter limitations.

The NPDES renewal application indicated the design flow and maximum flow during production was 0.14 MGD. This value was used for the preliminary modeling that the preliminary limitations were based off. During the technical review it was discovered that the previous permit utilized a flow of 0.164 MGD. This is the same value that the DRBC docket utilizes. Therefore, the modeling was performed with a flow of 0.164 MGD. This resulted in monitoring/reporting also being recommended for Total Silver. The monitoring/reporting for Total Silver was added to the permit.

DRBC Docket No. D-1991-016 CP-4 does not contain more stringent or additional requirements beyond the NPDES permit.

There are no representative stream gages in the vicinity of the outfall and the drainage area at Outfall 001 is too small for USGS StreamStats to estimate accurate low flow values. Therefore, the default Low Flow Yield (LFY) of 0.1 cfs/mi$^2$ was used to model the discharge. For modeling inputs, RMI values were obtained using the "PA Historic Streams" feature of eMapPA, drainage areas were delineated using USGS's StreamStats Interactive Map, and elevations were obtained using the elevation profile feature of StreamStats. StreamStats data and the TMS data can be seen starting on page 3 of this fact sheet.

For this permit renewal, all monitoring frequencies for parameters with limitations are consistent with the Department's *Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits* (document no. 362-0400-001).

The existing permit expired on April 30, 2024 and the application for renewal was received on time.

A Water Management System Inspection query indicated a Compliance Evaluation was performed on September 24, 2024.

There are currently five open violations for this client that may need to be resolved before issuance of the final permit:

1. 05/9/2025 - Violation ID 8232418 – Violation Code C4A – Failure to operate and maintain the water system. (Safe Drinking Water - Program Specific ID: 3540038).

2. 06/6/2024 - Violation ID 8193459 – Violation Code 92A.44 – NPDES - Violation of effluent limits in Part A of permit (WPC NPDES - Program Specific ID: PA0062197).

3. 06/24/2024 - Violation ID 8202209 – Violation Code 92A.44 – NPDES - Violation of effluent limits in Part A of permit (WPC NPDES - Program Specific ID: PA0062197).

4. 09/24/2024 - Violation ID 8202210 – Violation Code 92A.41(A)12B – NPDES - Failure to submit monitoring report(s) or properly complete monitoring reports (WPC NPDES - Program Specific ID: PA0062197).

**Summary of Review**

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.

## StreamStats Data:

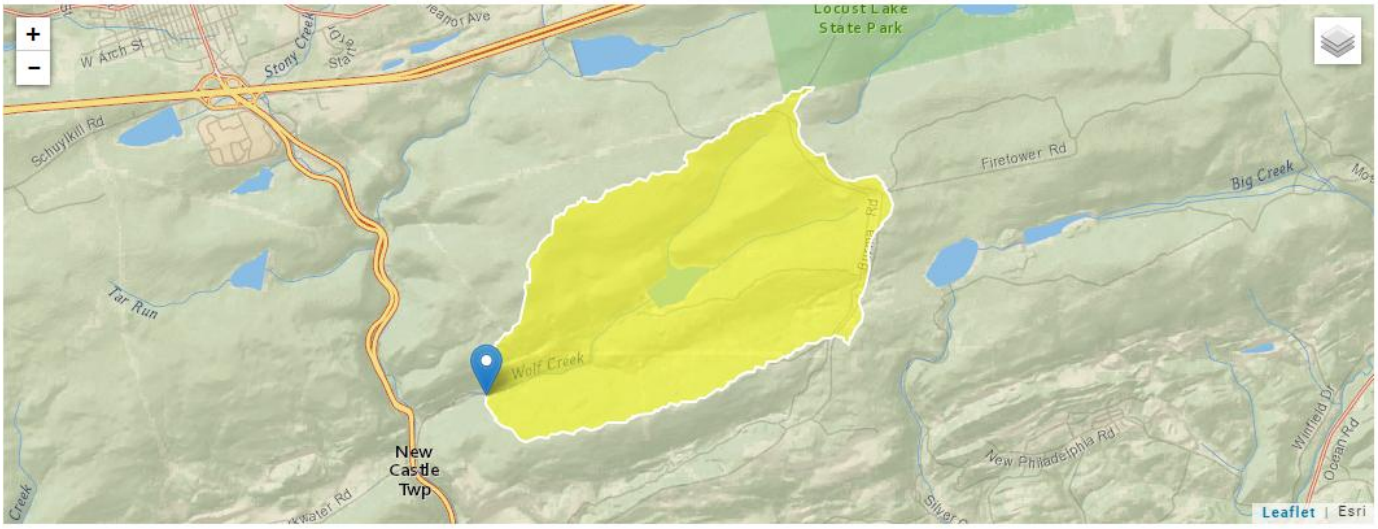
**At Outfall 001 on Wolf Creek (2355):**

| RMI | Elevation (ft) | Drainage Area ($mi^2$) | $Q_{7-10}$ Flow (cfs) |
|---|---|---|---|
| 0.52 | 1,034.56 | 3.89 | 0.493 |

$$Low\ Flow\ Yield\ using\ StreamStats = \frac{0.493\ ft^3/sec}{3.89\ mi^2} = \mathbf{0.127}\ \frac{\boldsymbol{ft^3/sec}}{\boldsymbol{mi^2}}$$

StreamStats Report

| | |
|---|---|
| **Region ID:** | PA |
| **Workspace ID:** | PA20241015184708893000 |
| **Clicked Point (Latitude, Longitude):** | 40.74257, -76.19049 |
| **Time:** | 2024-10-15 14:47:31 -0400 |




| Parameter Code | Parameter Name | Value | Units |
|---|---|---|---|
| DRNAREA | Drainage Area | 3.89 | square miles |

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

| Statistic | Value | Unit |
|---|---|---|
| 7 Day 2 Year Low Flow | 1.05 | ft^3/s |
| 30 Day 2 Year Low Flow | 1.37 | ft^3/s |
| 7 Day 10 Year Low Flow | 0.493 | ft^3/s |

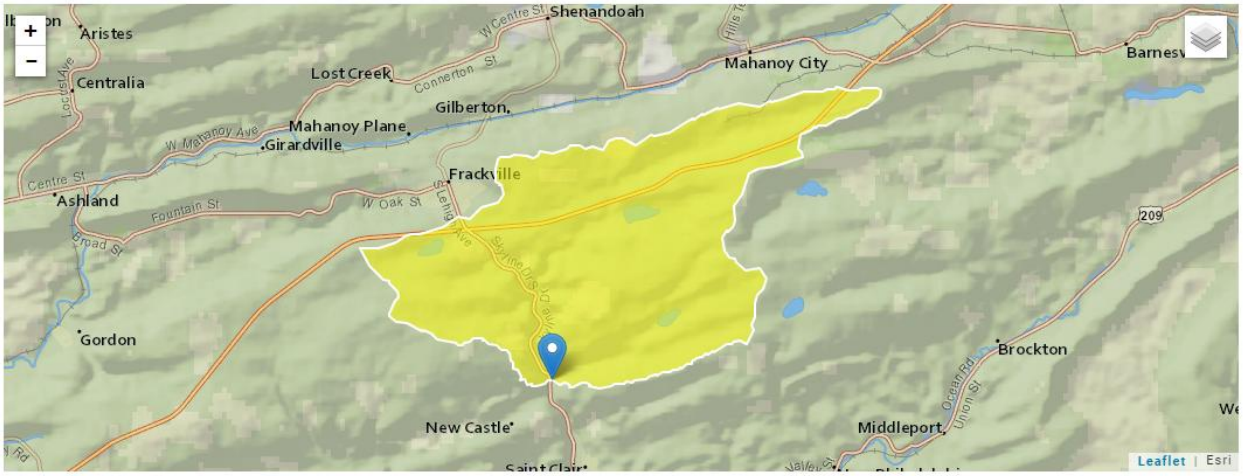
**Summary of Review**

**At confluence with Mill Creek (2353):**

| RMI | Elevation (ft) | Drainage Area (mi²) |
|---|---|---|
| 0.0<br>4.13 (On Mill Creek) | 907.53 | 18 |

StreamStats Report

| | |
|---|---|
| **Region ID:** | PA |
| **Workspace ID:** | PA20241015185141755000 |
| **Clicked Point (Latitude, Longitude):** | 40.73976, -76.19995 |
| **Time:** | 2024-10-15 14:52:06 -0400 |




| Parameter Code | Parameter Name | Value | Units |
|---|---|---|---|
| DRNAREA | Drainage Area | 18 | square miles |

**Using the state-wide Low-Flow Yield (LFY) of 0.1 cfs/mi² :**

$$\frac{0.1\ ft^3/sec}{mi^2} \times 3.89\ mi^2 = \frac{\mathbf{0.389\ ft^3}}{\mathbf{sec}}$$

**Additional Sample Results Summary:**

| | Total Aluminum (mg/L) | Dissolved Iron (mg/L) | Total Thallium (mg/L) | Total Zinc (mg/L) | |
|---|---|---|---|---|---|
| **3/5/2025** | 0.12 | 0.02 | <0.003 | 0.094 | |
| **3/12/2025** | 0.31 | 0.04 | <0.003 | 0.087 | |
| **3/19/2025** | 0.56 | 0.03 | <0.003 | 0.05 | |
| **3/26/2025** | 0.28 | 0.03 | <0.003 | 0.071 | |
| **4/2/2025** | 0.47 | 0.07 | <0.003 | 0.148 | |
| **4/10/2025** | 0.54 | 0.06 | <0.003 | 0.084 | |
| **4/16/2025** | 0.48 | 0.05 | <0.003 | 0.073 | |
| **4/22/2025** | 0.57 | 0.61 | <0.003 | 0.07 | |
| **4/29/2025** | 0.39 | 0.14 | <0.003 | 0.094 | |
| **5/6/2025** | 0.18 | 0.05 | <0.003 | 0.061 | |
| **Total:** | 0.390 | 0.110 | <0.003 | 0.083 | mg/L |
| | 390.00 | 110.0 | 3.0 | 83.2 | µg/L |

## Summary of Review

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Toxics Management Spreadsheet
Version 1.4, May 2023

# Discharge Information

Instructions | Discharge | Stream

Facility: SCMA - Broad Mountain WTP  NPDES Permit No.: PA0062529  Outfall No.: 001

Evaluation Type: Major Sewage / Industrial Waste  Wastewater Description: Industrial Wastewater

| Discharge Characteristics | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Design Flow (MGD)* | Hardness (mg/l)* | pH (SU)* | Partial Mix Factors (PMFs) | | | | Complete Mix Times (min) | |
| | | | AFC | CFC | THH | CRL | $Q_{7-10}$ | $Q_h$ |
| 0.164 | 6.7 | 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 Transl |
| Group 1 | Total Dissolved Solids (PWS) | mg/L | | 33 | | | | | | | | | | |
| | Chloride (PWS) | mg/L | | 3.86 | | | | | | | | | | |
| | Bromide | mg/L | | 0.13 | | | | | | | | | | |
| | Sulfate (PWS) | mg/L | | 7.01 | | | | | | | | | | |
| | Fluoride (PWS) | mg/L | | 0.11 | | | | | | | | | | |
| Group 2 | Total Aluminum | µg/L | | 390 | | | | | | | | | | |
| | Total Antimony | µg/L | | 0.2 | | | | | | | | | | |
| | Total Arsenic | µg/L | | 1 | | | | | | | | | | |
| | Total Barium | µg/L | | 14 | | | | | | | | | | |
| | Total Beryllium | µg/L | | 1 | | | | | | | | | | |
| | Total Boron | µg/L | | 200 | | | | | | | | | | |
| | Total Cadmium | µg/L | < | 0.2 | | | | | | | | | | |
| | Total Chromium (III) | µg/L | | 1 | | | | | | | | | | |
| | Hexavalent Chromium | µg/L | | 0.25 | | | | | | | | | | |
| | Total Cobalt | µg/L | | 2 | | | | | | | | | | |
| | Total Copper | µg/L | | 1 | | | | | | | | | | |
| | Free Cyanide | µg/L | | | | | | | | | | | | |
| | Total Cyanide | µg/L | | 10 | | | | | | | | | | |
| | Dissolved Iron | µg/L | | 110 | | | | | | | | | | |
| | Total Iron | µg/L | | 155.8 | | | | | | | | | | |
| | Total Lead | µg/L | < | 1 | | | | | | | | | | |
| | Total Manganese | µg/L | | 61.6 | | | | | | | | | | |
| | Total Mercury | µg/L | < | 0.2 | | | | | | | | | | |
| | Total Nickel | µg/L | | 1.1 | | | | | | | | | | |
| | Total Phenols (Phenolics) (PWS) | µg/L | | 2 | | | | | | | | | | |
| | Total Selenium | µg/L | | 1 | | | | | | | | | | |
| | Total Silver | µg/L | | 0.3 | | | | | | | | | | |
| | Total Thallium | µg/L | < | 3 | | | | | | | | | | |
| | Total Zinc | µg/L | | 83.2 | | | | | | | | | | |
| | Total Molybdenum | µg/L | | 3 | | | | | | | | | | |

## Summary of Review

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Toxics Management Spreadsheet
Version 1.4, May 2023

### Stream / Surface Water Information

**SCMA - Broad Mountain WTP, NPDES Permit No. PA0062529, Outfall 001**

Instructions | Discharge | Stream

Receiving Surface Water Name: **Wolf Creek** No. Reaches to Model: **1**

◉ Statewide Criteria
○ Great Lakes Criteria
○ ORSANCO Criteria

| Location | Stream Code* | RMI* | Elevation (ft)* | DA (mi²)* | Slope (ft/ft) | PWS Withdrawal (MGD) | Apply Fish Criteria* |
|---|---|---|---|---|---|---|---|
| Point of Discharge | 002365 | 0.52 | 1034.56 | 3.89 | | | Yes |
| End of Reach 1 | 002365 | 0 | 907.53 | 18 | | | Yes |

$Q_{7-10}$

| Location | RMI | LFY (cfs/mi²)* | 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 | 0.52 | 0.1 | | | | | | | | | | 100 | 7 | | |
| End of Reach 1 | 0 | 0.1 | | | | | | | | | | | | | |

$Q_h$

| Location | RMI | LFY (cfs/mi²) | 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 | 0.52 | | | | | | | | | | | | | | |
| End of Reach 1 | 0 | | | | | | | | | | | | | | |

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Toxics Management Spreadsheet
Version 1.4, May 2023

### Model Results

**SCMA - Broad Mountain WTP, NPDES Permit No. PA0062529, Outfall 001**

Instructions | Results | RETURN TO INPUTS | SAVE AS PDF | PRINT ◉ All ○ Inputs ○ Results ○ Limits

☐ *Hydrodynamics*

☑ *Wasteload Allocations*

☑ *AFC* CCT (min): 0.441 PMF: 1 Analysis Hardness (mg/l): 63.17 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 | 1,900 | |
| Total Antimony | 0 | 0 | | 0 | 1,100 | 1,100 | 2,787 | |
| Total Arsenic | 0 | 0 | | 0 | 340 | 340 | 861 | Chem Translator of 1 applied |
| Total Barium | 0 | 0 | | 0 | 21,000 | 21,000 | 53,198 | |
| Total Boron | 0 | 0 | | 0 | 8,100 | 8,100 | 20,519 | |
| Total Cadmium | 0 | 0 | | 0 | 1.288 | 1.34 | 3.39 | Chem Translator of 0.963 applied |
| Total Chromium (III) | 0 | 0 | | 0 | 391.123 | 1,238 | 3,135 | Chem Translator of 0.316 applied |
| Hexavalent Chromium | 0 | 0 | | 0 | 16 | 16.3 | 41.3 | Chem Translator of 0.982 applied |
| Total Cobalt | 0 | 0 | | 0 | 95 | 95.0 | 241 | |
| Total Copper | 0 | 0 | | 0 | 8.718 | 9.08 | 23.0 | 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 | 39.033 | 45.5 | 115 | Chem Translator of 0.858 applied |
| Total Manganese | 0 | 0 | | 0 | N/A | N/A | N/A | |
| Total Mercury | 0 | 0 | | 0 | 1.400 | 1.65 | 4.17 | Chem Translator of 0.85 applied |
| Total Nickel | 0 | 0 | | 0 | 317.466 | 318 | 806 | 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 | 1.460 | 1.72 | 4.35 | Chem Translator of 0.85 applied |
| Total Thallium | 0 | 0 | | 0 | 65 | 65.0 | 165 | |
| Total Zinc | 0 | 0 | | 0 | 79.401 | 81.2 | 206 | Chem Translator of 0.978 applied |

## Summary of Review

☑ *CFC* CCT (min): 0.441 PMF: 1 Analysis Hardness (mg/l): 63.17 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 | N/A | N/A | N/A | |
| Total Antimony | 0 | 0 | | 0 | 220 | 220 | 557 | |
| Total Arsenic | 0 | 0 | | 0 | 150 | 150 | 380 | Chem Translator of 1 applied |
| Total Barium | 0 | 0 | | 0 | 4,100 | 4,100 | 10,386 | |
| Total Boron | 0 | 0 | | 0 | 1,600 | 1,600 | 4,053 | |
| Total Cadmium | 0 | 0 | | 0 | 0.179 | 0.19 | 0.49 | Chem Translator of 0.928 applied |
| Total Chromium (III) | 0 | 0 | | 0 | 50.877 | 59.2 | 150 | Chem Translator of 0.86 applied |
| Hexavalent Chromium | 0 | 0 | | 0 | 10 | 10.4 | 26.3 | Chem Translator of 0.962 applied |
| Total Cobalt | 0 | 0 | | 0 | 19 | 19.0 | 48.1 | |
| Total Copper | 0 | 0 | | 0 | 6.048 | 6.3 | 16.0 | Chem Translator of 0.96 applied |
| Dissolved Iron | 0 | 0 | | 0 | N/A | N/A | N/A | |
| Total Iron | 0 | 0 | | 0 | 1,500 | 1,500 | 3,800 | WQC = 30 day average; PMF = 1 |
| Total Lead | 0 | 0 | | 0 | 1.521 | 1.77 | 4.49 | Chem Translator of 0.858 applied |
| Total Manganese | 0 | 0 | | 0 | N/A | N/A | N/A | |
| Total Mercury | 0 | 0 | | 0 | 0.770 | 0.91 | 2.29 | Chem Translator of 0.85 applied |
| Total Nickel | 0 | 0 | | 0 | 35.261 | 35.4 | 89.6 | Chem Translator of 0.997 applied |
| Total Phenols (Phenolics) (PWS) | 0 | 0 | | 0 | N/A | N/A | N/A | |
| Total Selenium | 0 | 0 | | 0 | 4.600 | 4.99 | 12.6 | Chem Translator of 0.922 applied |
| Total Silver | 0 | 0 | | 0 | N/A | N/A | N/A | Chem Translator of 1 applied |
| Total Thallium | 0 | 0 | | 0 | 13 | 13.0 | 32.9 | |
| Total Zinc | 0 | 0 | | 0 | 80.051 | 81.2 | 206 | Chem Translator of 0.986 applied |

☑ *THH* CCT (min): 0.441 PMF: 1 Analysis Hardness (mg/l): N/A Analysis pH: N/A

☑ *CRL* CCT (min): 0.338 PMF: 1 Analysis Hardness (mg/l): N/A Analysis pH: N/A

☑ ***Recommended WQBELs & Monitoring Requirements***

**No. Samples/Month:** 4

| Pollutants | *Mass Limits* AML (lbs/day) | MDL (lbs/day) | *Concentration Limits* AML | MDL | IMAX | Units | Governing WQBEL | WQBEL Basis | Comments |
|---|---|---|---|---|---|---|---|---|---|
| Total Aluminum | Report | Report | Report | Report | Report | µg/L | 1,218 | AFC | Discharge Conc > 10% WQBEL (no RP) |
| Dissolved Iron | Report | Report | Report | Report | Report | µg/L | 760 | THH | Discharge Conc > 10% WQBEL (no RP) |
| Total Silver | Report | Report | Report | Report | Report | µg/L | 2.79 | AFC | Discharge Conc > 10% WQBEL (no RP) |
| Total Thallium | 0.0008 | 0.001 | 0.61 | 0.95 | 1.52 | µg/L | 0.61 | THH | Discharge Conc ≥ 50% WQBEL (RP) |
| Total Zinc | 0.18 | 0.28 | 132 | 206 | 330 | µg/L | 132 | AFC | Discharge Conc ≥ 50% WQBEL (RP) |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

## Summary of Review

### TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

| | | | |
|---|---|---|---|
| 0.164 | = Q stream (cfs) | 0.5 | = CV Daily |
| 0.389 | = Q discharge (MGD) | 0.5 | = CV Hourly |
| 30 | = no. samples | 1 | = AFC_Partial Mix Factor |
| 0.3 | = Chlorine Demand of Stream | 1 | = CFC_Partial Mix Factor |
| 0 | = Chlorine Demand of Discharge | 15 | = AFC_Criteria Compliance Time (min) |
| 0.5 | = BAT/BPJ Value | 720 | = CFC_Criteria Compliance Time (min) |
| 0 | = % Factor of Safety (FOS) | | =Decay Coefficient (K) |

| Source | Reference | AFC Calculations | Reference | CFC Calculations |
|---|---|---|---|---|
| TRC | 1.3.2.iii | WLA afc = 0.106 | 1.3.2.iii | WLA cfc = 0.096 |
| PENTOXSD TRG | 5.1a | LTAMULT afc = 0.373 | 5.1c | LTAMULT cfc = 0.581 |
| PENTOXSD TRG | 5.1b | LTA_afc= 0.039 | 5.1d | LTA_cfc = 0.056 |

| Source | | Effluent Limit Calculations | |
|---|---|---|---|
| PENTOXSD TRG | 5.1f | AML MULT = 1.231 | |
| PENTOXSD TRG | 5.1g | AVG MON LIMIT (mg/l) = 0.049 | AFC |
| | | INST MAX LIMIT (mg/l) = 0.159 | |

| | |
|---|---|
| WLA afc | (.019/e(-k*AFC_tc)) + [(AFC_Yc*Qs*.019/Qd*e(-k*AFC_tc))... |
| | ...+ Xd + (AFC_Yc*Qs*Xs/Qd)]*(1-FOS/100) |
| LTAMULT afc | EXP((0.5*LN(cvh^2+1))-2.326*LN(cvh^2+1)^0.5) |
| LTA_afc | wla_afc*LTAMULT_afc |
| WLA_cfc | (.011/e(-k*CFC_tc) + [(CFC_Yc*Qs*.011/Qd*e(-k*CFC_tc) )... |
| | ...+ Xd + (CFC_Yc*Qs*Xs/Qd)]*(1-FOS/100) |
| LTAMULT_cfc | EXP((0.5*LN(cvd^2/no_samples+1))-2.326*LN(cvd^2/no_samples+1)^0.5) |
| LTA_cfc | wla_cfc*LTAMULT_cfc |
| AML MULT | EXP(2.326*LN((cvd^2/no_samples+1)^0.5)-0.5*LN(cvd^2/no_samples+1)) |
| AVG MON LIMIT | MIN(BAT_BPJ,MIN(LTA_afc,LTA_cfc)*AML_MULT) |
| INST MAX LIMIT | 1.5*((av_mon_limit/AML_MULT)/LTAMULT_afc) |

DRBC Docket 1991-016 CP-4.pdf

TMS PA0062529 10-22-2025.pdf

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

| | | | |
|---|---|---|---|
| Outfall No. | 001 | Design Flow (MGD) | 0.164 |
| Latitude | 40º 44' 34.03" | Longitude | -76º 11' 21.75" |
| Quad Name | Pottsville | Quad Code | 1336 |
| Wastewater Description: | IW Process Effluent without ELG | | |
| Receiving Waters | Wolf Creek (CWF, MF) | Stream Code | 2355 |
| NHD Com ID | 25991126 | RMI | 0.52 |
| Drainage Area | 3.89 $mi^2$ | Yield ($cfs/mi^2$) | 0.1 |
| $Q_{7-10}$ Flow (cfs) | 0.389 | $Q_{7-10}$ Basis | State-wide default |
| Elevation (ft) | 1,034.56 | Slope (ft/ft) | - |
| Watershed No. | 3-A | Chapter 93 Class. | CWF, MF |
| Existing Use | - | Existing Use Qualifier | - |
| Exceptions to Use | - | Exceptions to Criteria | - |
| Assessment Status | Impaired | | |
| Cause(s) of Impairment | CAUSE UNKNOWN | | |
| Source(s) of Impairment | NATURAL SOURCES | | |
| TMDL Status | - | Name | - |
| Nearest Downstream Public Water Supply Intake | Pottstown Borough | | |
| PWS Waters | Schuylkill River | Flow at Intake (cfs) | - |
| PWS RMI | 57 | Distance from Outfall (mi) | ~72.5 |

## Compliance History

**DMR Data for Outfall 001 (from September 1, 2024 to August 31, 2025)**

| Parameter | AUG-25 | JUL-25 | JUN-25 | MAY-25 | APR-25 | MAR-25 | FEB-25 | JAN-25 | DEC-24 | NOV-24 | OCT-24 | SEP-24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow (MGD) Average Monthly | 0.132 | 0.133 | 0.133 | 0.132 | 0.131 | 0.134 | 0.133 | 0.132 | 0.132 | 0.132 | 0.131 | 0.133 |
| Flow (MGD) Daily Maximum | 0.135 | 0.136 | 0.136 | 0.136 | 0.135 | 0.136 | 0.136 | 0.135 | 0.136 | 0.137 | 0.134 | 0.135 |
| pH (S.U.) Instantaneous Minimum | 6.4 | 6.4 | 6.2 | 6.3 | 6.2 | 6.5 | 6.6 | 6.7 | 6.2 | 6.7 | 6.6 | 6.7 |
| pH (S.U.) Instantaneous Maximum | 7.0 | 7.5 | 7.4 | 7.2 | 7.0 | 6.9 | 7.3 | 7.0 | 7.4 | 7.4 | 7.2 | 7.3 |
| TRC (mg/L) Average Monthly | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.06 | 0.09 | 0.07 | 0.09 | 0.06 | 0.04 | 0.05 |
| TRC (mg/L) Instantaneous Maximum | 0.08 | 0.09 | 0.09 | 0.08 | 0.10 | 0.14 | 0.17 | 0.10 | 0.19 | 0.20 | 0.09 | 0.09 |
| TSS (lbs/day) Average Monthly | 1.08 | 2.22 | 1.38 | 2.20 | 2.64 | 3.04 | 1.67 | 2.87 | 1.10 | 1.37 | 2.61 | 4.14 |
| TSS (lbs/day) Daily Maximum | 1.09 | 6.71 | 2.22 | 3.33 | 4.40 | 6.66 | 3.35 | 7.71 | 1.11 | 2.17 | 6.51 | 5.63 |
| TSS (mg/L) Average Monthly | 1.0 | 2.0 | 1.25 | 2.0 | 2.40 | 2.75 | 1.50 | 2.60 | 1.0 | 1.25 | 2.40 | 3.75 |
| TSS (mg/L) Daily Maximum | 1.0 | 6.0 | 2.0 | 3.0 | 4.0 | 6.0 | 3.0 | 7.0 | 1.0 | 2.0 | 6.0 | 5.0 |
| Total Aluminum (lbs/day) Average Monthly | 0.279 | 0.448 | 0.362 | 0.242 | 0.540 | 0.351 | 0.119 | 0.179 | 0.121 | 0.171 | 0.295 | 0.294 |
| Total Aluminum (lbs/day) Daily Maximum | 0.412 | 1.006 | 0.470 | 0.379 | 0.628 | 0.621 | 0.131 | 0.299 | 0.130 | 0.253 | 0.350 | 0.385 |
| Total Aluminum (mg/L) Average Monthly | 0.258 | 0.404 | 0.330 | 0.220 | 0.490 | 0.318 | 0.108 | 0.162 | 0.110 | 0.155 | 0.270 | 0.265 |
| Total Aluminum (mg/L) Daily Maximum | 0.380 | 0.900 | 0.470 | 0.350 | 0.570 | 0.560 | 0.120 | 0.270 | 0.120 | 0.230 | 0.320 | 0.350 |
| Total Iron (lbs/day) Average Monthly | 0.079 | 0.329 | 0.072 | 0.047 | 0.205 | 0.033 | 0.042 | 0.232 | 0.038 | 0.061 | 0.181 | 0.264 |
| Total Iron (lbs/day) Daily Maximum | 0.173 | 0.555 | 0.122 | 0.057 | 0.672 | 0.043 | 0.067 | 0.776 | 0.055 | 0.076 | 0.520 | 0.473 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Iron (mg/L) Average Monthly | 0.073 | 0.298 | 0.065 | 0.043 | 0.186 | 0.030 | 0.038 | 0.210 | 0.035 | 0.055 | 0.166 | 0.240 |
| Total Iron (mg/L) Daily Maximum | 0.160 | 0.500 | 0.110 | 0.050 | 0.610 | 0.040 | 0.060 | 0.70 | 0.050 | 0.070 | 0.480 | 0.430 |
| Total Manganese (lbs/day) Average Monthly | 0.049 | 0.205 | 0.065 | 0.038 | 0.084 | 0.031 | 0.053 | 0.110 | 0.034 | 0.046 | 0.093 | 0.145 |
| Total Manganese (lbs/day) Daily Maximum | 0.073 | 0.324 | 0.109 | 0.052 | 0.183 | 0.037 | 0.069 | 0.305 | 0.043 | 0.054 | 0.267 | 0.204 |
| Total Manganese (mg/L) Average Monthly | 0.046 | 0.185 | 0.059 | 0.047 | 0.076 | 0.028 | 0.048 | 0.099 | 0.031 | 0.042 | 0.085 | 0.132 |
| Total Manganese (mg/L) Daily Maximum | 0.067 | 0.292 | 0.098 | 0.066 | 0.166 | 0.033 | 0.062 | 0.275 | 0.039 | 0.048 | 0.246 | 0.190 |
| Total Zinc (lbs/day) Average Monthly | 0.108 | 0.087 | 0.082 | 0.090 | 0.103 | 0.084 | 0.143 | 0.113 | 0.096 | 0.166 | 0.046 | 0.076 |
| Total Zinc (lbs/day) Daily Maximum | 0.127 | 0.108 | 0.099 | 0.100 | 0.163 | 0.106 | 0.165 | 0.163 | 0.143 | 0.466 | 0.065 | 0.099 |
| Total Zinc (mg/L) Average Monthly | 0.10 | 0.079 | 0.074 | 0.081 | 0.094 | 0.076 | 0.129 | 0.103 | 0.088 | 0.151 | 0.042 | 0.069 |
| Total Zinc (mg/L) Daily Maximum | 0.117 | 0.097 | 0.091 | 0.090 | 0.148 | 0.094 | 0.149 | 0.145 | 0.131 | 0.423 | 0.060 | 0.088 |