Pennsylvania Department of Environmental Protection

Northcentral Regional Office
CLEAN WATER PROGRAM

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|---|---|---|---|
| Application Type | **Amendment, Major** | Application No. | **PA0228206 A-1** |
| Facility Type | **Industrial** | APS ID | **1122577** |
| Major / Minor | **Minor** | Authorization ID | **1501135** |

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

## Applicant and Facility Information

| | | | |
|---|---|---|---|
| Applicant Name | **Clearfield Municipal Authority** | Facility Name | **Montgomery Run Water Treatment Facility** |
| Applicant Address | 107 E Market Street | Facility Address | 1479 104th Cavalry Road |
| | Clearfield, PA 16830-2405 | | Clearfield, PA 16830 |
| Applicant Contact | Richard Lopez | Facility Contact | |
| Applicant Phone | (814) 765-9609 | Facility Phone | |
| Client ID | 87622 | Site ID | 530691 |
| SIC Code | 4941 | Municipality | Pike Township |
| SIC Description | Trans. & Utilities - Water Supply | County | Clearfield |
| Date Application Received | September 26, 2024 | EPA Waived? | Yes |
| Date Application Accepted | October 10, 2024 | If No, Reason | |

Purpose of Application: Relocation of existing outfall and increase of design discharge flow.

## Summary of Review

The above applicant has submitted a NPDES amendment application for their existing facility located in Pike Township, Clearfield County. The facility is a potable Water Treatment Facility (WTF) that serves portions of Clearfield County. The existing potable WTF is a conventional filter system that is being replaced by a membrane system. This permit amendment is for the relocation of the existing outfall and to increase the design discharge flow of the WTF.

The existing discharge is pumped to an UNT of Montgomery Creek, just upgradient of the WTF. The application proposes to move the outfall to Montgomery Creek approximately 250 feet downstream of the existing location. Both streams are considered CWF-MF by the Department's Chapter 93 Regulations. In addition to relocating the discharge, the amendment application proposes to increase the design discharge flow from 0.018 MGD to 0.0375 MGD.

All applicable Department Standard Operating Procedures were followed during the review of this application, unless otherwise stated.

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 | | *Chad A. Fabian*<br>Chad A. Fabian / Project Manager | February 6, 2025 |
| X | | *Nicholas W. Hartranft, P.E.*<br>Nicholas W. Hartranft, P.E. / Environmental Engineer Manager | February 7, 2025 |

| **Discharge, Receiving Waters and Water Supply Information** | | | |
|---|---|---|---|
| Outfall No. | 001 | Design Flow (MGD) | .0375 |
| Latitude | 41º 1' 28" | Longitude | -78º 30' 5" |
| Wastewater Description: | Water Treatment filter backwash water | | |
| Receiving Waters | Montgomery Creek (CWF) | Stream Code | 26623 |
| NHD Com ID | 61830503 | RMI | 2.9 |
| Drainage Area | 12.4 mi^2 | Yield (cfs/mi$^2$) | n/a |
| $Q_{7-10}$ Flow (cfs) | 1.55 | $Q_{7-10}$ Basis | Stream delineation |
| Elevation (ft) | 1274 | Slope (ft/ft) | n/a |
| Watershed No. | 8-B | Chapter 93 Class. | CWF |
| Existing Use | Same | Existing Use Qualifier | n/a |
| Exceptions to Use | None | Exceptions to Criteria | none |
| Assessment Status | Attaining Use(s) | | |
| Cause(s) of Impairment | Metals and pH | | |
| Source(s) of Impairment | Acid Mine Drainage | | |
| TMDL Status | Final | Name | Montgomery Creek |
| Nearest Downstream Public Water Supply Intake | PA American Water near Milton, PA approximately 160 miles downstream on the W. Branch Susquehanna River | | |

Changes Since Last Permit Issuance: The outfall has been moved approximately 250 feet downstream, therefore the drainage basin area has been adjusted from 11.7 mi^2 to 12.4 mi^2 (See attached Streamstats for drainage area). The discharge design flow has been increased from 0.018 MGD to 0.0375 MGD.

Other Comments:

The $Q_{7,10}$ was recalculated since the discharge point has moved. During the most recent renewal, the Q7.10 was 1.46 cfs with a drainage basin area of 11.7 mi^2. Using a ratio (cfs/mi^2) and the new drainage basin area of 12.4 mi^2, the new $Q_{7,10}$ has been calculated to be 1.55 cfs.

| **Compliance History** | |
|---|---|
| **Summary of DMRs:** | A review of the eDMR data shows no exceedances of effluent limits in the past 12 months. |
| **Summary of Inspections:** | The most recent inspection by the Department was conducted on 1/12/24. The only violations noted were minor TSS exceedances in April of 2023. The average monthly limitations for TSS is 30 mg/l, while the permittee reported 31.8. There are currently no open violations at the facility. |

## Development of Effluent Limitations

Technology Based Effluent Limitations

The Department's *Technology-Based Control Requirements for Water Treatment Plant Wastes* (DEP #362-2183-003, 1997) is a guidance that provides the following technology standards for discharges associated with Water Treatment Plants:

| Parameter | Monthly Average (mg/L) | Daily Maximum (mg/L) |
|---|---|---|
| Suspended Solids | 30.0 | 60.0 |
| Iron (Total) | 2.0 | 4.0 |
| Aluminum (Total) | 4.0 | 8.0 |
| Manganese (Total) | 1.0 | 2.0 |
| pH (SU) | 6.0 to 9.0 at all times | |
| Total Chlorine Residual | 0.5 | |

Water Quality Based Effluent Limitations (WQBELs)

Total Residual Chlorine (TRC)

The Department's TRC evaluation spreadsheet was used to evaluate if the existing 0.5 mg/l monthly average technology based TRC limit. The attached model shows that the existing limitation is protective of water quality standards.

Toxics Screening Analysis

The Department's Toxic Management Spreadsheet (TMS) was used to determine reasonable potential (RP) and calculate water quality-based effluent limitations (WQBELS) for the discharge. The new design discharge flow of 0.0375 MGD and the new $Q_{7,10}$ of 1.55 cfs were used to evaluate the parameters that were sampled during the previous NPDES renewal to determine if any WQBELs applied. The attached model shows that no WQBELs are warranted for this discharge. The TMS did recommend monitoring for total aluminum.

Total Maximum Daily Loads

Stream assessments have determined that the Montgomery Creek watershed is affected by pollution from Acid Mine Drainage (AMD). This pollution has caused high levels of metals and low pH in the main stem of Montgomery Creek and its unnamed tributaries. To address this impairment, a Total Maximum Daily Load (TMDL) was prepared by the Susquehanna River Basin Commission (SRBC) for Montgomery Creek and approved by the EPA in 2003. The CMA WTF discharge was not identified as a source of metals in the watershed and was therefore not assigned waste-load allocations (WLAs) for the purposes of the TMDL.

In order to comply with the TMDL at a later issuance/renewal, the Department has established effluent limits for total aluminum, total iron and total manganese at the water quality criteria established in 25 PA Code Chapter 93:

| Parameter | WQBEL | Guidance (mg/l) | WQ Criteria/Proposed Effluent Limit (mg/l) | Regulation |
|---|---|---|---|---|
| Total Aluminum | 25.72 | 4.0 | 0.75 | 25 PA § 93.8c |
| Total Iron | 80.25 | 2.0 | 1.50 | 25 PA § 93.7 |
| Total Manganese | 53.50 | 1.0 | 1.00 | 25 PA §93.7 |

By assigning the water quality criteria as effluent limitations, the discharge cannot be expected to contribute to the impairment.

Anti-Back Sliding

This draft permit does not propose a relaxation in any of the existing effluent limitations.

## 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) (1) | | Concentrations (mg/L) | | | | Minimum (2) Measurement Frequency | Required Sample Type |
| | Average Monthly | Average Weekly | Minimum | Average Monthly | Daily Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | Report Daily Max | XXX | XXX | XXX | XXX | 1/day | Estimate |
| pH (S.U.) | XXX | XXX | 6.0 Inst Min | XXX | XXX | 9.0 | 1/day | Grab |
| TRC | XXX | XXX | XXX | 0.5 | XXX | 1.6 | 1/day | Grab |
| TSS | XXX | XXX | XXX | 30.0 | 60.0 | 75 | 1/month | Grab |
| Total Aluminum | 0.23 | 0.46 Daily Max | XXX | 0.75 | 1.50 | 1.88 | 1/week | Grab |
| Total Iron | 0.47 | 0.94 Daily Max | XXX | 1.50 | 3.00 | 3.75 | 1/week | Grab |
| Total Manganese | 0.31 | 0.62 Daily Max | XXX | 1.00 | 2.00 | 2.5 | 1/week | Grab |

Compliance Sampling Location: 001

Other Comments:

All of the above effluent limitations and monitoring frequencies are the same as in the existing permit, except the mass limits have been adjusted for a design discharge flow of 0.0375 MGD.

General Part C Conditions are proposed in the permit.

It is recommended that the permit be drafted as described above.

TMS PA0228206.pdf StreamStats.pdf