

Application Type Renewal  
Facility Type Industrial  
Major / Minor Minor

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

Application No. PA0229237  
APS ID 975665  
Authorization ID 1241683

**Applicant and Facility Information**

Applicant Name	<u>Clearfield Municipal Authority</u>	Facility Name	<u>Moose Creek Water Treatment Plant</u>
Applicant Address	<u>107 E Market Street</u> <u>Clearfield, PA 16830-2405</u>	Facility Address	<u>One Pennfield Road</u> <u>Clearfield, PA 16830-2405</u>
Applicant Contact	<u>Johnny Williams</u>	Facility Contact	<u></u>
Applicant Phone	<u>(814) 765-9609</u>	Facility Phone	<u></u>
Client ID	<u>87622</u>	Site ID	<u>254417</u>
SIC Code	<u>4941</u>	Municipality	<u>Lawrence Township</u>
SIC Description	<u>Trans. &amp; Utilities - Water Supply</u>	County	<u>Clearfield</u>
Date Application Received	<u>August 23, 2018</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>August 30, 2018</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of existing NPDES permit</u>		

**Summary of Review**

The above permittee has submitted a renewal application for one industrial wastewater discharge from their Moose Creek Water Treatment Plant. The Moose Creek Water Treatment Plant is the source of public potable water supply for the Clearfield area. The source water is Moose Creek Reservoir and a groundwater well.

The discharge is 0.065 MGD of supernatant from a wastewater holding tank. Solids from the wastewater holding tank are pumped to 3 sand bed filters, which also discharge through Outfall 001. The sand beds are utilized approximately twice per quarter. The holding tank receives wastewater primarily from the membrane filter backwash water, along with sludge drying bed filtrate. A full schematic of wastewater flow diagram at the facility can be found in Attachment 1.B.

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
		Chad A. Fabian / Project Manager	July 19, 2019
		Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>.065</u>
Latitude	<u>41° 3' 5.72"</u>	Longitude	<u>-78° 28' 10.15"</u>
Quad Name	<u>Clearfield</u>	Quad Code	<u>4-10.3</u>
Wastewater Description: <u>Washing/Cleaning Wastewater</u>			
Receiving Waters	<u>Moose Creek (CWF)</u>	Stream Code	<u>26609</u>
NHD Com ID	<u>61830095</u>	RMI	<u>2.36</u>
Drainage Area	<u>n/a (reservoir release)</u>	Yield (cfs/mi <sup>2</sup> )	<u>n/a</u>
Q <sub>7-10</sub> Flow (cfs)	<u>0.785</u>	Q <sub>7-10</sub> Basis	<u>Water allocation permit 17-51C</u>
Elevation (ft)	<u>1300</u>	Slope (ft/ft)	<u>0.018</u>
Watershed No.	<u>8-B</u>	Chapter 93 Class.	<u>CWF</u>
Existing Use	<u>CWF</u>	Existing Use Qualifier	<u>n/a</u>
Exceptions to Use	<u>None</u>	Exceptions to Criteria	<u>none</u>
Assessment Status	<u>Attaining use, not impaired</u>		
Cause(s) of Impairment	<u>none</u>		
Source(s) of Impairment	<u>none</u>		
TMDL Status	<u>Final</u>	Name	<u>Moose Creek Watershed TMDL</u>
Nearest Downstream Public Water Supply Intake		Approximately 160 miles downstream on the W. Branch Susquehanna River.	

Changes Since Last Permit Issuance: A reassessment of the stream segment was done in 2016 by SRBC. The reassessment showed that the stream was no longer impaired and it was removed from the impaired streams list. The receiving stream is impaired downstream due to acid mine drainage. However, this discharge has no impact on the TMDL.

Compliance History	
<b>Summary of DMRs:</b>	No effluent violations have been reported in the past 24 months.
<b>Summary of Inspections:</b>	An inspection was performed by Clarissa Alcorn (DEP, Clean Water Program, Water Quality Specialist) on 2/21/2019. A violation was noted due to the facility not performing representative samples. The facility was only taking samples from the wastewater holding tank. The samples did not include sand bed filter wastewater, which combines with the holding tank wastewater in the Outfall 001 discharge line. However, the facility has corrected it sampling by obtaining the sample at the outfall. Other than the sampling issue, no other violations were found. No impact on the stream was noted. Excellent house keeping was observed during the inspection.

**Development of Effluent Limitations**

Outfall No. 001

Design Flow (MGD) 0.065

**Water Quality-Based Limitations**

A “Reasonable Potential Analysis” (Attachment C-Toxics Screening Analysis) determined 5 parameters (aluminum, hexavalent chromium, mercury, selenium, and thallium) to be candidates for limitations. Therefore, modeling for these parameters was performed using the Department’s PENTOXSD water quality model (see attached). These results from the respective model were then input into the reasonable potential spreadsheet to see if any limitations or monitoring should be required. Based on the attached reasonable potential spreadsheet hexavalent chromium and mercury are new parameters that will require monitoring during this permit term.

**Technology-Based Limitations**

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Parameter	Limit (mg/l)	SBC	Federal Regulation	State Regulation
Total Suspended Solids	30	Monthly Average	n/a	n/a
Total Iron	2	Monthly Average	n/a	n/a
Total Manganese	1	Monthly Average	n/a	n/a
Total Aluminum	4	Monthly Average	n/a	n/a
Total Residual Chlorine (TRC)	0.5	Monthly Average	n/a	n/a
pH	6.0-9.0 std units	Minimum-Maximum	n/a	n/a

Comments: The above limitations are the same as the existing limitations and are in accordance with the Department’s Technology-Based Control Requirements for Water Treatment Plants (DEP Guidance Document (392-2183-003). Modeling for TRC was performed only to verify that no water quality limits are required for TRC. See the attached TRC model.

A WQM Model 6.3 for dissolved oxygen, ammonia, or BOD5 was not run since those parameters are not a concern for the nature of this discharge.

**Best Professional Judgement (BPJ) Limitations**

A recommendation of 1/quarter monitoring frequency be implemented for hexavalent chromium and mercury during this permit term.

**Additional Considerations**

In summary, the proposed draft permit will be the same as the existing permit except for the additional monitoring and reporting of hexavalent chromium and mercury.

**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" (362-0400-001), 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> 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	Metered
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	1.0	XXX	1/day	Grab
TSS	XXX	XXX	XXX	30	60	XXX	1/month	Grab
Total Aluminum	XXX	XXX	XXX	4.0	8.0	XXX	1/month	Grab
Total Iron	XXX	XXX	XXX	2.0	4.0	XXX	1/month	Grab
Total Manganese	XXX	XXX	XXX	1.0	2.0	XXX	1/month	Grab
Hexavalent Chromium	XXX	XXX	XXX	Monitor	XXX	XXX	1/quarter	Grab
Total Mercury	XXX	XXX	XXX	Monitor	XXX	XXX	1/quarter	Grab

Compliance Sampling Location: 001

The above effluent limitations are the same as the existing limitations and are in accordance with the Department's Technology-Based Control Requirements for Water Treatment Plants (DEP Guidance Document (392-2183-003)).

It is recommended the permit be drafted as described above.