pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0113301**
Facility Type	**Industrial**	APS ID	**1010568**
Major / Minor	**Minor**	Authorization ID	**1304035**

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

Applicant and Facility Information

Applicant Name	**Mansfield Borough Municipal Authority (MBMA)**	Facility Name	**MBMA Water Filtration Plant**
Applicant Address	14 S Main Street	Facility Address	Shaw Road
	Mansfield, PA 16933		Mansfield, PA 16933
Applicant Contact	Richard Correll	Facility Contact	
Applicant Phone	(570) 971-8450	Facility Phone	
Client ID	83075	Site ID	4169
SIC Code	4941	Municipality	Richmond Township
SIC Description	Trans. & Utilities - Water Supply	County	Tioga
Date Application Received	January 31, 2020	EPA Waived?	Yes
Date Application Accepted	February 6, 2020	If No, Reason	

Purpose of Application: Renewal of Existing NPDES Permit

Summary of Review

The above applicant has submitted a renewal application for the existing discharge of industrial wastewater. The discharge is backwash water from a potable water filtration plant that serves the Borough of Mansfield and portions of Richmond Township. Treatment of the wastewater is provided via two backwash lagoons. The discharge is to Lambs Creek. Sludge from the lagoons is hauled away for disposal. Each lagoon requires solids removal approximately every other year.

Based on the following review, I recommend the permit be drafted and published in the PA Bulletin for the required 30 day public comment period. Unless otherwise noted, all applicable Department Standard Operating Procedures (SOPs) were followed during the review of this application.

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* Chad A. Fabian / Project Manager	October 21, 2020
X		*Nicholas W. Hartranft, P.E.* Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	October 22, 2020

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.0084 (peak monthly average) 0.006 (daily average)
Latitude	41° 49’ 27.10”	Longitude	77° 9’ 0.10”
Quad Name	Crooked Creek	Quad Code	0428
Wastewater Description:	Potable water filtration plant backwash water		
Receiving Waters	Lambs Creek	Stream Code	31320
NHD Com ID	57351517	RMI	3
Drainage Area	2	Yield (cfs/mi^2)	0.01
Q_{7-10} Flow (cfs)	0.02	Q_{7-10} Basis	USGS Streamstats (See attached printout)
Elevation (ft)	1360	Slope (ft/ft)	n/a
Watershed No.	4-A	Chapter 93 Class.	CWF
Existing Use	CWF	Existing Use Qualifier	n/a
Exceptions to Use	none	Exceptions to Criteria	none
Assessment Status	Not Assessed		
Cause(s) of Impairment	n/a		
Source(s) of Impairment	n/a		
TMDL Status	Completed	Name	Tioga River Watershed TMDL (3/22/2002)
Nearest Downstream Public Water Supply Intake	PA/NY Border, approximately 17 miles downstream		

Changes Since Last Permit Issuance: None

Comments: The Tioga River has a TMDL for impairment from metals and pH from acid mine drainage sources. However, the TMDL does not require that a load allocation be made in the stretch of the Tioga River in which this outfall is located. Therefore, the TMDL does not apply to this discharge.

Compliance History	
Summary of DMRs:	The facility utilizes the Department’s eDMR system. In the past 12 months, no effluent violations have occurred. A summary of the results are included in the compliance history table below.
Summary of Inspections:	Inspections were performed on 2/19/2019 (in person) and on 4/16/2020 (via phone). No violations were noted in either inspection. No impact from the discharge was observed in the receiving stream during the 2/19/2020 inspection. The facility has a history of compliance.

Compliance History

DMR Data for Outfall 001 (from September 1, 2019 to August 31, 2020)

Parameter	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19
Flow (MGD) Average Monthly	0.02	0.01	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02
Flow (MGD) Daily Maximum	0.02	0.01	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.03	0.04	0.02
pH (S.U.) Minimum	7.67	7.5	7.6	7.4	7.1	7.6	7.5	7.53	7.6	7.5	7.6	7.6
pH (S.U.) Instantaneous Maximum	7.8	7.62	7.9	7.5	7.5	7.9	8.1	8.07	8.05	7.7	8.2	7.9
TRC (mg/L) Average Monthly	< 0.01	< 0.01	< 0.01	< 0.01	< 0.0001	< 0.01	< 0.001	< 0.01	< 0.01	< 0.01	0.01	0.01
TRC (mg/L) Instantaneous Maximum	< 0.01	< 0.01	< 0.01	< 0.01	< 0.0001	< 0.01	< 0.001	< 0.01	< 0.01	< 0.01	0.01	0.04
TSS (mg/L) Average Monthly	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
TSS (mg/L) Daily Maximum	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Total Aluminum (mg/L) Average Monthly	0.18	0.60	0.26	0.28	0.19	0.88	0.17	0.089	0.14	0.31	0.14	0.16
Total Aluminum (mg/L) Daily Maximum	0.18	0.60	0.26	0.28	0.19	0.88	0.17	0.089	0.14	0.31	0.14	0.16
Total Iron (mg/L) Average Monthly	< 0.070	< 0.07	< 0.070	< 0.070	< 0.070	< 0.070	< 0.070	< 0.070	< 0.07	< 0.07	< 0.07	< 0.07
Total Iron (mg/L) Daily Maximum	< 0.070	< 0.07	< 0.070	< 0.070	< 0.070	< 0.070	< 0.070	< 0.070	< 0.07	< 0.07	< 0.07	< 0.07
Total Manganese (mg/L) Average Monthly	0.007	0.01	0.0076	< 0.0050	0.0050	0.0051	0.005	< 0.0050	0.0058	0.01	0.009	0.0065
Total Manganese (mg/L) Daily Maximum	0.007	0.01	0.0076	< 0.0050	0.0050	0.0051	0.005	< 0.0050	0.0058	0.01	0.009	0.0065

Technology-Based Limitations

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

Parameter	Limit (mg/l)	SBC
pH	6.0-9.0 S.U.	Min – Max
TSS	30	Monthly Ave
TSS	60	Daily Max
Iron	2	Monthly Ave
Iron	4	Daily Max
Aluminum*	1.2	Monthly Ave
Aluminum*	1.9	Daily Max
Manganese	1	Monthly Ave
Manganese	2	Daily Max

The above limitations are in the existing permit. All of the limitations, except for aluminum, are from the *Technology-Based Control Requirements for Water Treatment Plant Wastes*, 362-2183-003, 10/97.

Water Quality-Based Limitations

The Department's PENTOXSD model is a mass-balance water quality analysis model that includes consideration for mixing and other factors to determine recommended water quality-based effluent limits. The model incorporates the water quality criteria of 25 Pa. Code §93. During the previous issuance of the permit, the model was run for all of the expected toxics (metals) in the wastewater. In order to be conservative, the discharge was modeled using the peak monthly average flow (8400 gallons per day). The modeling run showed that the existing limitations are protective of water quality standards. Modeling was not performed per the Department's SOP for renewing NPDES permits, since no changes have occurred to the receiving water or discharge.

The following water quality based limitations are still in effect:

Parameter	Limit (mg/l)	SBC
aluminum	1.2	Monthly Ave.

Comments: The above limitation is an existing limitation.

Additionally, a previous TRC evaluation showed that the existing TRC limitations are protective of water quality standards.

Existing and 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) (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	0.35	XXX	1.1	1/day	Grab
TSS	XXX	XXX	XXX	30.0	60.0	XXX	1/month	8-Hr Composite
Total Aluminum	XXX	XXX	XXX	1.2	1.9	XXX	1/month	8-Hr Composite
Total Iron	XXX	XXX	XXX	2.0	4.0	XXX	1/month	8-Hr Composite
Total Manganese	XXX	XXX	XXX	1.0	2.0	XXX	1/month	8-Hr Composite

Compliance Sampling Location: 001

Other Comments: The proposed effluent limitations and monitoring frequencies are the same as in the existing permit.

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