

Application Type Renewal
Facility Type Industrial
Major / Minor Minor

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

Application No. PA0272710
APS ID 1007647
Authorization ID 1298791

Applicant and Facility Information

Applicant Name	<u>PA DEP NWRO</u>	Facility Name	<u>Presque Isle Chemical</u>
Applicant Address	<u>230 Chestnut Street</u> <u>Meadville, PA 16335</u>	Facility Address	<u>5661 State Route 6N</u> <u>Edinboro, PA 16412</u>
Applicant Contact	<u>Colin Kosinski</u>	Facility Contact	<u>Frederic Coll, AECOM Energy & Construction</u>
Applicant Phone	<u>(814) 332-6837</u>	Facility Phone	<u>(724) 808-1925</u>
Client ID	<u>62505</u>	Site ID	<u>600478</u>
SIC Code	<u>9500</u>	Municipality	<u>Washington Township</u>
SIC Description	<u>Environmental Quality and Housing</u>	County	<u>Erie County</u>
Date Application Received	<u>November 26, 2019</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>December 12, 2019</u>	If No, Reason	<u>-</u>
Purpose of Application	<u>Application for a renewal of an NPDES permit for discharge of treated contaminated groundwater.</u>		

Summary of Review

Act 14 - Proof of Notification was submitted and received.
This facility is not subject to any ELGs.
A Part II Water Quality Management permit is not required at this time.
The applicant should be able to continue to meet the limits of this permit, which will protect the uses of the receiving stream.

I. OTHER REQUIREMENTS:

- A. Right of Way
- B. Solids Handling
- C. NPDES Permit Supersedes WQM Permits
- D. Modification or Revocation for Changes to BAT or BCT

SPECIAL CONDITIONS:

- II. None

There are no open violations in effects associated with the subject Client ID (62505) as of 11/5/2020.

Approve	Deny	Signatures	Date
X		Stephen A. McCauley Stephen A. McCauley, E.I.T. / Environmental Engineering Specialist	11/5/2020
X		Justin C. Dickey Justin C. Dickey, P.E. / Environmental Engineer Manager	November 9, 2020

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.0576
Latitude	41° 52' 48.05"	Longitude	-80° 9' 32.80"
Quad Name	-	Quad Code	-
Wastewater Description: IW Process Effluent without ELG			
Receiving Waters	Unnamed Tributary to the Conneauttee Creek (WWF)	Stream Code	N/A
NHD Com ID	127347694	RMI	N/A
Drainage Area	0.14	Yield (cfs/mi ²)	0.07
Q ₇₋₁₀ Flow (cfs)	0.0098	Q ₇₋₁₀ Basis	calculated
Elevation (ft)	1317	Slope (ft/ft)	0.0191
Watershed No.	16-A	Chapter 93 Class.	WWF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Impaired*		
Cause(s) of Impairment	Pathogens		
Source(s) of Impairment	Source Unknown		
TMDL Status	-	Name	-
Background/Ambient Data		Data Source	
pH (SU)	-		-
Temperature (°F)	-		-
Hardness (mg/L)	-		-
Other:	-		-
Nearest Downstream Public Water Supply Intake	Aqua Pennsylvania, Inc. - Emlenton		
PWS Waters	Allegheny River	Flow at Intake (cfs)	1,376
PWS RMI	90.0	Distance from Outfall (mi)	80.0

* - The discharge is treated contaminated groundwater from an abandoned industrial waste recycling facility (contaminated largely by chlorinated VOCs) and is not expected to contain pathogens.

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.

Narrative: This Fact Sheet details the determination of draft NPDES permit limits for an existing discharge of 0.0576 MGD of treated Industrial Waste from existing groundwater extraction wells in Washington Township, Erie County.

Existing treatment consists of: A mixing tank, an inclined plate clarifier, a holding tank, two air stripper units (in series), a bag filter, two carbon filtration units (in series), and a service/finish tank. Sludge is handled via a settling tank and a sludge press.

Streamflow: French Creek at Meadville, PA (USGS Gage no. 03023100):

Q ₇₋₁₀ :	<u>55.3</u>	cfs	(USGS StreamStats)
Drainage Area:	<u>788</u>	sq. mi.	(USGS StreamStats)
Yieldrate:	<u>0.07</u>	cfs/m	(calculated)

Unnamed Tributary to the Conneauttee Creek @ Outfall 001:

Yieldrate:	<u>0.07</u>	cfs/m	(calculated above)
Drainage Area:	<u>0.14</u>	sq. mi.	(USGS StreamStats)
% of stream allocated:	<u>100%</u>	Basis:	No nearby discharges
Q ₇₋₁₀ :	<u>0.0098</u>	cfs	

2. Wasteflow: Outfall 001

Maximum discharge: 0.0576 MGD = 0.089 cfs

Runoff flow period: 24 hours Basis: Discharges with flow equalization

The calculated stream flow is less than 3 parts to the discharge flow. However, this is an existing discharge that does not add to any stream impairment, and the treatment requirements would not be attainable. Therefore, in accordance with the SOP, no treatment requirements will be required from document number 391-2000-014, titled, "Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers", dated April 12, 2008.

Flow will continue to be monitored as authorized under Chapter 92a.61, and as recommended in the SOP.

3. Parameters:

The following parameters were evaluated: pH and Total Suspended Solids.

a. pH

Between 6.0 and 9.0 at all times

Basis: Application of Chapter 95.2 technology-based limits.

b. Total Suspended Solids (TSS)

Limits of 30 mg/l as a monthly average and 60 as an instantaneous maximum.

Basis: Application of Chapter 92a.48 technology-based limits.

4. Reasonable Potential Analysis:

A Reasonable Potential Analysis was performed in accordance with State practices for Outfall 001 by first using the Toxics Screening Analysis Spreadsheet to determine which parameters should be modeled using the Pentox program. Based on the Toxics Screening Analysis Spreadsheet (see Attachment 1), none of the parameters sampled in the renewal application were required to be modeled for Outfall 001.

Result: No WQBELs are necessary for this renewal.

During the previous renewal process, the discharge was re-evaluated because the original effluent sampling did not use sensitive enough test methods to determine the presence/non-presence of pollutants. A reasonable potential analysis recommended Cadmium monitoring due to the amount reported (<0.5 µg/l) compared to the criterion (0.386 µg/l). However, for this renewal, the maximum application sample reported for Cadmium was 0.00001 µg/l, which is well below the criterion of 0.271 µg/l. In addition, the Toxics Screening Analysis Spreadsheet (see Attachment 1) did not recommend modeling for Cadmium. Based on this new information (Antibacksliding is avoided), the Total Cadmium monitoring will be removed with this renewal.

The maximum application sample reported for Vinyl Chloride was 0.0000018 µg/l, which is well below the criterion of 0.025 µg/l, and the Toxics Screening Analysis Spreadsheet (see Attachment 1) did not recommend modeling for Vinyl Chloride. However, Vinyl Chloride monitoring was included in the previous renewal because it is the major constituent of the groundwater contamination. Therefore, the Vinyl Chloride monitoring will be retained with this renewal.

5. NO₂-NO₃, Fluoride, Phenolics, Sulfates, Chlorides, and TDS:

Nearest Downstream potable water supply (PWS): Aqua Pennsylvania, Inc. - Emlenton

Distance downstream from the point of discharge: 80.0 miles (approximate)

- No limits necessary
- Limits needed

Basis: Significant dilution is available. While none of the parameters were sampled in the renewal application, the downstream PWS to the discharge flow ratio is greater than 15,000:1.

6. Approved Chemical Additives:

Outfall Number	Chemical Name	Purpose	Maximum Usage Rate	Units
001	Disodium Phosphate Anhydrous	Calcium scale inhibitor	0.76	Gallons per month

7. Attachment List:

Attachment 1 - Toxics Screening Analysis Spreadsheet

If viewing this electronically, please refer to the following PDF to view the above Attachment:



Adobe Acrobat Document

Compliance History

DMR Data for Outfall 001 (from October 1, 2019 to September 30, 2020)

Parameter	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19
Flow (MGD) Average Monthly	0.00725	0.00736	0.00763	0.01077	0.01620	0.01500	0.01796	0.01902	0.01979	0.01825	0.01607	0.01157
pH (S.U.) Minimum	7.90	7.93	7.65	7.93	7.69	7.80	7.88	7.74	7.70	7.52	7.85	6.90
pH (S.U.) Maximum	8.07	8.44	7.67	8.09	8.17	7.89	7.90	8.07	8.02	8.09	7.86	7.76
TSS (mg/L) Average Monthly	< 5	< 5	6.5	< 5	< 5	< 4.0	< 4.5	5.5	< 5	< 5	< 5	< 5
TSS (mg/L) Instantaneous Maximum	< 5	< 5	8	< 5	< 5	< 4.0	< 4.5	6	< 5	< 5	< 5	< 5
Total Cadmium (mg/L) Average Monthly	< 0.0010	< 0.001	< 0.0001	< 0.001	< 0.001	< 0.003	< 0.0065	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Vinyl Chloride (mg/L) Average Monthly	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005

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	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	2/month	Grab
TSS	XXX	XXX	XXX	30.0	XXX	60.0	2/month	Grab
Vinyl Chloride	XXX	XXX	XXX	Report	XXX	XXX	2/month	Grab

Compliance Sampling Location: Outfall 001.

Flow and Vinyl Chloride are monitor only based on Chapter 92a.61. The limits for pH are technology-based on Chapter 95.2. The limits for Total Suspended Solids are technology-based on Chapter 92a.48.