pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

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

Application Type	**Renewal**	Application No.	**PA0014575**
Facility Type	**Industrial**	APS ID	**1004463**
Major / Minor	**Minor**	Authorization ID	**1293305**

Applicant and Facility Information

Applicant Name	**Jersey Shore Area Joint Water Authority Lycoming County**	Facility Name	**Jersey Shore Area Joint Water Authority**
Applicant Address	PO Box 5046	Facility Address	577 Water Company Road
	Jersey Shore, PA 17740-5046		Cogan Station, PA 17728
Applicant Contact	Judith Cohick, Manager	Facility Contact	Judith Cohick, Manager
Applicant Phone	(570) 398-1443	Facility Phone	(570) 398-1443
Client ID	74625	Site ID	259523
SIC Code	4941	Municipality	Anthony Township
SIC Description	Trans. & Utilities - Water Supply	County	Lycoming
Date Application Received	October 18, 2019	EPA Waived?	Yes
Date Application Accepted	October 31, 2019	If No, Reason	
Purpose of Application	Renewal of a NPDES Permit		

Summary of Review

The subject facility is a water filtration plant with a filter backwash discharge.

A map of the discharge location is attached.

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
✓		Keith C. Allison / Project Manager	February 18, 2020
		Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.05
Latitude	41º 19' 24.14"	Longitude	-77º 11' 25.54"
Quad Name	Salladasburg, PA	Quad Code	0828
Wastewater Description:	Filter plant backwash		
Receiving Waters	Larrys Creek (EV (existing use))	Stream Code	21014
NHD Com ID	66913801	RMI	9.7
Drainage Area	29.3 mi^2	Yield (cfs/mi^2)	0.0662
Q_{7-10} Flow (cfs)	1.94	Q_{7-10} Basis	USGS StreaStats
Elevation (ft)	870	Slope (ft/ft)	0.0121
Watershed No.	10-A	Chapter 93 Class.	HQ-CWF
Existing Use	EV (EXCEPTIONAL VALUE)	Existing Use Qualifier	RBP - Antidegradation
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Attaining Use(s)		
Nearest Downstream Public Water Supply Intake	PA-American Water Company @ Milton, PA		
PWS Waters	West Branch Susquehanna River	Flow at Intake (cfs)	8,500,000
PWS RMI	10.8	Distance from Outfall (mi)	Approx. 50

Changes Since Last Permit Issuance: None. The above stream and drainage characteristics were determined for the previous review and remain adequate.

Other Comments: This discharge predates the Exceptional Value existing use of Larrys Creek.

No downstream water supply is expected to be affected by this discharge with the limitations and monitoring proposed.

Treatment Facility Summary

Treatment Facility Name: Jersey Shore Area Joint Water Authority

WQM Permit No.	Issuance Date
4170201	7/21/70 – Original permit for lagoon
	10/4/84 – Transfer from Jersey Shore Water Company

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Industrial	Physical (IW)	Sedimentation	No Disinfection	0.05

Changes Since Last Permit Issuance: None

Comments: Treatment of the backwash discharge is provided by a settling lagoon. Per the original WQM Permit application, the lagoon is 0.446 million gallons.

Compliance History

DMR Data for Outfall 001 (from January 1, 2019 to December 31, 2019)

Parameter	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19
Flow (MGD) Average Monthly	0.014	0	0.021	0.017	0	0	0.01	0.020	0.02	0.025	0.029	0.022
Flow (MGD) Daily Maximum	0.021	0	0.045	0.018	0	0	0.02	0.038	0.02	0.045	0.044	0.046
pH (S.U.) Minimum	6.71		6.80	6.91			6.9	6.76	7	6.8	6.8	6
pH (S.U.) Instantaneous Maximum	7.23		7.08	6.80			7.02	7.0	7.06	7.09	7.4	7.6
TRC (mg/L) Instantaneous Maximum	< 0.01		< 0.02	< 0.02			< 0.02	< 0.02	0.02	0.02	0.02	0.02
TSS (mg/L) Average Monthly	< 5		< 5	< 5			< 5	< 5	< 5	< 4.0	< 4.0	< 5.00
TSS (mg/L) Daily Maximum	< 5		< 5	< 5			< 5	< 5	< 5	< 4.0	< 4.0	< 5.00
Total Aluminum (mg/L) Average Monthly	< 0.117		< 0.456	< 0.456			< 0.716	< 0.327	0.324	0.211	0.309	0.292
Total Aluminum (mg/L) Daily Maximum	< 0.117		< 0.456	< 0.456			< 0.716	< 0.327	0.324	0.211	0.309	0.292
Total Iron (mg/L) Average Monthly	< 0.0200		< 0.493	< 0.0200			< 0.0200	< 0.0200	< 0.0200	< 0.070	< 0.07	< 0.05
Total Iron (mg/L) Daily Maximum	< 0.0200		< 0.493	< 0.0200			< 0.0200	< 0.0200	< 0.0200	< 0.070	< 0.07	< 0.05
Total Manganese (mg/L) Average Monthly	< 0.014		< 0.011	< 0.038			< 0.017	< 0.011	0.011	0.0122	0.023	< 0.01
Total Manganese (mg/L) Daily Maximum	< 0.014		< 0.011	< 0.038			< 0.017	< 0.011	0.011	0.0122	0.023	< 0.01

Compliance History, Cont'd	
Summary of Inspections:	The facility has been inspected periodically by the Department over the past permit term. The most recent inspection was on June 11, 2019, by Brandon Shihinski, WQS. No inspections over the past permit term have identified any violations.
Other Comments:	A WMS query found no open violations in eFACTS for Jersey Shore Area Joint Water Authority

Existing Effluent Limitations and Monitoring Requirements

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	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
TRC	XXX	XXX	XXX	XXX	XXX	0.05	1/day	Grab
TSS	XXX	XXX	XXX	30	60	75	1/month	Composite
Total Aluminum	XXX	XXX	XXX	4	8	10	1/month	Composite
Total Iron	XXX	XXX	XXX	2	4	5	1/month	Composite
Total Manganese	XXX	XXX	XXX	1	2	2.5	1/month	Composite

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.05
Latitude 41º 19' 24.04" **Longitude** -77º 11' 25.32"
Wastewater Description: Effluent

Technology-Based Limitations

The following technology-based limitations apply, determined by the Department to be Best Practicable Technology (BPT) for Water Treatment Plant discharges:

Parameter	Limit (mg/l)	SBC
pH	6.0-9.0 S.U.	Min – Max
TSS	30	Monthly Ave
	60	Daily Max
Iron	2	Monthly Ave
	4	Daily Max
Aluminum	4	Monthly Ave
	8	Daily Max
Manganese	1	Monthly Ave
	2	Daily Max
Total Residual Chlorine (TRC)	0.5	Monthly Ave
	1.0	Daily Max

Comments: The above limitations are from the Department's guidance for water treatment plant wastewaters, *Technology-Based Control Requirements for Water Treatment Plant Wastes*, 362-2183-003, 10/97. The limits are all included in the existing NPDES Permit PA0014575 except for a more stringent TRC limit instituted due to the discharge to a special protection watershed as explained below.

Water Quality-Based Limitations

A "Reasonable Potential Analysis" determined that no additional toxic parameters were candidates for more stringent limitations (see Attachment B). Therefore, no water quality modeling was performed.

Antidegradation

The facility has an existing TRC maximum limit of 0.05 mg/l to protect the existing special protection designation of the stream. Because the intent of the 0.05 mg/L limit is to demonstrate that no detectable TRC is present in the discharge, the limit will be reduced to 0.02 mg/L consistent with standard chlorine meter performance as seen in the DMR data listed on page 3. The limit is achievable per the DMR data.

The change in the stream existing use from HQ to EV will not result in the imposition of more stringent requirements because the stream attained the exceptional value use with this discharge is place.

Best Professional Judgment (BPJ) Limitations

Comments: None needed beyond the existing technology and water quality-based limitations noted above.

Anti-Backsliding

No limitations were made less stringent consistent with the anti-backsliding provisions of the Clean Water Act and 40 CFR 122.44(l).

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	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
TRC	XXX	XXX	XXX	XXX	XXX	0.02	1/day	Grab
TSS	XXX	XXX	XXX	30.0	60.0	75	1/month	Composite
Total Aluminum	XXX	XXX	XXX	4.0	8.0	10	1/month	Composite
Total Iron	XXX	XXX	XXX	2.0	4.0	5	1/month	Composite
Total Manganese	XXX	XXX	XXX	1.0	2.0	2.5	1/month	Composite

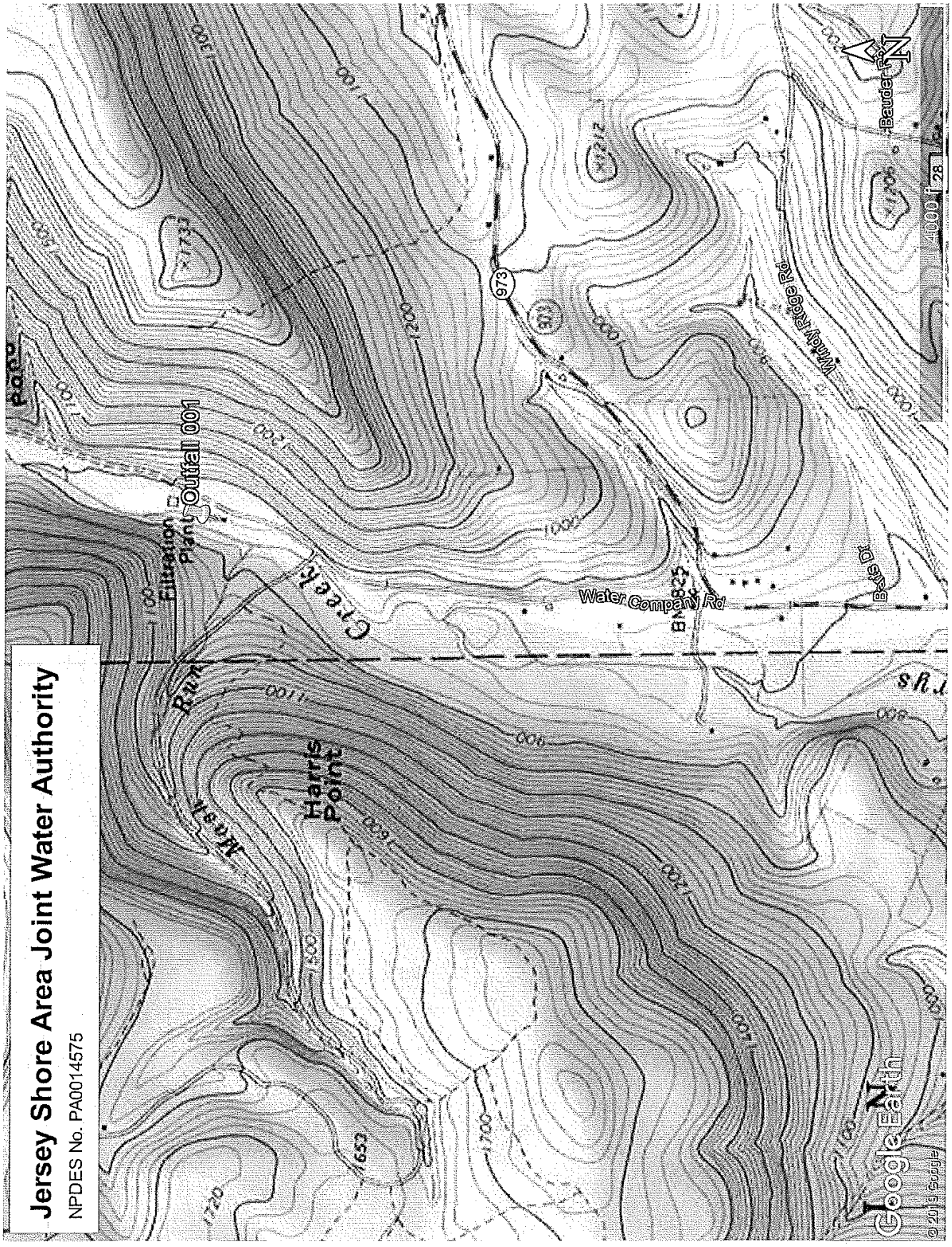
Compliance Sampling Location: Outfall 001

Other Comments: The proposed limitations and monitoring are unchanged from the existing permit except for the more stringent TRC IMAX as noted above. In addition, an extra decimal point has been included for the Average monthly and Daily Maximum limits for TSS, Aluminum, Iron, and Manganese for consistency with the requirements of WMS/ICIS.

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☐	PENTOXSD for Windows Model (see Attachment)
☐	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☒	Toxics Screening Analysis Spreadsheet (see Attachment **B**)
☒	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☒	Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
☒	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
☒	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
☐	Pennsylvania CSO Policy, 385-2000-011, 9/08.
☒	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 391-2000-002, 4/97.
☐	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
☒	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 391-2000-007, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
☒	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
☒	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 10/97.
☐	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 391-2000-019, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 3/99.
☐	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 391-2000-022, 3/1999.
☒	Design Stream Flows, 391-2000-023, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 391-2000-024, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
☒	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☒	SOP: Establishing Effluent Limitations for Individual Industrial Permits
☐	Other:

Attachments:

A. Discharge Location Map
B. Reasonable Potential Analysis a/k/a Toxics Screening Analysis


Jersey Shore Area Joint Water Authority
NPDES No. PA0014575
Pond
Filtration Plant Outfall 001
Creek
Run
North
Harris Point
Water Company Rd
Bay Dr
Windy Ridge Rd
Bunder Rd
973
Google Earth

TOXICS SCREENING ANALYSIS
WATER QUALITY POLLUTANTS OF CONCERN
VERSION 2.7

Facility: Jersey Shore Area Water Auth.
Analysis Hardness (mg/L): 100
Stream Flow, Q_{7-10} (cfs): 1.94

NPDES Permit No.: PA0014575
Discharge Flow (MGD): 0.05

Outfall: 001
Analysis pH (SU): 7

	Parameter	Maximum Concentration in Application or DMRs (µg/L)		Most Stringent Criterion (µg/L)	Candidate for PENTOXSD Modeling?	Most Stringent WQBEL (µg/L)	Screening Recommendation
Group 1	Total Dissolved Solids		51000	500000	No		
	Chloride		9870	250000	No		
	Bromide		60	N/A	No		
	Sulfate		15700	250000	No		
	Fluoride		52	2000	No		
Group 2	Total Aluminum		464	750	No		
	Total Antimony	<	1	5.6	No (Value < QL)		
	Total Arsenic		0.72	10	No		
	Total Barium		29	2400	No		
	Total Beryllium	<	0.3	N/A	No		
	Total Boron	<	92	1600	No (Value < QL)		
	Total Cadmium	<	0.2	0.271	No (Value < QL)		
	Total Chromium	<	0.4	N/A	No		
	Hexavalent Chromium	<	5	10.4	No		
	Total Cobalt	<	0.7	19	No (Value < QL)		
	Total Copper	<	2	9.3	No (Value < QL)		
	Total Cyanide	<	10	N/A	No		
	Total Iron		9.06	1500	No		
	Dissolved Iron		3	300	No		
	Total Lead	<	1	3.2	No (Value < QL)		
	Total Manganese		22	1000	No		
	Total Mercury	<	0.04	0.05	No (Value < QL)		
	Total Molybdenum	<	2	N/A	No		
	Total Nickel	<	1	52.2	No (Value < QL)		
	Total Phenols (Phenolics)			5			
	Total Selenium	<	2	5.0	No (Value < QL)		
	Total Silver	<	0.5	3.8	No		
	Total Thallium	<	0.5	0.24	No (Value < QL)		
	Total Zinc	<	1	119.8	No (Value < QL)		
Group 3	Acrolein	<		3			
	Acrylamide	<		0.07			
	Acrylonitrile	<		0.051			
	Benzene	<		1.2			
	Bromoform	<		4.3			
	Carbon Tetrachloride	<		0.23			
	Chlorobenzene	<		130			
	Chlorodibromomethane	<		0.4			
	Chloroethane	<		N/A			
	2-Chloroethyl Vinyl Ether	<		3500			
	Chloroform	<		5.7			
	Dichlorobromomethane	<		0.55			
	1,1-Dichloroethane	<		N/A			
	1,2-Dichloroethane	<		0.38			
	1,1-Dichloroethylene	<		33			
	1,2-Dichloropropane	<		2200			
	1,3-Dichloropropylene	<		0.34			
	Ethylbenzene	<		530			
	Methyl Bromide	<		47			
	Methyl Chloride	<		5500			
	Methylene Chloride	<		4.6			
	1,1,2,2-Tetrachloroethane	<		0.17			
	Tetrachloroethylene	<		0.69			
	Toluene	<		330			
	1,2-trans-Dichloroethylene	<		140			
	1,1,1-Trichloroethane	<		610			
	1,1,2-Trichloroethane	<		0.59			
	Trichloroethylene	<		2.5			
	Vinyl Chloride	<		0.025			
Group 4	2-Chlorophenol	<		81			
	2,4-Dichlorophenol	<		77			
	2,4-Dimethylphenol	<		130			
	4,6-Dinitro-o-Cresol	<		13			
	2,4-Dinitrophenol	<		69			
	2-Nitrophenol	<		1600			
	4-Nitrophenol	<		470			
	p-Chloro-m-Cresol	<		30			
	Pentachlorophenol	<		0.27			
	Phenol	<		10400			
	2,4,6-Trichlorophenol	<		1.4			

Toxics Screening Analysis Spreadsheet (v 2.7).xlsm, 2/6/2020