Pennsylvania Department of Environmental Protection

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0083704**
Facility Type	**Industrial**	APS ID	**326746**
Major / Minor	**Minor**	Authorization ID	**1471501**

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

Applicant and Facility Information

Applicant Name	**Shippensburg Borough Authority**	Facility Name	**Gunter Valley Water Treatment Plant**
Applicant Address	PO Box 129 111 N Fayette Street	Facility Address	12835 Forge Hill Road
	Shippensburg, PA 17257-0129		Orrstown, PA 17244-9714
Applicant Contact	Kevin Plasterer	Facility Contact	Mark Ryder
Applicant Phone	(717) 532-2147	Facility Phone	(717) 532-2147
Client ID	85913	Site ID	248347
SIC Code	4941	Municipality	Lurgan Township
SIC Description	Trans. & Utilities - Water Supply	County	Franklin
Date Application Received	January 31, 2024	EPA Waived?	Yes
Date Application Accepted	February 14, 2024	If No, Reason	
Purpose of Application	NPDES Renewal.		

Summary of Review

Shippensburg Borough Authority (SBA), has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of an NPDES permit for discharge of treated industrial waste generated from the facility known as Gunter Valley Water Treatment Plant. The permit was last reissued on July 18, 2019 and became effective on August 1, 2019. The permit expired on July 31, 2024 but the terms and conditions have been administratively extended since that time.

Based on the review, it is recommended that the permit be drafted.

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		Jinsu Kim Jinsu Kim / Environmental Engineering Specialist	August 27, 2025
x		Maria D. Bebenek for Daniel W. Martin, P.E. / Environmental Engineer Manager	September 18, 2025
x		Maria D. Bebenek Maria D. Bebenek, P.E. / Program Manager	September 18, 2025

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.1
Latitude	40º 7' 13.07"	Longitude	-77º 41' 3.88"
Quad Name	Topozone	Quad Code	1824
Wastewater Description:	IW Process Effluent without ELG		
Receiving Waters	Trout Run	Stream Code	10815
NHD Com ID	56409077	RMI	0.04
Drainage Area	8.24 sq.mi.	Yield (cfs/mi^2)	0.138
Q_{7-10} Flow (cfs)	1.15 (see comments below)	Q_{7-10} Basis	See comments below
Elevation (ft)		Slope (ft/ft)	
Watershed No.	7-B	Chapter 93 Class.	HQ-CWF, MF
Existing Use	None	Existing Use Qualifier	None
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Carlisle Borough		
PWS Waters	Conodoguinet Creek	Flow at Intake (cfs)	
PWS RMI	35.95	Distance from Outfall (mi)	48.4

Drainage Area
The discharge is to Trout Run at RMI 0.04. A drainage area upstream of the point of discharge is 8.24 sq.mi. according to the USGS Stream Stats.

Stream Flow
The fact sheet for the last permit renewal shows the USGS gauging station no. 01570000 on the Conodoguinet Creek was used to calculate the Q7-10 at the point of discharge. Considering the distance to the point of discharge, stream flow observed at this gauging station is likely interfered by point source discharges along the Conodoguinet Creek. The discharge is located downstream of the dam. In such cases, a minimum water release requirement is typically taken into consideration to estimate the Q7-10. The water allocation permit no. WA-297B issued in 1995 requires a continuous flow of 650,000 gallons per day or 1.01 cfs be maintained at all times in Trout Run immediately below the dam. A project was proposed in 2016 by the Pennsylvania Department of Conservation and Natural Resources to remove the dam for the purpose of eliminating a threat to public safety and restoring approximately 3,500 feet of stream channel to a free-flowing condition (i.e., permit no. D28-102EA). As a result, DEP has decided to estimate the low flows based on a sum of the above-referenced minimum water release of 1.01 cfs and the difference of the watershed delineated at upstream of the dam and the discharge point (i.e., 1.01 cfs + (0.632 cfs – 0.492 cfs) = 1.15 cfs). Once the removal of the dam is completed, a Q7-10 at the point of discharge produced by USGS Stream Stats will be used.

Trout Run
The receiving stream, Trout Run, is not currently impaired and the discharge is located within the stream segment listed as attaining uses according to the 2024 DEP integrated water quality report. Under 25 Pa Code §93.9o, Trout Run is designated as HQ-CWF, MF from Water Supply Dam to Mouth. All permit requirements will be developed to ensure that the water quality of this receiving stream will be maintained and protected in accordance with 25 Pa Code §93.4a(c).

Public Water Supply Intake
The nearest downstream public water supply intake is Carlisle Borough located on the Conodoguinet Creek, approximately 48.4 miles from the point of discharge. Considering the distance and nature, the discharge is not expected to significantly impact the water supply intake.

Treatment Facility Summary				
Treatment Facility Name: Gunter Valley Water Treatment Plant				
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Industrial	Primary	Sedimentation	No Disinfection	N/A
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
N/A	N/A	Not Overloaded	N/A	N/A

SBA owns and operates a water treatment plant known as Gunter Valley Water Treatment Plant located at 12835 Forge Hill Road, Orrstown, PA 17244. The water system serves areas of Shippensburg Borough, Orrstown Borough, Shippensburg Township, Southampton Cumberland Township and Southampton Franklin Township and a portion of Letterkenny Township. Source water is Letterkenny Reservoir and three wells. According to the application, filter backwash water, clarifier sediment, and plant service water from the water treatment plant are discharged into a concrete sedimentation basin prior to discharge into Trout Run. Any settled solids in the sedimentation basin are periodically dredged out and transferred to an offsite wastewater treatment facility for disposal. As shown below, a number of chemicals are currently used on a daily basis at this facility:

Chemical Products	Purpose	Maximum Usage Rate (lbs/day)
Aluminum Sulfate	Coagulant	131
Chlorine	Disinfection/Chemical Oxidation	44
Fluorosilicic Acid	Fluoride Additive	8.1
Polymer – Zetag 8818	Coagulant Aid	5.6
Sodium Hydroxide	pH Adjustment	161
Sodium Zinc Metaphosphate	Corrosion Inhibitor	12
Sodium Permanganate	Chemical Oxidation	54.2

Considering the purpose of using these chemicals, most of these chemicals are used for treatment purpose(s); therefore, are not considered “chemical additives” defined in DEP’s SOP no. BPNPSM-PMT030. Sodium Zinc Metaphosphate used for corrosion inhibitor is not used for treatment purpose and is likely be presented in effluent; therefore, this will be considered a chemical additive.

Compliance History	
Summary of DMRs:	A summary of 12-month DMR data is presented on the next page.
Summary of Inspections:	02/14/2023: DEP conducted a routine inspection and noted no significant violations were identified at the time of inspection.
Other Comments:	The facility had a number of permit violations since the last permit reissuance. These violations are listed on page 6 of this fact sheet. DEP’s database shows that there is no open violation associated with this permittee or facility.

Effluent Date

DMR Data for Outfall 001 (from August 1, 2023 to July 31, 2024)

Parameter	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23
Flow (MGD) Average Monthly	0.076	0.071	0.069	0.069	0.076	0.079	0.080	0.076	0.073	0.077	0.072	0.072
Flow (MGD) Daily Maximum	0.078	0.074	0.071	0.076	0.079	0.098	0.128	0.084	0.123	0.080	0.079	0.135
pH (S.U.) Daily Minimum	6.9	6.8	6.8	6.6	6.5	6.5	6.9	7.0	7.1	7.1	7.1	7.0
pH (S.U.) Daily Maximum	7.0	6.9	6.9	6.9	6.8	6.9	7.1	7.4	7.5	7.6	7.3	7.2
TRC (mg/L) Average Monthly	0.07	0.04	0.05	0.04	0.04	0.04	0.10	0.06	0.05	0.08	0.04	0.04
TRC (mg/L) Instantaneous Maximum	0.16	0.05	0.06	0.07	0.05	0.05	0.20	0.10	0.08	0.11	0.04	0.06
TSS (lbs/day) Average Monthly	1.1	0.60	0.72	1.6	0.63	4.3	2.0	0.95	2.4	4.0	1.8	0.75
TSS (lbs/day) Daily Maximum	1.6	0.62	0.89	2.2	0.65	8.6	5.3	1.4	5.6	4.7	3.0	1.3
TSS (mg/L) Average Monthly	1.75	1.0	1.25	2.75	1.00	6.5	3.0	1.50	4.00	6.25	3.00	1.25
TSS (mg/L) Daily Maximum	2.50	1.0	1.50	3.50	1.00	10.5	5.0	2.00	5.50	7.0	4.50	1.50
Total Aluminum (lbs/day) Average Monthly	0.14	0.16	0.09	0.18	0.15	0.03	0.19	0.13	0.23	0.13	0.13	0.14
Total Aluminum (lbs/day) Daily Maximum	0.15	0.17	0.10	0.20	0.16	0.04	0.34	0.15	0.41	0.13	0.16	0.33
Total Aluminum (mg/L) Average Monthly	0.22	0.27	0.15	0.31	0.23	0.47	0.29	0.20	0.38	0.20	0.22	0.23
Total Aluminum (mg/L) Daily Maximum	0.23	0.28	0.17	0.32	0.24	0.49	0.32	0.21	0.40	0.20	0.25	0.29
Total Iron (lbs/day) Average Monthly	0.10	0.04	0.06	0.05	0.05	0.07	0.07	0.13	0.12	0.15	0.12	0.12
Total Iron (lbs/day) Daily Maximum	0.13	0.06	0.06	0.06	0.07	0.08	0.11	0.14	0.21	0.18	0.13	0.23
Total Iron (mg/L) Average Monthly	< 0.15	0.06	< 0.10	< 0.08	< 0.08	< 0.10	< 0.10	< 0.20	< 0.20	0.24	< 0.20	< 0.20

Parameter	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23
Total Iron (mg/L) Daily Maximum	< 0.20	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.20	< 0.20	0.27	< 0.20	< 0.20
Total Manganese (lbs/day) Average Monthly	0.06	0.06	0.03	0.02	0.02	0.01	0.01	0.02	0.04	0.06	0.34	0.18
Total Manganese (lbs/day) Daily Maximum	0.07	0.06	0.05	0.03	0.02	0.02	0.02	0.02	0.08	0.06	0.38	0.35
Total Manganese (mg/L) Average Monthly	0.09	0.10	0.06	0.04	0.03	0.02	0.02	0.03	0.06	0.09	0.58	0.30
Total Manganese (mg/L) Daily Maximum	0.10	0.10	0.08	0.04	0.03	0.02	0.02	0.04	0.08	0.09	0.58	0.31

Compliance History

Date	Description	Parameter	Results	Limits	Units	SBC
7/1/2019	Sample type not in accordance with permit	Flow				
8/1/2019	Sample type not in accordance with permit	Flow				
9/1/2019	Sample type not in accordance with permit	Flow				
1/1/2020	Violation of permit condition	Aluminum, Total	4.2	4	mg/L	Average Monthly
1/1/2020	Violation of permit condition	Aluminum, Total	8.53	8	mg/L	Daily Maximum
2/1/2021	Violation of permit condition	Aluminum, Total	13.51	8	mg/L	Daily Maximum
2/1/2021	Violation of permit condition	Aluminum, Total	4.5	4	mg/L	Average Monthly
12/1/2021	Late DMR Submission					

Existing Effluent Limits and Monitoring Requirements

The table below summarizes effluent limits and monitoring requirements specified in the existing permit:

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/day	Calculation
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
Total Suspended Solids	Report	Report	XXX	30.0	60.0	75	2/month	24-Hr Composite
Aluminum, Total	Report	Report	XXX	4.0	8.0	10	2/month	24-Hr Composite
Iron, Total	Report	Report	XXX	2.0	3.0	5	2/month	24-Hr Composite
Manganese, Total	Report	Report	XXX	1.0	1.5	2.5	2/month	24-Hr Composite

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.1
Latitude 40º 7' 14.00" **Longitude** -77º 41' 4.00"
Wastewater Description: IW Process Effluent without ELG

Technology-Based Limitations

A majority of industrial wastewaters generated from this water treatment plant is filter backwash. DEP's technical guidance no. 362-2183-003 addresses technology-based control requirements along with the following recommended Best Practicable Control Technology Currently Available (BPT) effluent requirements for WTP sludge and filter backwash:

Parameter	Limit (mg/l)	SBC
Suspended Solids	30	Average Monthly
	60	Daily Maximum
Iron, Total	2.0	Average Monthly
	4.0	Daily Maximum
Aluminum, Total	4.0	Average Monthly
	8.0	Daily Maximum
Manganese, Total	1.0	Average Monthly
	2.0	Daily Maximum
Flow	Monitor	Average Monthly
pH	6.0	Minimum
	9.0	Maximum
Total Residual Chlorine	0.5	Average Monthly
	1.0	Daily Maximum

Water Quality-Based Limitations

DEP's SOP no. BPNPSM-PMT-032 recommends the average monthly flow as a design flow in water quality modeling unless a different flow is determined to be more representative of site-specific conditions. The volume of effluent discharged from facilities such as water treatment plants is heavily depended upon the quality of source water as more backwashing is needed to maintain acceptable filter performance if the intake water quality is poor. As such, maximum flow is often used to account for the worst-case scenario (i.e., highest discharge events). The last permit renewal was based on the flow of 0.0851 MGD which is the maximum flow reported over the past three years. A review of past 12-month DMR data shows that there have been a number of events that the discharge over 0.1 MGD occurred. Given that the discharge has been normally in 0.08 MGD with some events over 0.12 MGD, DEP has determined to use 0.1 MGD to develop permit requirements for this renewal. It is noteworthy that a different value can be used for the upcoming permit renewal, based on the discharge volume reported in the DMRs as the effluent volume from the water treatment plant varies.

WQM 7.0

CBOD5 and NH3-N are not pollutants of concern for the water treatment waste as the discharge of these pollutants is not resulting from the water treatment process. Therefore, WQM 7.0 modeling is not necessary and permit requirements for these pollutants are not recommended.

Total Residual Chlorine

Chlorine is used for source water disinfection. It is one of post-chemicals injected between filters and clearwell. However, because water from clearwell is used as backwash water supply and plant service water, residual chlorine is expected to be present in the effluent discharged via Outfall 001. Accordingly, Total Residual Chlorine (TRC) effluent concentrations must be monitored and regulated per 25 Pa Code §92a.48(b). DEP's TRC CALC worksheet was utilized to determine if existing TBELs are still appropriate under the flow of 0.0851 MGD. The worksheet showed that the existing TBEL is still adequate.

Toxics

Maximum concentrations reported on these sample results were entered into DEP's Toxics Screening Analysis worksheet to evaluate toxics pollutants of concern. The worksheet indicated that effluent limits for Total Zinc and monitoring requirement for Total Cadmium. However, these parameters were both non-detected in the effluent. The reporting level was higher than DEP's target QL which caused TMS to identify them as parameters of concern. Based on the raw water sample collected and submitted to DEP on August 12, the reporting level has been adjusted and TMS shows no parameters

of concern. Total Aluminum, Total Iron and Manganese are existing pollutants of concern recognized by DEP's technical guidance no. 362-2183-003. A reasonable potential analysis was therefore performed for these pollutants to determine if existing TBELs are appropriate. TMS shows that existing requirements are still appropriate. No change is therefore recommended.

Additional Considerations

Flow Monitoring
Flow monitoring will remain in the permit and is required by 40 CFR § 122.44(i)(1)(ii). A continuous flow measurement required by the existing permit can typically be performed through the use of a flow measurement equipment. DEP has been however notified by the permittee that it is not practical to have an effluent flow measurement equipment due to low flow/intermittent flow. Currently the facility has been reporting the effluent volume calculated based on a sum of measured continuous flow from on-line analyzers, the design capacity of the flocculator and the difference of the flow volume measured through a raw water flow meter and flow volume measured through a finished water flow meter. This approach has been used since the startup of the water treatment plant.

Chesapeake Bay TMDL
Since this is a non-significant industrial wastewater facility, it is not necessary to provide phosphorus (TP) and nitrogen (TN) cap loads. The DEP's Supplement to Phase III Watershed Implementation Plan (WIP) indicates that monitoring and reporting of TN and TP are necessary for non-significant IW facilities throughout the permit term anytime the facility has the potential to introduce a net TN or TP increase to the load contained within the intake water used in processing. Considering the nature of discharge and amount of chemical products being used at the facility, no significant amount of nutrients is expected to be generated from the water treatment process. Accordingly, no TP and TN monitoring is necessary.

Mass Loading Effluent Limitations
The current permit requires no monitoring of mass loadings for those pollutants that have technology-based concentration limits. DEP's technical guidance no. 362-0400-001 recommends mass loading effluent limits for those pollutants that have water quality-based limits and monitoring requirements for those that have technology-based concentration limits. Accordingly, mass loading monitoring requirements are recommended for Total Suspended Solids, Total Iron and Total Manganese and mass loading effluent limits are recommended for Total Aluminum. These limits are based on the flow of 0.1 MGD.

Anti-Degradation requirements
The effluent limits for this discharge have been developed to ensure the existing in-stream uses and the level of water quality necessary to protect the existing uses are maintained and protected.

Anti-Backsliding Requirements
Unless stated otherwise in this fact sheet, all proposed effluent limits have developed for this permit renewal are at least as stringent as effluent limits developed for the previous permit renewal.

Outfall 002
Outfall 002 (lat: 40°07'15", long: -77°41'04") receives stormwater drained from the site (18,000 sq.ft. with 90% impervious area). No monitoring is currently needed but Part C standard stormwater condition will be included in the permit.

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	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/day	Calculation
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
TSS	Report	Report	XXX	30.0	60.0	75	2/month	24-Hr Composite
Total Aluminum	Report	Report	XXX	4.0	8.0	10	2/month	24-Hr Composite
Total Iron	Report	Report	XXX	2.0	3.0	5	2/month	24-Hr Composite
Total Manganese	Report	Report	XXX	1.0	1.5	2.5	2/month	24-Hr Composite

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☐	Toxics Management Spreadsheet (see Attachment)
☐	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☐	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
☐	Pennsylvania CSO Policy, 386-2000-002, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
☐	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
☐	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 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, 386-2000-020, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 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, 386-2000-010, 3/1999.
☐	Design Stream Flows, 386-2000-003, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☐	SOP:
☐	Other:

Low-flow just downstream of the dam

StreamStats Report

Region ID: PA
Workspace ID: PA20240923170205127000
Clicked Point (Latitude, Longitude): 40.13745, -77.67143
Time: 2024-09-23 13:02:39 -0400

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	0	percent
DRNAREA	Area that drains to a point on a stream	6.38	square miles
PRECIP	Mean Annual Precipitation	41	inches
ROCKDEP	Depth to rock	4.6	feet
STRDEN	Stream Density -- total length of streams divided by drainage area	1.08	miles per square mile

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	6.38	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	41	inches	35	50.4
STRDEN	Stream Density	1.08	miles per square mile	0.51	3.1
ROCKDEP	Depth to Rock	4.6	feet	3.32	5.65
CARBON	Percent Carbonate	0	percent	0	99

Low-Flow Statistics Flow Report [Low Flow Region 2]

PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error, PC: Percent Correct, RMSE: Root Mean Squared Error, PseudoR^2: Pseudo R Squared (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	1.02	ft^3/s	38	38
30 Day 2 Year Low Flow	1.36	ft^3/s	33	33

Statistic	Value	Unit	SE	ASEp
7 Day 10 Year Low Flow	0.492	ft^3/s	51	51
30 Day 10 Year Low Flow	0.651	ft^3/s	46	46
90 Day 10 Year Low Flow	1.04	ft^3/s	36	36

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

Application Version: 4.24.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

Low-flow @outfall 001

StreamStats Report

Region ID: PA
Workspace ID: PA20240923170452261000
Clicked Point (Latitude, Longitude): 40.12035, -77.68439
Time: 2024-09-23 13:05:17 -0400

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	0	percent
DRNAREA	Area that drains to a point on a stream	8.24	square miles
PRECIP	Mean Annual Precipitation	41	inches
ROCKDEP	Depth to rock	4.6	feet
STRDEN	Stream Density -- total length of streams divided by drainage area	1.13	miles per square mile

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	8.24	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	41	inches	35	50.4
STRDEN	Stream Density	1.13	miles per square mile	0.51	3.1
ROCKDEP	Depth to Rock	4.6	feet	3.32	5.65
CARBON	Percent Carbonate	0	percent	0	99

Low-Flow Statistics Flow Report [Low Flow Region 2]

PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error, PC: Percent Correct, RMSE: Root Mean Squared Error, PseudoR^2: Pseudo R Squared (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	1.3	ft^3/s	38	38
30 Day 2 Year Low Flow	1.73	ft^3/s	33	33

Statistic	Value	Unit	SE	ASEp
7 Day 10 Year Low Flow	0.632	ft^3/s	51	51
30 Day 10 Year Low Flow	0.835	ft^3/s	46	46
90 Day 10 Year Low Flow	1.33	ft^3/s	36	36

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

Application Version: 4.24.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

Toxics Management Spreadsheet
Version 1.4, May 2023

Discharge Information

Instructions | Discharge | Stream

Facility: **Gunter Valley Water Treatment Plant** NPDES Permit No.: **PA0083704** Outfall No.: **001**

Evaluation Type **Major Sewage / Industrial Waste** Wastewater Description: **Filter Backwash**

Discharge Characteristics								
Design Flow (MGD)*	Hardness (mg/l)*	pH (SU)*	Partial Mix Factors (PMFs)				Complete Mix Times (min)	
			AFC	CFC	THH	CRL	Q_{7-10}	Q_h
0.1	100	7						

					0 if left blank		*0.5 if left blank*		*0 if left blank*			*1 if left blank*	
	Discharge Pollutant	Units	Max Discharge Conc		Trib Conc	Stream Conc	Daily CV	Hourly CV	Stream CV	Fate Coeff	FOS	Criteria Mod	Chem Transl
Group 1	Total Dissolved Solids (PWS)	mg/L											
	Chloride (PWS)	mg/L											
	Bromide	mg/L											
	Sulfate (PWS)	mg/L											
	Fluoride (PWS)	mg/L											
Group 2	Total Aluminum	µg/L		344									
	Total Antimony	µg/L	<	1									
	Total Arsenic	µg/L	<	2.5									
	Total Barium	µg/L		31.7									
	Total Beryllium	µg/L	<	2.5									
	Total Boron	µg/L	<	100									
	Total Cadmium	µg/L	<	1									
	Total Chromium (III)	µg/L	<	2.5									
	Hexavalent Chromium	µg/L		0.9									
	Total Cobalt	µg/L	<	2									
	Total Copper	µg/L	<	12.5									
	Free Cyanide	µg/L											
	Total Cyanide	µg/L	<	6									
	Dissolved Iron	µg/L	<	20									
	Total Iron	µg/L		76.5									
	Total Lead	µg/L	<	0.5									
	Total Manganese	µg/L		111									
	Total Mercury	µg/L		0.024									
	Total Nickel	µg/L	<	2.5									
	Total Phenols (Phenolics) (PWS)	µg/L		438									
	Total Selenium	µg/L	<	2.5									
	Total Silver	µg/L	<	2.5									
	Total Thallium	µg/L	<	0.5									
	Total Zinc	µg/L	<	12.5									
	Total Molybdenum	µg/L	<	0.5									
	Acrolein	µg/L	<										
	Acrylamide	µg/L	<										
	Acrylonitrile	µg/L	<										
	Benzene	µg/L	<										
	Bromoform	µg/L	<										
	Carbon Tetrachloride	µg/L	<										

Group 3	Chlorobenzene	µg/L												
	Chlorodibromomethane	µg/L	<											
	Chloroethane	µg/L	<											
	2-Chloroethyl Vinyl Ether	µg/L	<											
	Chloroform	µg/L	<											
	Dichlorobromomethane	µg/L	<											
	1,1-Dichloroethane	µg/L	<											
	1,2-Dichloroethane	µg/L	<											
	1,1-Dichloroethylene	µg/L	<											
	1,2-Dichloropropane	µg/L	<											
	1,3-Dichloropropylene	µg/L	<											
	1,4-Dioxane	µg/L	<											
	Ethylbenzene	µg/L	<											
	Methyl Bromide	µg/L	<											
	Methyl Chloride	µg/L	<											
	Methylene Chloride	µg/L	<											
	1,1,2,2-Tetrachloroethane	µg/L	<											
	Tetrachloroethylene	µg/L	<											
	Toluene	µg/L	<											
	1,2-trans-Dichloroethylene	µg/L	<											
	1,1,1-Trichloroethane	µg/L	<											
	1,1,2-Trichloroethane	µg/L	<											
	Trichloroethylene	µg/L	<											
	Vinyl Chloride	µg/L	<											
Group 4	2-Chlorophenol	µg/L	<											
	2,4-Dichlorophenol	µg/L	<											
	2,4-Dimethylphenol	µg/L	<											
	4,6-Dinitro-o-Cresol	µg/L	<											
	2,4-Dinitrophenol	µg/L	<											
	2-Nitrophenol	µg/L	<											
	4-Nitrophenol	µg/L	<											
	p-Chloro-m-Cresol	µg/L	<											
	Pentachlorophenol	µg/L	<											
	Phenol	µg/L	<											
	2,4,6-Trichlorophenol	µg/L	<											
Group 5	Acenaphthene	µg/L	<											
	Acenaphthylene	µg/L	<											
	Anthracene	µg/L	<											
	Benzidine	µg/L	<											
	Benzo(a)Anthracene	µg/L	<											
	Benzo(a)Pyrene	µg/L	<											
	3,4-Benzofluoranthene	µg/L	<											
	Benzo(ghi)Perylene	µg/L	<											
	Benzo(k)Fluoranthene	µg/L	<											
	Bis(2-Chloroethoxy)Methane	µg/L	<											
	Bis(2-Chloroethyl)Ether	µg/L	<											
	Bis(2-Chloroisopropyl)Ether	µg/L	<											
	Bis(2-Ethylhexyl)Phthalate	µg/L	<											
	4-Bromophenyl Phenyl Ether	µg/L	<											
	Butyl Benzyl Phthalate	µg/L	<											
	2-Chloronaphthalene	µg/L	<											
	4-Chlorophenyl Phenyl Ether	µg/L	<											
	Chrysene	µg/L	<											
	Dibenzo(a,h)Anthrancene	µg/L	<											
	1,2-Dichlorobenzene	µg/L	<											
	1,3-Dichlorobenzene	µg/L	<											
	1,4-Dichlorobenzene	µg/L	<											
	3,3-Dichlorobenzidine	µg/L	<											
	Diethyl Phthalate	µg/L	<											
	Dimethyl Phthalate	µg/L	<											
	Di-n-Butyl Phthalate	µg/L	<											
	2,4-Dinitrotoluene	µg/L	<											
	2,6-Dinitrotoluene	µg/L	<											
	Di-n-Octyl Phthalate	µg/L	<											

	1,2-Diphenylhydrazine	µg/L	<										
	Fluoranthene	µg/L	<										
	Fluorene	µg/L	<										
	Hexachlorobenzene	µg/L	<										
	Hexachlorobutadiene	µg/L	<										
	Hexachlorocyclopentadiene	µg/L	<										
	Hexachloroethane	µg/L	<										
	Indeno(1,2,3-cd)Pyrene	µg/L	<										
	Isophorone	µg/L	<										
	Naphthalene	µg/L	<										
	Nitrobenzene	µg/L	<										
	n-Nitrosodimethylamine	µg/L	<										
	n-Nitrosodi-n-Propylamine	µg/L	<										
	n-Nitrosodiphenylamine	µg/L	<										
	Phenanthrene	µg/L	<										
	Pyrene	µg/L	<										
	1,2,4-Trichlorobenzene	µg/L	<										
Group 6	Aldrin	µg/L	<										
	alpha-BHC	µg/L	<										
	beta-BHC	µg/L	<										
	gamma-BHC	µg/L	<										
	delta BHC	µg/L	<										
	Chlordane	µg/L	<										
	4,4-DDT	µg/L	<										
	4,4-DDE	µg/L	<										
	4,4-DDD	µg/L	<										
	Dieldrin	µg/L	<										
	alpha-Endosulfan	µg/L	<										
	beta-Endosulfan	µg/L	<										
	Endosulfan Sulfate	µg/L	<										
	Endrin	µg/L	<										
	Endrin Aldehyde	µg/L	<										
	Heptachlor	µg/L	<										
	Heptachlor Epoxide	µg/L	<										
	PCB-1016	µg/L	<										
	PCB-1221	µg/L	<										
	PCB-1232	µg/L	<										
	PCB-1242	µg/L	<										
	PCB-1248	µg/L	<										
	PCB-1254	µg/L	<										
	PCB-1260	µg/L	<										
	PCBs, Total	µg/L	<										
	Toxaphene	µg/L	<										
	2,3,7,8-TCDD	ng/L	<										
Group 7	Gross Alpha	pCi/L											
	Total Beta	pCi/L	<										
	Radium 226/228	pCi/L	<										
	Total Strontium	µg/L	<										
	Total Uranium	µg/L	<										
	Osmotic Pressure	mOs/kg											

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

Toxics Management Spreadsheet
Version 1.4, May 2023

Stream / Surface Water Information

Gunter Valley Water Treatment Plant, NPDES Permit No. PA0083704, Outfall 001

Instructions | Discharge | *Stream*

Receiving Surface Water Name: **Trout Run**

No. Reaches to Model: **1**

(●) Statewide Criteria
( ) Great Lakes Criteria
( ) ORSANCO Criteria

Location	Stream Code*	RMI*	Elevation (ft)*	DA (mi^2)*	Slope (ft/ft)	PWS Withdrawal (MGD)	Apply Fish Criteria*
Point of Discharge	010815	0.04	805	8.24			Yes
End of Reach 1	010815	0	801	8.3			Yes

$Q_{7\text{-}10}$

Location	RMI	LFY (cfs/mi^2)*	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness*	pH*	Hardness	pH
Point of Discharge	0.04	1.149										100	7		
End of Reach 1	0	1.15													

Q_h

Location	RMI	LFY (cfs/mi^2)	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness	pH	Hardness	pH
Point of Discharge	0.04														
End of Reach 1	0														

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Toxics Management Spreadsheet
Version 1.4, May 2023

Model Results

Gunter Valley Water Treatment Plant, NPDES Permit No. PA0083704, Outfall 001

Instructions | *Results* | RETURN TO INPUTS | SAVE AS PDF | PRINT | (•) All | ( ) Inputs | ( ) Results | ( ) Limits

☐ ***Hydrodynamics***

☑ ***Wasteload Allocations***

☑ ***AFC*** CCT (min): 6.714 PMF: 1 Analysis Hardness (mg/l): 100 Analysis pH: 7.00

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Aluminum	0	0		0	750	750	46,651	
Total Antimony	0	0		0	1,100	1,100	68,421	
Total Arsenic	0	0		0	340	340	21,148	Chem Translator of 1 applied
Total Barium	0	0		0	21,000	21,000	1,306,216	
Total Boron	0	0		0	8,100	8,100	503,826	
Total Cadmium	0	0		0	2.014	2.13	133	Chem Translator of 0.944 applied
Total Chromium (III)	0	0		0	569.763	1,803	112,151	Chem Translator of 0.316 applied
Hexavalent Chromium	0	0		0	16	16.3	1,013	Chem Translator of 0.982 applied
Total Cobalt	0	0		0	95	95.0	5,909	
Total Copper	0	0		0	13.439	14.0	871	Chem Translator of 0.96 applied
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	64.581	81.6	5,078	Chem Translator of 0.791 applied
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	1.400	1.65	102	Chem Translator of 0.85 applied
Total Nickel	0	0		0	468.236	469	29,183	Chem Translator of 0.998 applied
Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A	
Total Selenium	0	0		0	N/A	N/A	N/A	Chem Translator of 0.922 applied
Total Silver	0	0		0	3.217	3.78	235	Chem Translator of 0.85 applied
Total Thallium	0	0		0	65	65.0	4,043	
Total Zinc	0	0		0	117.180	120	7,453	Chem Translator of 0.978 applied

☑ ***CFC*** CCT (min): 10.062 PMF: 1 Analysis Hardness (mg/l): 100 Analysis pH: 7.00

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Aluminum	0	0		0	N/A	N/A	N/A	

Total Antimony	0	0		0	220	220	13,684	
Total Arsenic	0	0		0	150	150	9,330	Chem Translator of 1 applied
Total Barium	0	0		0	4,100	4,100	255,023	
Total Boron	0	0		0	1,600	1,600	99,521	
Total Cadmium	0	0		0	0.246	0.27	16.8	Chem Translator of 0.909 applied
Total Chromium (III)	0	0		0	74.115	86.2	5,360	Chem Translator of 0.86 applied
Hexavalent Chromium	0	0		0	10	10.4	647	Chem Translator of 0.962 applied
Total Cobalt	0	0		0	19	19.0	1,182	
Total Copper	0	0		0	8.956	9.33	580	Chem Translator of 0.96 applied
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	1,500	1,500	93,301	WQC = 30 day average; PMF = 1
Total Lead	0	0		0	2.517	3.18	198	Chem Translator of 0.791 applied
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	0.770	0.91	56.3	Chem Translator of 0.85 applied
Total Nickel	0	0		0	52.007	52.2	3,245	Chem Translator of 0.997 applied
Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A	
Total Selenium	0	0		0	4.600	4.99	310	Chem Translator of 0.922 applied
Total Silver	0	0		0	N/A	N/A	N/A	Chem Translator of 1 applied
Total Thallium	0	0		0	13	13.0	809	
Total Zinc	0	0		0	118.139	120	7,453	Chem Translator of 0.986 applied

☑ ***THH*** CCT (min): 10.062 PMF: 1 Analysis Hardness (mg/l): N/A Analysis pH: N/A

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	5.6	5.6	348	
Total Arsenic	0	0		0	10	10.0	622	
Total Barium	0	0		0	2,400	2,400	149,282	
Total Boron	0	0		0	3,100	3,100	192,822	
Total Cadmium	0	0		0	N/A	N/A	N/A	
Total Chromium (III)	0	0		0	N/A	N/A	N/A	
Hexavalent Chromium	0	0		0	N/A	N/A	N/A	
Total Cobalt	0	0		0	N/A	N/A	N/A	
Total Copper	0	0		0	N/A	N/A	N/A	
Dissolved Iron	0	0		0	300	300	18,660	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	N/A	N/A	N/A	
Total Manganese	0	0		0	1,000	1,000	62,201	
Total Mercury	0	0		0	0.050	0.05	3.11	
Total Nickel	0	0		0	610	610	37,942	
Total Phenols (Phenolics) (PWS)	0	0		0	5	5.0	N/A	
Total Selenium	0	0		0	N/A	N/A	N/A	
Total Silver	0	0		0	N/A	N/A	N/A	
Total Thallium	0	0		0	0.24	0.24	14.9	
Total Zinc	0	0		0	N/A	N/A	N/A	

☑ ***CRL*** CCT (min): 3.345 PMF: 1 Analysis Hardness (mg/l): N/A Analysis pH: N/A

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	N/A	N/A	N/A	
Total Arsenic	0	0		0	N/A	N/A	N/A	
Total Barium	0	0		0	N/A	N/A	N/A	
Total Boron	0	0		0	N/A	N/A	N/A	
Total Cadmium	0	0		0	N/A	N/A	N/A	
Total Chromium (III)	0	0		0	N/A	N/A	N/A	
Hexavalent Chromium	0	0		0	N/A	N/A	N/A	
Total Cobalt	0	0		0	N/A	N/A	N/A	
Total Copper	0	0		0	N/A	N/A	N/A	
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	N/A	N/A	N/A	
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	N/A	N/A	N/A	
Total Nickel	0	0		0	N/A	N/A	N/A	
Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A	
Total Selenium	0	0		0	N/A	N/A	N/A	
Total Silver	0	0		0	N/A	N/A	N/A	
Total Thallium	0	0		0	N/A	N/A	N/A	
Total Zinc	0	0		0	N/A	N/A	N/A	

☑ ***Recommended WQBELs & Monitoring Requirements***

No. Samples/Month: 4

Pollutants	*Mass Limits*		*Concentration Limits*				Governing WQBEL	WQBEL Basis	Comments
	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units			

☑ ***Other Pollutants without Limits or Monitoring***

The following pollutants do not require effluent limits or monitoring based on water quality because reasonable potential to exceed water quality criteria was not determined and the discharge concentration was less than thresholds for monitoring, or the pollutant was not detected and a sufficiently sensitive analytical method was used (e.g., <= Target QL).

Pollutants	Governing WQBEL	Units	Comments
Total Aluminum	29,901	µg/L	Discharge Conc ≤ 10% WQBEL
Total Antimony	N/A	N/A	Discharge Conc < TQL
Total Arsenic	N/A	N/A	Discharge Conc < TQL
Total Barium	149,282	µg/L	Discharge Conc ≤ 10% WQBEL

Total Beryllium	N/A	N/A	No WQS
Total Boron	N/A	N/A	Discharge Conc < TQL
Total Cadmium	16.8	µg/L	Discharge Conc ≤ 10% WQBEL
Total Chromium (III)	N/A	N/A	Discharge Conc < TQL
Hexavalent Chromium	647	µg/L	Discharge Conc ≤ 10% WQBEL
Total Cobalt	1,182	µg/L	Discharge Conc ≤ 10% WQBEL
Total Copper	558	µg/L	Discharge Conc ≤ 10% WQBEL
Total Cyanide	N/A	N/A	No WQS
Dissolved Iron	18,660	µg/L	Discharge Conc < TQL
Total Iron	93,301	µg/L	Discharge Conc ≤ 10% WQBEL
Total Lead	198	µg/L	Discharge Conc < TQL
Total Manganese	62,201	µg/L	Discharge Conc ≤ 10% WQBEL
Total Mercury	3.11	µg/L	Discharge Conc ≤ 10% WQBEL
Total Nickel	3,245	µg/L	Discharge Conc < TQL
Total Phenols (Phenolics) (PWS)		µg/L	PWS Not Applicable
Total Selenium	310	µg/L	Discharge Conc < TQL
Total Silver	151	µg/L	Discharge Conc ≤ 10% WQBEL
Total Thallium	14.9	µg/L	Discharge Conc < TQL
Total Zinc	4,777	µg/L	Discharge Conc ≤ 10% WQBEL
Total Molybdenum	N/A	N/A	No WQS

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