Pennsylvania Department of Environmental Protection

SOUTHWEST REGIONAL OFFICE
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0021768**
Facility Type	**Sewage**	APS ID	**602736**
Major / Minor	**Major**	Authorization ID	**1373120**

NPDES PERMIT FACT SHEET ADDENDUM

Applicant and Facility Information

Applicant Name	**Municipal Authority of the Borough of Somerset**	Facility Name	**Somerset Borough STP**
Applicant Address	347 West Union Street	Facility Address	1043 South Center Avenue
	Somerset, PA 15501-1543		Somerset, PA 15501
Applicant Contact	Jessica J. Sizemore	Facility Contact	William Moon
Applicant Phone	(814) 443-2661	Facility Phone	(814) 443-2661
Client ID	64334	Site ID	244435
SIC Code	4952	Municipality	Somerset Borough
SIC Description	Trans. & Utilities - Sewerage Systems	County	Somerset
Date Published in PA Bulletin	Saturday, October 21, 2023	EPA Waived?	No
Comment Period End Date	Monday, November 20, 2023	If No, Reason	

Purpose of Application: Application for a renewal of an NPDES permit for discharge of treated Sewage

Internal Review and Recommendations

The Draft Permit Notification was published in the PA Bulletin on Saturday, April 5, 2025, and the Comment Period End Date is Monday, May 5, 2025.

On April 16, 2025, US EPA Region III made the following statement:

"According to our Memorandum of Agreement, the Environmental Protection Agency (EPA) Region III has received the draft National Pollutant Discharge Elimination System (NPDES) permit for:

Permittee name: Municipal Authority of the Borough of Somerset
Facility name: Somerset Borough STP
NPDES Number: PA0021768
EPA Received: 10/4/2023
30-day response due date: 11/3/2023

This is a major permit that discharges to the East Branch Coxes Creek and is affected by the Coxes Creek Watershed AMD TMDL. EPA has chosen to perform a limited review of the draft permit based on the wasteload allocation (WLA) requirements of the approved TMDL, pretreatment program requirements, whole effluent toxicity requirements, and the compliance schedules for the toxic pollutants and total residual chlorine. EPA has completed its review and offers the following comment(s):

1.) Part C of the draft permit did not include the pretreatment-specific language necessary to ensure adequate implementation of the pretreatment program. The existing permit included this language, and my pretreatment staff have not received a request

Approve	Return	Deny	Signatures	Date
X			William C. Mitchell, E.I.T. / Project Manager	May 7, 2025
X			Mahbuba Iasmin, Ph.D., P.E. / Environmental Engineering Manager	May 12, 2025

Internal Review and Recommendations

for termination of the approved pretreatment program for Somerset; therefore, this STP is still considered an approved pretreatment program, and the NPDES permit must include pretreatment program implementation language in Part C of said permit. Attached to this email is the pretreatment language which should be added to Part C of the permit. Please also include pretreatment-specific language on the factsheet to describe Somerset Borough STP's pretreatment program.

2.) Page 54 of the factsheet includes an attachment of the WET analysis spreadsheet for the chronic Ceriodaphnia survival endpoint results. All the tests show only 3 replicates for each concentration, where EPA's "method 1002.0 Daphnid, Ceriodaphnia dubia, survival and reproduction test; chronic toxicity" (2002, 4th edition) clarifies that one of the acceptability criteria for this test is that every concentration should have at minimum 10 replicates. The use of 3 replicates instead of 10 makes these tests unacceptable (see table 3 on page 164 of Method 1002). Moreover, page 4-3 of EPA's "Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)" (2000) indicates tests that do not meet the minimum test acceptability criteria are invalid and should be repeated with newly collected samples. We recommend that PADEP require accelerated chronic WET testing for the Ceriodaphnia dubia species to obtain 4 tests for each endpoint by the end of the first year of the permit cycle so that PADEP can evaluate RP for WET (40 CFR 122.44(d)(1)(ii)) and determine whether WET limits would be required in the permit via a permit amendment.

3.) Page 11 of the factsheet indicates that Part C of the draft permit has compliance schedules of 3 years for free cyanide, dissolved iron, acrolein, dichlorobromomethane, and chloroform. The factsheet should include a brief narrative to explain how PADEP determined that a compliance schedule is appropriate for those pollutants.

Moreover, on page 31 of the NPDES permit application, the analysis result table for pollutant group 2 lists the average concentration of dissolved iron as 72.5 ug/L and the maximum concentration as 100 ug/L. These values are lower than the WQBEL of 357 ug/L. The maximum discharge concentration for dissolved iron listed on the TMS model (page 36 of the factsheet), however, is 1720 ug/L, which is significantly larger than the values on the application. What is the source of the maximum concentration listed on the TMS spreadsheet for dissolved iron?"

The following changes have been made to the draft permit as a result of the statement above:

- Addition of Part C.II, POTW Pretreatment Program Implementation
- Revised Part C.V, Whole Effluent Toxicity, language consistent with 40 CFR 122.21(j)(5)(iv). Annual WET testing is required in the permit. Errors with past WET tests is consider a violation of the permit and the Authority will work with Operations to ensure future test comply with the permit requirements. If testing protocol is not followed, the forthcoming COA will address the need for additional testing. RP will be re-evaluated next permit renewal cycle.
- In a letter dated April 1, 2024 (Attachment 1), The Authority states that it will not be able to comply with free cyanide, dichlorobromomethane, and chloroform until a new STP is designed and built under the Phase II project associated with its CAP, and soon to be COA. The Phase II work has a proposed completion date of November 29, 2031. Effluent limits will take effect at the beginning of the 59th month from PED and any effluent limit violations will be addressed in the COA.
- Revised sampling for Acrolein met the Department's TQL, No RP. The WQBEL has been removed from Part A & C of the permit.
- Dissolved iron has been removed from Part A.I.A, Part A.I.B & Part C.IV, and was moved to Part A.I.C, which will be effective upon permit issuance. Application data indicates that they can comply with the WQBEL upon permit issuance.
- The dissolved iron maximum discharge concentration, used in the TMS, was taken from the 2023 Pre-Draft Survey resampling event (Attachment 2).

Internal Review and Recommendations

On November 16, 2023, the Authority's Engineer, The EADS Group, provided the following comments:

"On behalf of the Applicant/Permittee, we are providing the following comments related to the draft publication of NPDES No. PA0021768.

1. Acrolein

   a. Additional samples of Acrolein were taken in October and November of 2023 and sent to Geochemical Testing (certified laboratory) for analysis. In samples previously submitted, Geochemical Testing tested to a reporting limit of 5.0 µg/L which was above the target QL set by the Department. In the most recent samples (Oct. & Nov. 2023), samples were tested to a detection limit of 2.0 µg/L.

   b. All samples were analyzed to the detection limit and all test reports indicated a result of 2.00 µg/L with a note of "U" which indicates "the analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit."

   c. Based on the results there is no indication that Acrolein is present in the waste stream and there are no known potential sources of Acrolein which could discharge this pollutant to the POTW. Acrolein does not appear to exist in this system so, testing for this pollutant is unwarranted. We recommend removing Acrolein entirely from the NDPES permit.

   d. The laboratory reports and chain of custody forms are attached as **Exhibit A**.

2. Total Residual Chlorine (TRC)

   a. Corrective Action Plan – STP Upgrades

   b. Chloroform and dichlorobromomethane are byproducts of chlorine disinfection and are directly tied to TRC. The POTW is currently subject to a Hydraulic Overload Corrective Action Plan (CAP). The Department approved the CAP in October of 2020. MABS is in design of Phase 1 of the CAP which focuses on collection system improvements.

   c. Phase 2 includes upgrades to the WWTP which conceptually include UV disinfection. Therefore, reasonable opportunity for chloroform and dichlorobromomethane to be present will be eliminated. Phase 2 is likely to occur between 2026 and 2028.

   d. Proposed limits for dichlorobromomethane and chloroform

   e. We request removal of both chloroform and dichlorobromomethane in the upcoming NPDES permit term. Removal of the limit is justified because the WWTP is planning steps to eliminate the pollutant source. Imposing the limit now as a means to accelerate advancement towards elimination of chlorine disinfection is impractical. The Department has approved a schedule which includes WWTP upgrades with a scope that includes UV disinfection. The approved CAP schedule would not be consistent with the draft NPDES schedule. We request the Department evaluate the NPDES and CAP schedules to arrive at a consistent compliance and implementation schedule.

   f. Alternatively, if the Department believes monitoring of chloroform and dichlorobromethane is essential to the protection of water quality during the upcoming NPDES term, we request a "Report" limit and consideration of adding the quantitative limit in the next permit cycle to ensure compliance. MABS will be following the CAP schedule. MABS will be unable to plan, design, permit, fund, and construct a UV disinfection system (or alternative) within the next NPDES permit term to gain compliance if simultaneously attempting to adhere to the CAP compliance schedule and scope.

3. Conclusions and Recommendations

   a. Removing the testing requirement for Acrolein - there is no detectible amount of acrolein present in any of the additional samples. There is no reasonable cause for continued testing of Acrolein.

   b. Removal or "Report" limits for dichlorobromomethane and chloroform - MABS intends to incorporate changes to their STP in Phase 2 of the CAP schedule. The plan includes UV disinfection. We request the NDPES permit accommodate the schedule of CAP activities. The schedule was approved by the Department in October 2020."

Internal Review and Recommendations

The Authority has stated that they cannot comply with TRC, dichlorobromomethane, and chloroform until UV is installed under Phase II work of the Department approved CAP. The Phase II work (STP Upgrades) has a proposed completion date of November 29, 2031, which is greater than 5 years. In accordance with § 92a.51(a) WQBELs for TRC, dichlorobromomethane, and chloroform will take effect on the beginning of the 59th month from the permit effective date. The final NPDES Permit will be attached to a forthcoming COA, which will manage long term compliance with WQBELs, and any effluent limit violations that may occur until Phase II STP work is completed.

§ 92a.51. Schedules of compliance states the following:

(a) With respect to an existing discharge that is not in compliance with the water quality standards and effluent limitations or standards in § 92a.44 or § 92a.12 (relating to establishing limitations, standards, and other permit conditions; and treatment requirements), the applicant shall be required in the permit to take specific steps to remedy a violation of the standards and limitations in accordance with a legally applicable schedule of compliance, in the shortest, reasonable period of time, the period to be consistent with the Federal Act. Except as otherwise set forth in this subsection, a schedule of compliance specified in the permit must require compliance with final enforceable effluent limitations as soon as practicable, but in no case longer than 5 years, unless a court of competent jurisdiction issues an order allowing a longer time for compliance. Compliance schedules granted to CSO dischargers may exceed 5 years but may not exceed the period of implementation specified in an approved long-term control plan (LTCP).

The following changes have been made to the draft permit as a result of the comments above:

- Acrolein was removed from Part A.I.A & Part A.I.B. An updated TMS is attached, No RP (Attachment 3)
- Part A.I.A.1 had the date revised to state Permit Effective Date through End of 58th Month
- Part A.I.B.1 had the date revised to state Beginning of 59th Month through Permit Expiration Date
- Part C.IV, Water Quality-Based Effluent Limitation for Toxic Pollutants, was revised as followed: the final WQBEL effective date was updated to state the beginning of the 59th Month, acrolein and dissolved iron was removed, and the compliance schedule was revised to follow the Department Approved CAP/COA.
- Revisions to Part C.VI, Requirements for Total Residual Chlorine (TRC)

Due to the changes to the permit conditions, the Department has decided to redraft the permit. Draft permit issuance is recommended.

Internal Review and Recommendations

The following changes have been made to Fact Sheet, Development of Effluent Limitations:

Water Quality-Based Limitations

A "Reasonable Potential Analysis" (Attachment 3 - TMS Version 1.4) determined the following parameters were candidates for limitations: Total Aluminum, Total Boron, Hexavalent Chromium, Total Cobalt, Total Copper, Free Cyanide, Dissolved Iron, Total Iron, Total Lead, Total Manganese, Total Zinc, Chlorodibromomethane, Chloroform, Dichlorobromomethane, 1,1,2-Trichloroethane.

The following limitations were determined through water quality modeling:

Parameter	Limit (mg/l)	SBC	Model
Ammonia-Nitrogen Nov 1 – Apr 30	4.9	Average Monthly	WQM 7.0 Version 1.1
Ammonia-Nitrogen May 1 – Oct 31	2.2	Average Monthly	WQM 7.0 Version 1.1
Dissolved Oxygen	6.0	Inst Minimum	WQM 7.0 Version 1.1
TRC	0.03	Average Monthly	TRC_CALC
Chromium, Hexavalent (ug/L)	12.4	Average Monthly	TMS Version 1.4
Copper, Total (ug/L)	18.4	Average Monthly	TMS Version 1.4
Cyanide, Free (ug/L)	4.76	Average Monthly	TMS Version 1.4
Iron, Dissolved (ug/L)	357.0	Average Monthly	TMS Version 1.4
Iron, Total	1.78	Average Monthly	TMS Version 1.4
Chloroform (ug/L)	6.79	Average Monthly	TMS Version 1.4
Dichlorobromomethane (ug/L)	2.39	Average Monthly	TMS Version 1.4
1,1,2-Trichloroethane (ug/L)	1.38	Average Monthly	TMS Version 1.4

Comments: Due to anti-backsliding, the summer period Ammonia-Nitrogen limitation of 2.0 mg/L (Average Monthly Concentration) will again be imposed from the previous permit.

DMR data indicates that the Authority cannot comply with revised more restrictive TRC WQBELs. Part C.VI (Titled "Requirements for TRC) has been added to the permit. The Authority will have 59 months to comply with the final effluent limitation. During the interim period the existing TRC limit of 0.38 mg/L (Average Monthly Concentration) will be imposed.

Part C.IV. (Titled "WQBELs for Toxic Pollutants) has been added to the permit. The Authority has the opportunity to collect site-specific data and conduct a TRE. The Authority will have 59 months years to complete the required studies, submit a Final WQBEL Compliance Report, and other Action Items before having to comply with Final Permit Limits for Free Cyanide, Dichlorobromomethane, and Chloroform.

Application data indicates that the Authority can comply with WQBELs for Hexavalent Chromium, Total Copper, Dissolved Iron, Total Iron, and 1,1,2-Trichloroethane upon permit issuance.

The TMS Model Results recommended Monitoring be established for Total Aluminum, Total Boron, Total Cobalt, Total Lead, Total Manganese, Total Zinc, and Chlorodibromomethane, as the discharge concentration of those parameters is greater than 10 % of the governing WQBELs (no RP). Part A.I.C requires 1/month sampling for these pollutants.

Per- and Polyfluoroalkyl Substances (PFAS)

In February 2024, DEP implemented a new monitoring initiative for PFAS consistent with an EPA memorandum that provides guidance to states for addressing PFAS discharges. PFAS are a family of thousands of synthetic organic chemicals that contain a chain of strong carbon-fluorine bonds. Many PFAS are highly stable, water- and oil-resistant, and exhibit other properties that make them useful in a variety of consumer products and industrial processes. PFAS are resistant to biodegradation, photooxidation, direct photolysis, and hydrolysis and do not readily degrade naturally; thus, many PFAS accumulate over time. According to the United States Department of Health and Human Services, Agency for Toxic Substances and Disease Registry (ATSDR), the environmental persistence and mobility of some PFAS, combined with decades of widespread use, have resulted in their presence in surface water, groundwater, drinking water, rainwater, soil, sediment, ice caps, outdoor and indoor air, plants, animal tissue, and human blood serum across the globe. ATSDR also reported that exposure to certain

Internal Review and Recommendations

PFAS can lead to adverse human health impacts Due to their durability, toxicity, persistence, and pervasiveness, PFAS have emerged as potentially significant pollutants of concern.

In accordance with Section II.G of DEP's "Standard Operating Procedure (SOP) for Clean Water Program – Establishing Effluent Limitations for Individual Sewage Permits" [SOP No. BCW-PMT-033] and under the authority of 25 Pa. Code § 92a.61(b), DEP has determined that monitoring for a subset of common/well-studied PFAS including Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), Perfluorobutanesulfonic acid (PFBS), and Hexafluoropropylene oxide dimer acid (HFPO-DA) is necessary to help understand the extent of environmental contamination by PFAS in the Commonwealth and the extent to which point source dischargers are contributors. SOP BCW-PMT-033 directs permit writers to consider special monitoring requirements for PFOA, PFOS, PFBS, and HFPO-DA in the following instances:

a. If sampling that is completed as part of the permit renewal application reveals a detection of PFOA, PFOS, HFPO-DA or PFBS (any of these compounds), the application manager will establish a quarterly monitoring requirement for PFOA, PFOS, HFPO-DA and PFBS (all of these compounds) in the permit.

b. If sampling that is completed as part of the permit renewal application demonstrates non-detect values at or below the Target QLs for PFOA, PFOS, HFPO-DA and PFBS (all of these compounds in a minimum of 3 samples), the application manager will establish an annual monitoring requirement for PFOA, PFOS, HFPO-DA and PFBS in the permit.

c. In all cases the application manager will include a condition in the permit that the permittee may cease monitoring for PFOA, PFOS, HFPO-DA and PFBS when the permittee reports non-detect values at or below the Target QL for four consecutive monitoring periods for each PFAS parameter that is analyzed. Use the following language: The permittee may discontinue monitoring for PFOA, PFOS, HFPO-DA, and PFBS if the results in 4 consecutive monitoring periods indicate non-detects at or below Quantitation Limits of 4.0 ng/L for PFOA, 3.7 ng/L for PFOS, 3.5 ng/L for PFBS and 6.4 ng/L for HFPO-DA. When monitoring is discontinued, permittees should enter a No Discharge Indicator (NODI) Code of "GG" on DMRs.

The Authority's application was submitted before the NPDES permit application forms were updated to require sampling for PFOA, PFOS, PFBS, and HFPO-DA. Therefore, annual reporting of PFOA, PFOS, PFBS, and HFPO-DA will be established consistent with Section II.G of SOP BCW-PMT-033 and under the authority of 25 Pa. Code § 92a.61(b).

As stated in Section II.G.3 of SOP BCW-PMT-0332, if non-detect values at or below DEP's Target QLs are reported for four consecutive monitoring periods (i.e., four consecutive annual results), then the monitoring may be discontinued. Footnote (3) has been added to Part A of the NPDES Permit, which further discusses monitoring and reporting requirements.

Attachment 1 – April 1, 2024, WQBELs and Compliance Schedule Letter

THE EADS GROUP
www.eadsgroup.com

April 1, 2024

Department of Environmental Protection: Bureau of Clean Water
Southwest Regional Office Building
Attn: William C. Mitchell, E.I.T., Project Manager
400 Waterfront Drive
Pittsburgh, PA 15222

Draft NPDES Permit – Sewage
Somerset Borough STP
Application No. PA0021768
Authorization ID No. 1373120
WQBELs and Compliance Schedule

Mr. Mitchell,

On March 06, 2024 the Department, Permittee, and Permittee's consultant (The EADS Group, Inc.) participated in a meeting related to the Draft NPDES Permit for PA0021768. The Department requested an updated Compliance Schedule and confirmation of future effluent compliance for certain parameters. The Compliance Schedule is provided as a separate attachment. Below you will find our opinion related to effluent compliance.

The Draft NPDES proposes to establish or lower limits (mass and concentration) on the following parameters in the second period of the permit.

1. Total Residual Chlorine (TRC)
2. Cyanide, Free
3. Iron, Dissolved
4. Acrolein
5. Dichlorobromomethane
6. Chloroform

The Draft NPDES presents conflicting units. The Parameter column provides units of µg/L and the Concentrations column provides units of mg/L. The columns refer to the same parameters, so it is unclear which units are accurate. Please confirm units.

Effluent Compliance Opinion

1. TRC, Dichlorobromomethane, and Chloroform
   a. These parameters are related and effluent compliance will be achieved when Phase 2 of the Compliance Schedule is implemented. Phase 2 is expected to begin in 2025 and be completed in 2031. The Compliance Schedule was noted in past Public Comment periods and was approved by the Department in October 2020. Updates have been made to the schedule to account for additional requirements.

2. Cyanide, Free
   a. 2021 Sampling – 2021 sampling used a Quantitation Limit (QL) of 0.020 mg/L using test method ASTM D7237.10. Since the QL was significantly above the Department's QL Goal of 1.0 µg/L these samples are irrelevant. All 2021 samples reported "<0.020 mg/L" indicating non detectable concentrations of the analyte at or above the QL.

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b. 2023 Sampling
   i. 4/11/2023 – 6 µg/L
   ii. 4/18/2023 – 6 µg/L
   iii. 4/25/2023 – 3 µg/L
   iv. 5/2/2023 - 2 µg/L
   v. Based on the 2023 samples the Permittee would meet effluent limits for Cyanide, Free. There are no known sources of Cyanide and it is assumed that future samplings will be similar to 2023 samples.

3. Iron, Dissolved
   a. It appears that the Permittee will be able to regularly meet effluent limits for Iron, Dissolved.
   b. The sample result reported on 5/2/2023 (1,720 µg/L) appears to be an outlier. No issues were reported with sampling or the analysis of 5/2/2023.
   c. The Permittee samples Iron, Dissolved on a quarterly basis as part of Industrial Pretreatment requirements. Values from the most recent three years and additional sampling conducted on 4/11/2023, 4/18/2023, 4/25/2023 and 5/2/2023 are shown below.
      i. 2021 (µg/L): 60, 50, 50, 80
      ii. 2022 (µg/L): 50, 80, 50, 100
      iii. 2023 (Quarterly Sampling) (µg/L): 60, 140, 60, 90
      iv. 2023 (Additional Sampling) (µg/L): 64, **1720,** 90, 90
   d. There were no events or known sources of Iron, Dissolved that can be attributed to the spike seen in the 5/2/2023 sample. This sample is an outlier and appears to be an isolated event.

4. Acrolein
   a. The Department confirmed via email dated 03/15/2024 that there will be no limit or monitoring requirement for Acrolein in the upcoming permit cycle.

The Permittee is evaluating the usefulness of completing additional studies to assist in determining appropriate WQBELs. The Permittee last conducted a WQBELs related study in 1992 and successfully appealed certain effluent parameters. The Permittee will notify the Department if they elect to perform a study. If a study is completed it will most likely be used as a basis for preparing the next NPDES permit application.

Please contact me if you have any questions regarding this matter.

Respectfully submitted,
The EADS Group, Inc.

By: Jacob T. Bolby, P.E.

Cc: Jessica Sizemore, MABS
William Moon, MABS

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Attachment 2 – Pre-Draft Survey Sampling Results

RAW SAMPLE DATA

	2021 Samples (ug/L)				2023 Additional Samples (ug/L)			
Pollutant	**Monthly Average**	**Daily Max**	**IMAX**	**QL Used**	**Monthly Average**	**Daily Max**	**IMAX**	**QL Used**
Total Aluminum	64.80	108.00	108.00	10.00	53.73	80.60	80.60	10.00
Total Boron	158.67	226.00	226.00	50.00	129.00	163.00	163.00	50.00
Hexavalent Chromium	1.20	1.40	1.40	1.00	4.00	13.00	13.00	1.00
Total Cobalt	2.03	2.90	2.90	0.50	1.35	1.50	1.50	0.50
Total Copper	13.50	16.40	16.40	1.00	12.13	16.40	16.40	1.00
Free Cyanide	20.00	20.00	20.00	20.00	4.25	6.00	6.00	1.00
Dissolved Iron	109.00	181.00	181.00	50.00	491.00	1720.00	1720.00	50.00
Total Iron	1465	2280	2280	50	1224	1810	1810	50
Total Lead	1.03	1.10	1.10	1.00	1.00	1.00	1.00	1.00
Total Manganese	81.33	138.00	138.00	1.00	42.40	64.20	64.20	1.00
Total Zinc	29.80	38.30	38.30	5.00	25.88	29.00	29.00	5.00
Acrolein	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Chlorodibromomethane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Chloroform	7.90	11.00	11.00	0.50	7.18	8.10	8.10	0.50
Dichlorobromomethane	1.97	2.90	2.90	0.50	2.45	3.00	3.00	0.50
1,1,2-Trichloroethane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

COMPARISON OF SAMPLE AVERAGES TO NPDES LIMITS

	Combination of 2021/2023 (ug/L)			NPDES Limits (ug/L)		
Pollutant	**Monthly Average**	**Daily Max**	**IMAX**	**Monthly Average**	**Daily Max**	**IMAX**
Total Aluminum	58.47	108.00	108.00	Report	Report	Report
Total Boron	141.71	226.00	226.00	Report	Report	Report
Hexavalent Chromium	2.80	13.00	13.00	Report	Report	Report
Total Cobalt	1.64	2.90	2.90	Report	Report	Report
Total Copper	12.71	16.40	16.40	18.40	28.70	46.00
Free Cyanide	13.70	20.00	20.00	4.76	7.43	11.90
Dissolved Iron	327.29	1720.00	1720.00	Report	Report	Report
Total Iron	1328	2280	2280	1786	2787	4465
Total Lead	1.01	1.10	1.10	Report	Report	Report
Total Manganese	59.09	138.00	138.00	Report	Report	Report
Total Zinc	27.56	38.30	38.30	Report	Report	Report
Acrolein	5.00	5.00	5.00	3.00	3.57	3.57
Chlorodibromomethane	1.00	1.00	1.00	Report	Report	Report
Chloroform	7.49	11.00	11.00	6.79	17.00	17.00
Dichlorobromomethane	2.24	3.00	3.00	2.39	5.97	5.97
1,1,2-Trichloroethane	1.00	1.00	1.00	1.38	3.46	3.46

REPORTING LIMIT COMPARISON

Pollutant	NPDES Target QL (ug/L)	GeoChemical Reporting Limit (ug/L)
Total Aluminum	10	10
Total Boron	200	50
Hexavalent Chromium	1	1
Total Cobalt	1	0.5
Total Copper	4	1
Free Cyanide	1	1
Dissolved Iron	20	50
Total Iron	20	50
Total Lead	1	1
Total Manganese	2	1
Total Zinc	5	5
Acrolein	2	5
Chlorodibromomethane	0.5	1
Chloroform	0.5	0.5
Dichlorobromomethane	0.5	0.5
1,1,2-Trichloroethane	0.5	1

Attachment 3 – TMS Version 1.4

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Toxics Management Spreadsheet
Version 1.4, May 2023

Discharge Information

Instructions | Discharge | Stream

Facility: Somerset Borough STP NPDES Permit No.: PA0021768 Outfall No.: 001

Evaluation Type: Major Sewage / Industrial Waste Wastewater Description: Sewage Effluent

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
2	195.7	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		621									
	Chloride (PWS)	mg/L		212									
	Bromide	mg/L		0.2									
	Sulfate (PWS)	mg/L		62.5									
	Fluoride (PWS)	mg/L											
Group 2	Total Aluminum	µg/L		108									
	Total Antimony	µg/L	<	1									
	Total Arsenic	µg/L		1									
	Total Barium	µg/L		90.8									
	Total Beryllium	µg/L		1									
	Total Boron	µg/L		226									
	Total Cadmium	µg/L	<	0.2									
	Total Chromium (III)	µg/L		10									
	Hexavalent Chromium	µg/L		13									
	Total Cobalt	µg/L		2.9									
	Total Copper	µg/L		16.4									
	Free Cyanide	µg/L		6									
	Total Cyanide	µg/L		12									
	Dissolved Iron	µg/L		1720									
	Total Iron	µg/L		1810									
	Total Lead	µg/L		1.1									
	Total Manganese	µg/L		138									
	Total Mercury	µg/L	<	0.2									
	Total Nickel	µg/L		10									
	Total Phenols (Phenolics) (PWS)	µg/L		0.5									
	Total Selenium	µg/L	<	1									
	Total Silver	µg/L		0.5									
	Total Thallium	µg/L	<	0.2									
	Total Zinc	µg/L		38.3									
	Total Molybdenum	µg/L		1.7									
	Acrolein	µg/L	<	2									
	Acrylamide	µg/L	<										
	Acrylonitrile	µg/L	<	1									
	Benzene	µg/L	<	0.5									
	Bromoform	µg/L	<	1									

Group 3	Carbon Tetrachloride	µg/L	<	0.5										
	Chlorobenzene	µg/L		0.5										
	Chlorodibromomethane	µg/L	<	1										
	Chloroethane	µg/L	<	0.5										
	2-Chloroethyl Vinyl Ether	µg/L	<	1										
	Chloroform	µg/L		11										
	Dichlorobromomethane	µg/L		3										
	1,1-Dichloroethane	µg/L	<	0.5										
	1,2-Dichloroethane	µg/L	<	0.5										
	1,1-Dichloroethylene	µg/L	<	0.5										
	1,2-Dichloropropane	µg/L	<	0.5										
	1,3-Dichloropropylene	µg/L	<	0.5										
	1,4-Dioxane	µg/L	<	50										
	Ethylbenzene	µg/L	<	0.5										
	Methyl Bromide	µg/L	<	1										
	Methyl Chloride	µg/L	<	0.5										
	Methylene Chloride	µg/L	<	0.5										
	1,1,2,2-Tetrachloroethane	µg/L	<	0.5										
	Tetrachloroethylene	µg/L	<	0.5										
	Toluene	µg/L	<	0.5										
	1,2-trans-Dichloroethylene	µg/L	<	1										
	1,1,1-Trichloroethane	µg/L	<	0.5										
	1,1,2-Trichloroethane	µg/L	<	1										
	Trichloroethylene	µg/L	<	0.5										
	Vinyl Chloride	µg/L	<	0.5										
Group 4	2-Chlorophenol	µg/L	<	0.5										
	2,4-Dichlorophenol	µg/L	<	0.5										
	2,4-Dimethylphenol	µg/L	<	0.5										
	4,6-Dinitro-o-Cresol	µg/L	<	5										
	2,4-Dinitrophenol	µg/L	<	1.9										
	2-Nitrophenol	µg/L	<	0.9										
	4-Nitrophenol	µg/L	<	0.9										
	p-Chloro-m-Cresol	µg/L	<	0.2										
	Pentachlorophenol	µg/L	<	0.9										
	Phenol	µg/L	<	0.5										
	2,4,6-Trichlorophenol	µg/L	<	0.5										
Group 5	Acenaphthene	µg/L	<	0.2										
	Acenaphthylene	µg/L	<	0.2										
	Anthracene	µg/L	<	0.2										
	Benzidine	µg/L	<	0.9										
	Benzo(a)Anthracene	µg/L	<	0.2										
	Benzo(a)Pyrene	µg/L	<	0.2										
	3,4-Benzofluoranthene	µg/L	<	0.2										
	Benzo(ghi)Perylene	µg/L	<	0.2										
	Benzo(k)Fluoranthene	µg/L	<	0.2										
	Bis(2-Chloroethoxy)Methane	µg/L	<	0.2										
	Bis(2-Chloroethyl)Ether	µg/L	<	0.2										
	Bis(2-Chloroisopropyl)Ether	µg/L	<	0.2										
	Bis(2-Ethylhexyl)Phthalate	µg/L	<	2.8										
	4-Bromophenyl Phenyl Ether	µg/L	<	0.2										
	Butyl Benzyl Phthalate	µg/L	<	1.9										
	2-Chloronaphthalene	µg/L	<	0.2										
	4-Chlorophenyl Phenyl Ether	µg/L	<	0.2										
	Chrysene	µg/L	<	0.2										
	Dibenzo(a,h)Anthrancene	µg/L	<	0.2										
	1,2-Dichlorobenzene	µg/L	<	0.2										
	1,3-Dichlorobenzene	µg/L	<	0.2										
	1,4-Dichlorobenzene	µg/L	<	0.2										
	3,3-Dichlorobenzidine	µg/L	<	0.9										
	Diethyl Phthalate	µg/L	<	1.9										
	Dimethyl Phthalate	µg/L	<	1.9										
	Di-n-Butyl Phthalate	µg/L	<	1.9										
	2,4-Dinitrotoluene	µg/L	<	0.5										

	2,6-Dinitrotoluene	µg/L	<	0.5										
	Di-n-Octyl Phthalate	µg/L	<	1.9										
	1,2-Diphenylhydrazine	µg/L	<	0.2										
	Fluoranthene	µg/L	<	0.2										
	Fluorene	µg/L	<	0.2										
	Hexachlorobenzene	µg/L	<	0.2										
	Hexachlorobutadiene	µg/L	<	0.2										
	Hexachlorocyclopentadiene	µg/L	<	0.2										
	Hexachloroethane	µg/L	<	0.2										
	Indeno(1,2,3-cd)Pyrene	µg/L	<	0.2										
	Isophorone	µg/L	<	0.5										
	Naphthalene	µg/L	<	0.2										
	Nitrobenzene	µg/L	<	0.2										
	n-Nitrosodimethylamine	µg/L	<	0.2										
	n-Nitrosodi-n-Propylamine	µg/L	<	0.2										
	n-Nitrosodiphenylamine	µg/L	<	0.2										
	Phenanthrene	µg/L	<	0.2										
	Pyrene	µg/L	<	0.2										
	1,2,4-Trichlorobenzene	µg/L	<	0.2										
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

Somerset Borough STP, NPDES Permit No. PA0021768, Outfall 001

Instructions | Discharge | *Stream*

Receiving Surface Water Name: **East Branch Coxes Creek**

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	039012	2.27	2079	23.8			Yes
End of Reach 1	039012	1.32	2016	25.4			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	2.27	0.02478	0.59		10	12.54	1.254	0.234				100	7		
End of Reach 1	1.32	0.02478													

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	2.27														
End of Reach 1	1.32														

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

Toxics Management Spreadsheet
Version 1.4, May 2023

Model Results

Somerset Borough STP, NPDES Permit No. PA0021768, Outfall 001

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

☑ ***Hydrodynamics***

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

RMI	Stream Flow (cfs)	PWS Withdrawal (cfs)	Net Stream Flow (cfs)	Discharge Analysis Flow (cfs)	Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Travel Time (days)	Complete Mix Time (min)
2.27	0.59		0.59	3.094	0.013	1.254	12.54	10.	0.234	0.248	0.035
1.32	0.63		0.63								

Q_h

RMI	Stream Flow (cfs)	PWS Withdrawal (cfs)	Net Stream Flow (cfs)	Discharge Analysis Flow (cfs)	Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Travel Time (days)	Complete Mix Time (min)
2.27	4.69		4.69	3.094	0.013	1.742	12.54	7.197	0.356	0.163	0.303
1.32	4.959		4.96								

☑ ***Wasteload Allocations***

☑ *AFC* CCT (min): 0.035 PMF: 1 Analysis Hardness (mg/l): 180.37 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 Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Total Aluminum	0	0		0	750	750	893	
Total Antimony	0	0		0	1,100	1,100	1,310	
Total Arsenic	0	0		0	340	340	405	Chem Translator of 1 applied
Total Barium	0	0		0	21,000	21,000	25,005	
Total Boron	0	0		0	8,100	8,100	9,645	
Total Cadmium	0	0		0	3.572	3.89	4.63	Chem Translator of 0.919 applied
Total Chromium (III)	0	0		0	923.634	2,923	3,480	Chem Translator of 0.316 applied
Hexavalent Chromium	0	0		0	16	16.3	19.4	Chem Translator of 0.982 applied
Total Cobalt	0	0		0	95	95.0	113	
Total Copper	0	0		0	23.428	24.4	29.1	Chem Translator of 0.96 applied
Free Cyanide	0	0		0	22	22.0	26.2	

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	121.972	173	206	Chem Translator of 0.705 applied
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	1.400	1.65	1.96	Chem Translator of 0.85 applied
Total Nickel	0	0		0	771.235	773	920	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	8.872	10.4	12.4	Chem Translator of 0.85 applied
Total Thallium	0	0		0	65	65.0	77.4	
Total Zinc	0	0		0	193.157	198	235	Chem Translator of 0.978 applied
Acrolein	0	0		0	3	3.0	3.57	
Acrylonitrile	0	0		0	650	650	774	
Benzene	0	0		0	640	640	762	
Bromoform	0	0		0	1,800	1,800	2,143	
Carbon Tetrachloride	0	0		0	2,800	2,800	3,334	
Chlorobenzene	0	0		0	1,200	1,200	1,429	
Chlorodibromomethane	0	0		0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0		0	18,000	18,000	21,432	
Chloroform	0	0		0	1,900	1,900	2,262	
Dichlorobromomethane	0	0		0	N/A	N/A	N/A	
1,2-Dichloroethane	0	0		0	15,000	15,000	17,860	
1,1-Dichloroethylene	0	0		0	7,500	7,500	8,930	
1,2-Dichloropropane	0	0		0	11,000	11,000	13,098	
1,3-Dichloropropylene	0	0		0	310	310	369	
Ethylbenzene	0	0		0	2,900	2,900	3,453	
Methyl Bromide	0	0		0	550	550	655	
Methyl Chloride	0	0		0	28,000	28,000	33,339	
Methylene Chloride	0	0		0	12,000	12,000	14,288	
1,1,2,2-Tetrachloroethane	0	0		0	1,000	1,000	1,191	
Tetrachloroethylene	0	0		0	700	700	833	
Toluene	0	0		0	1,700	1,700	2,024	
1,2-trans-Dichloroethylene	0	0		0	6,800	6,800	8,097	
1,1,1-Trichloroethane	0	0		0	3,000	3,000	3,572	
1,1,2-Trichloroethane	0	0		0	3,400	3,400	4,048	
Trichloroethylene	0	0		0	2,300	2,300	2,739	
Vinyl Chloride	0	0		0	N/A	N/A	N/A	
2-Chlorophenol	0	0		0	560	560	667	
2,4-Dichlorophenol	0	0		0	1,700	1,700	2,024	
2,4-Dimethylphenol	0	0		0	660	660	786	
4,6-Dinitro-o-Cresol	0	0		0	80	80.0	95.3	
2,4-Dinitrophenol	0	0		0	660	660	786	
2-Nitrophenol	0	0		0	8,000	8,000	9,526	
4-Nitrophenol	0	0		0	2,300	2,300	2,739	
p-Chloro-m-Cresol	0	0		0	160	160	191	
Pentachlorophenol	0	0		0	8.723	8.72	10.4	
Phenol	0	0		0	N/A	N/A	N/A	
2,4,6-Trichlorophenol	0	0		0	460	460	548	

Acenaphthene	0	0		0	83	83.0	98.8	
Anthracene	0	0		0	N/A	N/A	N/A	
Benzidine	0	0		0	300	300	357	
Benzo(a)Anthracene	0	0		0	0.5	0.5	0.6	
Benzo(a)Pyrene	0	0		0	N/A	N/A	N/A	
3,4-Benzofluoranthene	0	0		0	N/A	N/A	N/A	
Benzo(k)Fluoranthene	0	0		0	N/A	N/A	N/A	
Bis(2-Chloroethyl)Ether	0	0		0	30,000	30,000	35,721	
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0		0	4,500	4,500	5,358	
4-Bromophenyl Phenyl Ether	0	0		0	270	270	321	
Butyl Benzyl Phthalate	0	0		0	140	140	167	
2-Chloronaphthalene	0	0		0	N/A	N/A	N/A	
Chrysene	0	0		0	N/A	N/A	N/A	
Dibenzo(a,h)Anthrancene	0	0		0	N/A	N/A	N/A	
1,2-Dichlorobenzene	0	0		0	820	820	976	
1,3-Dichlorobenzene	0	0		0	350	350	417	
1,4-Dichlorobenzene	0	0		0	730	730	869	
3,3-Dichlorobenzidine	0	0		0	N/A	N/A	N/A	
Diethyl Phthalate	0	0		0	4,000	4,000	4,763	
Dimethyl Phthalate	0	0		0	2,500	2,500	2,977	
Di-n-Butyl Phthalate	0	0		0	110	110	131	
2,4-Dinitrotoluene	0	0		0	1,600	1,600	1,905	
2,6-Dinitrotoluene	0	0		0	990	990	1,179	
1,2-Diphenylhydrazine	0	0		0	15	15.0	17.9	
Fluoranthene	0	0		0	200	200	238	
Fluorene	0	0		0	N/A	N/A	N/A	
Hexachlorobenzene	0	0		0	N/A	N/A	N/A	
Hexachlorobutadiene	0	0		0	10	10.0	11.9	
Hexachlorocyclopentadiene	0	0		0	5	5.0	5.95	
Hexachloroethane	0	0		0	60	60.0	71.4	
Indeno(1,2,3-cd)Pyrene	0	0		0	N/A	N/A	N/A	
Isophorone	0	0		0	10,000	10,000	11,907	
Naphthalene	0	0		0	140	140	167	
Nitrobenzene	0	0		0	4,000	4,000	4,763	
n-Nitrosodimethylamine	0	0		0	17,000	17,000	20,242	
n-Nitrosodi-n-Propylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodiphenylamine	0	0		0	300	300	357	
Phenanthrene	0	0		0	5	5.0	5.95	
Pyrene	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene	0	0		0	130	130	155	

☑ *CFC* CCT (min): 0.035 PMF: 1 Analysis Hardness (mg/l): 180.37 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 Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	

Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	220	220	262	
Total Arsenic	0	0		0	150	150	179	Chem Translator of 1 applied
Total Barium	0	0		0	4,100	4,100	4,882	
Total Boron	0	0		0	1,600	1,600	1,905	
Total Cadmium	0	0		0	0.370	0.42	0.5	Chem Translator of 0.884 applied
Total Chromium (III)	0	0		0	120.146	140	166	Chem Translator of 0.86 applied
Hexavalent Chromium	0	0		0	10	10.4	12.4	Chem Translator of 0.962 applied
Total Cobalt	0	0		0	19	19.0	22.6	
Total Copper	0	0		0	14.825	15.4	18.4	Chem Translator of 0.96 applied
Free Cyanide	0	0		0	5.2	5.2	6.19	
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	1,500	1,500	1,786	WQC = 30 day average; PMF = 1
Total Lead	0	0		0	4.753	6.74	8.03	Chem Translator of 0.705 applied
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	0.770	0.91	1.08	Chem Translator of 0.85 applied
Total Nickel	0	0		0	85.660	85.9	102	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	5.94	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	15.5	
Total Zinc	0	0		0	194.737	198	235	Chem Translator of 0.986 applied
Acrolein	0	0		0	3	3.0	3.57	
Acrylonitrile	0	0		0	130	130	155	
Benzene	0	0		0	130	130	155	
Bromoform	0	0		0	370	370	441	
Carbon Tetrachloride	0	0		0	560	560	667	
Chlorobenzene	0	0		0	240	240	286	
Chlorodibromomethane	0	0		0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0		0	3,500	3,500	4,167	
Chloroform	0	0		0	390	390	464	
Dichlorobromomethane	0	0		0	N/A	N/A	N/A	
1,2-Dichloroethane	0	0		0	3,100	3,100	3,691	
1,1-Dichloroethylene	0	0		0	1,500	1,500	1,786	
1,2-Dichloropropane	0	0		0	2,200	2,200	2,620	
1,3-Dichloropropylene	0	0		0	61	61.0	72.6	
Ethylbenzene	0	0		0	580	580	691	
Methyl Bromide	0	0		0	110	110	131	
Methyl Chloride	0	0		0	5,500	5,500	6,549	
Methylene Chloride	0	0		0	2,400	2,400	2,858	
1,1,2,2-Tetrachloroethane	0	0		0	210	210	250	
Tetrachloroethylene	0	0		0	140	140	167	
Toluene	0	0		0	330	330	393	

1,2-trans-Dichloroethylene	0	0		0	1,400	1,400	1,667	
1,1,1-Trichloroethane	0	0		0	610	610	726	
1,1,2-Trichloroethane	0	0		0	680	680	810	
Trichloroethylene	0	0		0	450	450	536	
Vinyl Chloride	0	0		0	N/A	N/A	N/A	
2-Chlorophenol	0	0		0	110	110	131	
2,4-Dichlorophenol	0	0		0	340	340	405	
2,4-Dimethylphenol	0	0		0	130	130	155	
4,6-Dinitro-o-Cresol	0	0		0	16	16.0	19.1	
2,4-Dinitrophenol	0	0		0	130	130	155	
2-Nitrophenol	0	0		0	1,600	1,600	1,905	
4-Nitrophenol	0	0		0	470	470	560	
p-Chloro-m-Cresol	0	0		0	500	500	595	
Pentachlorophenol	0	0		0	6.693	6.69	7.97	
Phenol	0	0		0	N/A	N/A	N/A	
2,4,6-Trichlorophenol	0	0		0	91	91.0	108	
Acenaphthene	0	0		0	17	17.0	20.2	
Anthracene	0	0		0	N/A	N/A	N/A	
Benzidine	0	0		0	59	59.0	70.3	
Benzo(a)Anthracene	0	0		0	0.1	0.1	0.12	
Benzo(a)Pyrene	0	0		0	N/A	N/A	N/A	
3,4-Benzofluoranthene	0	0		0	N/A	N/A	N/A	
Benzo(k)Fluoranthene	0	0		0	N/A	N/A	N/A	
Bis(2-Chloroethyl)Ether	0	0		0	6,000	6,000	7,144	
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0		0	910	910	1,084	
4-Bromophenyl Phenyl Ether	0	0		0	54	54.0	64.3	
Butyl Benzyl Phthalate	0	0		0	35	35.0	41.7	
2-Chloronaphthalene	0	0		0	N/A	N/A	N/A	
Chrysene	0	0		0	N/A	N/A	N/A	
Dibenzo(a,h)Anthrancene	0	0		0	N/A	N/A	N/A	
1,2-Dichlorobenzene	0	0		0	160	160	191	
1,3-Dichlorobenzene	0	0		0	69	69.0	82.2	
1,4-Dichlorobenzene	0	0		0	150	150	179	
3,3-Dichlorobenzidine	0	0		0	N/A	N/A	N/A	
Diethyl Phthalate	0	0		0	800	800	953	
Dimethyl Phthalate	0	0		0	500	500	595	
Di-n-Butyl Phthalate	0	0		0	21	21.0	25.0	
2,4-Dinitrotoluene	0	0		0	320	320	381	
2,6-Dinitrotoluene	0	0		0	200	200	238	
1,2-Diphenylhydrazine	0	0		0	3	3.0	3.57	
Fluoranthene	0	0		0	40	40.0	47.6	
Fluorene	0	0		0	N/A	N/A	N/A	
Hexachlorobenzene	0	0		0	N/A	N/A	N/A	
Hexachlorobutadiene	0	0		0	2	2.0	2.38	

Hexachlorocyclopentadiene	0	0		0	1	1.0	1.19	
Hexachloroethane	0	0		0	12	12.0	14.3	
Indeno(1,2,3-cd)Pyrene	0	0		0	N/A	N/A	N/A	
Isophorone	0	0		0	2,100	2,100	2,500	
Naphthalene	0	0		0	43	43.0	51.2	
Nitrobenzene	0	0		0	810	810	964	
n-Nitrosodimethylamine	0	0		0	3,400	3,400	4,048	
n-Nitrosodi-n-Propylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodiphenylamine	0	0		0	59	59.0	70.3	
Phenanthrene	0	0		0	1	1.0	1.19	
Pyrene	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene	0	0		0	26	26.0	31.0	

☑ ***THH*** CCT (min): 0.035 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 Dissolved Solids (PWS)	0	0		0	500,000	500,000	N/A	
Chloride (PWS)	0	0		0	250,000	250,000	N/A	
Sulfate (PWS)	0	0		0	250,000	250,000	N/A	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	5.6	5.6	6.67	
Total Arsenic	0	0		0	10	10.0	11.9	
Total Barium	0	0		0	2,400	2,400	2,858	
Total Boron	0	0		0	3,100	3,100	3,691	
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	
Free Cyanide	0	0		0	4	4.0	4.76	
Dissolved Iron	0	0		0	300	300	357	
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	1,191	
Total Mercury	0	0		0	0.050	0.05	0.06	
Total Nickel	0	0		0	610	610	726	
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	0.29	
Total Zinc	0	0		0	N/A	N/A	N/A	
Acrolein	0	0		0	3	3.0	3.57	
Acrylonitrile	0	0		0	N/A	N/A	N/A	
Benzene	0	0		0	N/A	N/A	N/A	

Bromoform	0	0		0	N/A	N/A	N/A	
Carbon Tetrachloride	0	0		0	N/A	N/A	N/A	
Chlorobenzene	0	0		0	100	100.0	119	
Chlorodibromomethane	0	0		0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0		0	N/A	N/A	N/A	
Chloroform	0	0		0	5.7	5.7	6.79	
Dichlorobromomethane	0	0		0	N/A	N/A	N/A	
1,2-Dichloroethane	0	0		0	N/A	N/A	N/A	
1,1-Dichloroethylene	0	0		0	33	33.0	39.3	
1,2-Dichloropropane	0	0		0	N/A	N/A	N/A	
1,3-Dichloropropylene	0	0		0	N/A	N/A	N/A	
Ethylbenzene	0	0		0	68	68.0	81.0	
Methyl Bromide	0	0		0	100	100.0	119	
Methyl Chloride	0	0		0	N/A	N/A	N/A	
Methylene Chloride	0	0		0	N/A	N/A	N/A	
1,1,2,2-Tetrachloroethane	0	0		0	N/A	N/A	N/A	
Tetrachloroethylene	0	0		0	N/A	N/A	N/A	
Toluene	0	0		0	57	57.0	67.9	
1,2-trans-Dichloroethylene	0	0		0	100	100.0	119	
1,1,1-Trichloroethane	0	0		0	10,000	10,000	11,907	
1,1,2-Trichloroethane	0	0		0	N/A	N/A	N/A	
Trichloroethylene	0	0		0	N/A	N/A	N/A	
Vinyl Chloride	0	0		0	N/A	N/A	N/A	
2-Chlorophenol	0	0		0	30	30.0	35.7	
2,4-Dichlorophenol	0	0		0	10	10.0	11.9	
2,4-Dimethylphenol	0	0		0	100	100.0	119	
4,6-Dinitro-o-Cresol	0	0		0	2	2.0	2.38	
2,4-Dinitrophenol	0	0		0	10	10.0	11.9	
2-Nitrophenol	0	0		0	N/A	N/A	N/A	
4-Nitrophenol	0	0		0	N/A	N/A	N/A	
p-Chloro-m-Cresol	0	0		0	N/A	N/A	N/A	
Pentachlorophenol	0	0		0	N/A	N/A	N/A	
Phenol	0	0		0	4,000	4,000	4,763	
2,4,6-Trichlorophenol	0	0		0	N/A	N/A	N/A	
Acenaphthene	0	0		0	70	70.0	83.3	
Anthracene	0	0		0	300	300	357	
Benzidine	0	0		0	N/A	N/A	N/A	
Benzo(a)Anthracene	0	0		0	N/A	N/A	N/A	
Benzo(a)Pyrene	0	0		0	N/A	N/A	N/A	
3,4-Benzofluoranthene	0	0		0	N/A	N/A	N/A	
Benzo(k)Fluoranthene	0	0		0	N/A	N/A	N/A	
Bis(2-Chloroethyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Chloroisopropyl)Ether	0	0		0	200	200	238	
Bis(2-Ethylhexyl)Phthalate	0	0		0	N/A	N/A	N/A	
4-Bromophenyl Phenyl Ether	0	0		0	N/A	N/A	N/A	

Butyl Benzyl Phthalate	0	0		0	0.1	0.1	0.12	
2-Chloronaphthalene	0	0		0	800	800	953	
Chrysene	0	0		0	N/A	N/A	N/A	
Dibenzo(a,h)Anthrancene	0	0		0	N/A	N/A	N/A	
1,2-Dichlorobenzene	0	0		0	1,000	1,000	1,191	
1,3-Dichlorobenzene	0	0		0	7	7.0	8.33	
1,4-Dichlorobenzene	0	0		0	300	300	357	
3,3-Dichlorobenzidine	0	0		0	N/A	N/A	N/A	
Diethyl Phthalate	0	0		0	600	600	714	
Dimethyl Phthalate	0	0		0	2,000	2,000	2,381	
Di-n-Butyl Phthalate	0	0		0	20	20.0	23.8	
2,4-Dinitrotoluene	0	0		0	N/A	N/A	N/A	
2,6-Dinitrotoluene	0	0		0	N/A	N/A	N/A	
1,2-Diphenylhydrazine	0	0		0	N/A	N/A	N/A	
Fluoranthene	0	0		0	20	20.0	23.8	
Fluorene	0	0		0	50	50.0	59.5	
Hexachlorobenzene	0	0		0	N/A	N/A	N/A	
Hexachlorobutadiene	0	0		0	N/A	N/A	N/A	
Hexachlorocyclopentadiene	0	0		0	4	4.0	4.76	
Hexachloroethane	0	0		0	N/A	N/A	N/A	
Indeno(1,2,3-cd)Pyrene	0	0		0	N/A	N/A	N/A	
Isophorone	0	0		0	34	34.0	40.5	
Naphthalene	0	0		0	N/A	N/A	N/A	
Nitrobenzene	0	0		0	10	10.0	11.9	
n-Nitrosodimethylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodi-n-Propylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodiphenylamine	0	0		0	N/A	N/A	N/A	
Phenanthrene	0	0		0	N/A	N/A	N/A	
Pyrene	0	0		0	20	20.0	23.8	
1,2,4-Trichlorobenzene	0	0		0	0.07	0.07	0.083	

☑ *CRL* CCT (min): 0.303 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 Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
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	
Free Cyanide	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	
Acrolein	0	0		0	N/A	N/A	N/A	
Acrylonitrile	0	0		0	0.06	0.06	0.15	
Benzene	0	0		0	0.58	0.58	1.46	
Bromoform	0	0		0	7	7.0	17.6	
Carbon Tetrachloride	0	0		0	0.4	0.4	1.01	
Chlorobenzene	0	0		0	N/A	N/A	N/A	
Chlorodibromomethane	0	0		0	0.8	0.8	2.01	
2-Chloroethyl Vinyl Ether	0	0		0	N/A	N/A	N/A	
Chloroform	0	0		0	N/A	N/A	N/A	
Dichlorobromomethane	0	0		0	0.95	0.95	2.39	
1,2-Dichloroethane	0	0		0	9.9	9.9	24.9	
1,1-Dichloroethylene	0	0		0	N/A	N/A	N/A	
1,2-Dichloropropane	0	0		0	0.9	0.9	2.26	
1,3-Dichloropropylene	0	0		0	0.27	0.27	0.68	
Ethylbenzene	0	0		0	N/A	N/A	N/A	
Methyl Bromide	0	0		0	N/A	N/A	N/A	
Methyl Chloride	0	0		0	N/A	N/A	N/A	
Methylene Chloride	0	0		0	20	20.0	50.3	
1,1,2,2-Tetrachloroethane	0	0		0	0.2	0.2	0.5	
Tetrachloroethylene	0	0		0	10	10.0	25.1	
Toluene	0	0		0	N/A	N/A	N/A	
1,2-trans-Dichloroethylene	0	0		0	N/A	N/A	N/A	
1,1,1-Trichloroethane	0	0		0	N/A	N/A	N/A	
1,1,2-Trichloroethane	0	0		0	0.55	0.55	1.38	
Trichloroethylene	0	0		0	0.6	0.6	1.51	
Vinyl Chloride	0	0		0	0.02	0.02	0.05	
2-Chlorophenol	0	0		0	N/A	N/A	N/A	
2,4-Dichlorophenol	0	0		0	N/A	N/A	N/A	
2,4-Dimethylphenol	0	0		0	N/A	N/A	N/A	
4,6-Dinitro-o-Cresol	0	0		0	N/A	N/A	N/A	

2,4-Dinitrophenol	0	0		0	N/A	N/A	N/A	
2-Nitrophenol	0	0		0	N/A	N/A	N/A	
4-Nitrophenol	0	0		0	N/A	N/A	N/A	
p-Chloro-m-Cresol	0	0		0	N/A	N/A	N/A	
Pentachlorophenol	0	0		0	0.030	0.03	0.075	
Phenol	0	0		0	N/A	N/A	N/A	
2,4,6-Trichlorophenol	0	0		0	1.5	1.5	3.77	
Acenaphthene	0	0		0	N/A	N/A	N/A	
Anthracene	0	0		0	N/A	N/A	N/A	
Benzidine	0	0		0	0.0001	0.0001	0.0003	
Benzo(a)Anthracene	0	0		0	0.001	0.001	0.003	
Benzo(a)Pyrene	0	0		0	0.0001	0.0001	0.0003	
3,4-Benzofluoranthene	0	0		0	0.001	0.001	0.003	
Benzo(k)Fluoranthene	0	0		0	0.01	0.01	0.025	
Bis(2-Chloroethyl)Ether	0	0		0	0.03	0.03	0.075	
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0		0	0.32	0.32	0.8	
4-Bromophenyl Phenyl Ether	0	0		0	N/A	N/A	N/A	
Butyl Benzyl Phthalate	0	0		0	N/A	N/A	N/A	
2-Chloronaphthalene	0	0		0	N/A	N/A	N/A	
Chrysene	0	0		0	0.12	0.12	0.3	
Dibenzo(a,h)Anthrancene	0	0		0	0.0001	0.0001	0.0003	
1,2-Dichlorobenzene	0	0		0	N/A	N/A	N/A	
1,3-Dichlorobenzene	0	0		0	N/A	N/A	N/A	
1,4-Dichlorobenzene	0	0		0	N/A	N/A	N/A	
3,3-Dichlorobenzidine	0	0		0	0.05	0.05	0.13	
Diethyl Phthalate	0	0		0	N/A	N/A	N/A	
Dimethyl Phthalate	0	0		0	N/A	N/A	N/A	
Di-n-Butyl Phthalate	0	0		0	N/A	N/A	N/A	
2,4-Dinitrotoluene	0	0		0	0.05	0.05	0.13	
2,6-Dinitrotoluene	0	0		0	0.05	0.05	0.13	
1,2-Diphenylhydrazine	0	0		0	0.03	0.03	0.075	
Fluoranthene	0	0		0	N/A	N/A	N/A	
Fluorene	0	0		0	N/A	N/A	N/A	
Hexachlorobenzene	0	0		0	0.00008	0.00008	0.0002	
Hexachlorobutadiene	0	0		0	0.01	0.01	0.025	
Hexachlorocyclopentadiene	0	0		0	N/A	N/A	N/A	
Hexachloroethane	0	0		0	0.1	0.1	0.25	
Indeno(1,2,3-cd)Pyrene	0	0		0	0.001	0.001	0.003	
Isophorone	0	0		0	N/A	N/A	N/A	
Naphthalene	0	0		0	N/A	N/A	N/A	
Nitrobenzene	0	0		0	N/A	N/A	N/A	
n-Nitrosodimethylamine	0	0		0	0.0007	0.0007	0.002	
n-Nitrosodi-n-Propylamine	0	0		0	0.005	0.005	0.013	
n-Nitrosodiphenylamine	0	0		0	3.3	3.3	8.3	

Phenanthrene	0	0		0	N/A	N/A	N/A	
Pyrene	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene	0	0		0	N/A	N/A	N/A	

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

No. Samples/Month: 4

	Mass Limits		*Concentration Limits*						
Pollutants	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units	Governing WQBEL	WQBEL Basis	Comments
Total Aluminum	Report	Report	Report	Report	Report	µg/L	750	AFC	Discharge Conc > 10% WQBEL (no RP)
Total Boron	Report	Report	Report	Report	Report	µg/L	1,905	CFC	Discharge Conc > 10% WQBEL (no RP)
Hexavalent Chromium	0.21	0.32	12.4	19.3	30.9	µg/L	12.4	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Total Cobalt	Report	Report	Report	Report	Report	µg/L	22.6	CFC	Discharge Conc > 10% WQBEL (no RP)
Total Copper	0.31	0.48	18.4	28.7	46.0	µg/L	18.4	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Free Cyanide	0.079	0.12	4.76	7.43	11.9	µg/L	4.76	THH	Discharge Conc ≥ 50% WQBEL (RP)
Dissolved Iron	5.96	9.3	357	557	893	µg/L	357	THH	Discharge Conc ≥ 50% WQBEL (RP)
Total Iron	29.8	46.5	1,786	2,787	4,465	µg/L	1,786	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Total Lead	Report	Report	Report	Report	Report	µg/L	8.03	CFC	Discharge Conc > 10% WQBEL (no RP)
Total Manganese	Report	Report	Report	Report	Report	µg/L	1,191	THH	Discharge Conc > 10% WQBEL (no RP)
Total Zinc	Report	Report	Report	Report	Report	µg/L	198	AFC	Discharge Conc > 10% WQBEL (no RP)
Chlorodibromomethane	Report	Report	Report	Report	Report	µg/L	2.01	CRL	Discharge Conc > 25% WQBEL (no RP)
Chloroform	0.11	0.18	6.79	10.6	17.0	µg/L	6.79	THH	Discharge Conc ≥ 50% WQBEL (RP)
Dichlorobromomethane	0.04	0.062	2.39	3.73	5.97	µg/L	2.39	CRL	Discharge Conc ≥ 50% WQBEL (RP)
1,1,2-Trichloroethane	0.023	0.036	1.38	2.16	3.46	µg/L	1.38	CRL	Discharge Conc ≥ 50% WQBEL (RP)

☑ ***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 Dissolved Solids (PWS)	N/A	N/A	PWS Not Applicable
Chloride (PWS)	N/A	N/A	PWS Not Applicable
Bromide	N/A	N/A	No WQS
Sulfate (PWS)	N/A	N/A	PWS Not Applicable
Total Antimony	N/A	N/A	Discharge Conc < TQL
Total Arsenic	11.9	µg/L	Discharge Conc ≤ 10% WQBEL
Total Barium	2,858	µg/L	Discharge Conc ≤ 10% WQBEL
Total Beryllium	N/A	N/A	No WQS
Total Cadmium	0.5	µg/L	Discharge Conc < TQL
Total Chromium (III)	166	µg/L	Discharge Conc ≤ 10% WQBEL
Total Cyanide	N/A	N/A	No WQS

Total Mercury	0.06	µg/L	Discharge Conc < TQL
Total Nickel	102	µg/L	Discharge Conc ≤ 10% WQBEL
Total Phenols (Phenolics) (PWS)		µg/L	PWS Not Applicable
Total Selenium	5.94	µg/L	Discharge Conc < TQL
Total Silver	10.4	µg/L	Discharge Conc ≤ 10% WQBEL
Total Thallium	0.29	µg/L	Discharge Conc < TQL
Total Molybdenum	N/A	N/A	No WQS
Acrolein	3.0	µg/L	Discharge Conc < TQL
Acrylonitrile	0.15	µg/L	Discharge Conc < TQL
Benzene	1.46	µg/L	Discharge Conc < TQL
Bromoform	17.6	µg/L	Discharge Conc ≤ 25% WQBEL
Carbon Tetrachloride	1.01	µg/L	Discharge Conc < TQL
Chlorobenzene	119	µg/L	Discharge Conc ≤ 25% WQBEL
Chloroethane	N/A	N/A	No WQS
2-Chloroethyl Vinyl Ether	4,167	µg/L	Discharge Conc < TQL
1,1-Dichloroethane	N/A	N/A	No WQS
1,2-Dichloroethane	24.9	µg/L	Discharge Conc < TQL
1,1-Dichloroethylene	39.3	µg/L	Discharge Conc < TQL
1,2-Dichloropropane	2.26	µg/L	Discharge Conc < TQL
1,3-Dichloropropylene	0.68	µg/L	Discharge Conc < TQL
1,4-Dioxane	N/A	N/A	No WQS
Ethylbenzene	81.0	µg/L	Discharge Conc < TQL
Methyl Bromide	119	µg/L	Discharge Conc ≤ 25% WQBEL
Methyl Chloride	6,549	µg/L	Discharge Conc < TQL
Methylene Chloride	50.3	µg/L	Discharge Conc < TQL
1,1,2,2-Tetrachloroethane	0.5	µg/L	Discharge Conc < TQL
Tetrachloroethylene	25.1	µg/L	Discharge Conc < TQL
Toluene	67.9	µg/L	Discharge Conc < TQL
1,2-trans-Dichloroethylene	119	µg/L	Discharge Conc ≤ 25% WQBEL
1,1,1-Trichloroethane	726	µg/L	Discharge Conc < TQL
Trichloroethylene	1.51	µg/L	Discharge Conc < TQL
Vinyl Chloride	0.05	µg/L	Discharge Conc < TQL
2-Chlorophenol	35.7	µg/L	Discharge Conc < TQL
2,4-Dichlorophenol	11.9	µg/L	Discharge Conc < TQL
2,4-Dimethylphenol	119	µg/L	Discharge Conc < TQL
4,6-Dinitro-o-Cresol	2.38	µg/L	Discharge Conc < TQL
2,4-Dinitrophenol	11.9	µg/L	Discharge Conc < TQL
2-Nitrophenol	1,905	µg/L	Discharge Conc < TQL
4-Nitrophenol	560	µg/L	Discharge Conc < TQL
p-Chloro-m-Cresol	160	µg/L	Discharge Conc < TQL
Pentachlorophenol	0.075	µg/L	Discharge Conc < TQL
Phenol	4,763	µg/L	Discharge Conc < TQL
2,4,6-Trichlorophenol	3.77	µg/L	Discharge Conc < TQL
Acenaphthene	20.2	µg/L	Discharge Conc < TQL
Acenaphthylene	N/A	N/A	No WQS

Anthracene	357	µg/L	Discharge Conc < TQL
Benzidine	0.0003	µg/L	Discharge Conc < TQL
Benzo(a)Anthracene	0.003	µg/L	Discharge Conc < TQL
Benzo(a)Pyrene	0.0003	µg/L	Discharge Conc < TQL
3,4-Benzofluoranthene	0.003	µg/L	Discharge Conc < TQL
Benzo(ghi)Perylene	N/A	N/A	No WQS
Benzo(k)Fluoranthene	0.025	µg/L	Discharge Conc < TQL
Bis(2-Chloroethoxy)Methane	N/A	N/A	No WQS
Bis(2-Chloroethyl)Ether	0.075	µg/L	Discharge Conc < TQL
Bis(2-Chloroisopropyl)Ether	238	µg/L	Discharge Conc < TQL
Bis(2-Ethylhexyl)Phthalate	0.8	µg/L	Discharge Conc < TQL
4-Bromophenyl Phenyl Ether	64.3	µg/L	Discharge Conc < TQL
Butyl Benzyl Phthalate	0.12	µg/L	Discharge Conc < TQL
2-Chloronaphthalene	953	µg/L	Discharge Conc < TQL
4-Chlorophenyl Phenyl Ether	N/A	N/A	No WQS
Chrysene	0.3	µg/L	Discharge Conc < TQL
Dibenzo(a,h)Anthrancene	0.0003	µg/L	Discharge Conc < TQL
1,2-Dichlorobenzene	191	µg/L	Discharge Conc < TQL
1,3-Dichlorobenzene	8.33	µg/L	Discharge Conc < TQL
1,4-Dichlorobenzene	179	µg/L	Discharge Conc < TQL
3,3-Dichlorobenzidine	0.13	µg/L	Discharge Conc < TQL
Diethyl Phthalate	714	µg/L	Discharge Conc < TQL
Dimethyl Phthalate	595	µg/L	Discharge Conc < TQL
Di-n-Butyl Phthalate	23.8	µg/L	Discharge Conc < TQL
2,4-Dinitrotoluene	0.13	µg/L	Discharge Conc < TQL
2,6-Dinitrotoluene	0.13	µg/L	Discharge Conc < TQL
Di-n-Octyl Phthalate	N/A	N/A	No WQS
1,2-Diphenylhydrazine	0.075	µg/L	Discharge Conc < TQL
Fluoranthene	23.8	µg/L	Discharge Conc < TQL
Fluorene	59.5	µg/L	Discharge Conc < TQL
Hexachlorobenzene	0.0002	µg/L	Discharge Conc < TQL
Hexachlorobutadiene	0.025	µg/L	Discharge Conc < TQL
Hexachlorocyclopentadiene	1.19	µg/L	Discharge Conc < TQL
Hexachloroethane	0.25	µg/L	Discharge Conc < TQL
Indeno(1,2,3-cd)Pyrene	0.003	µg/L	Discharge Conc < TQL
Isophorone	40.5	µg/L	Discharge Conc < TQL
Naphthalene	51.2	µg/L	Discharge Conc < TQL
Nitrobenzene	11.9	µg/L	Discharge Conc < TQL
n-Nitrosodimethylamine	0.002	µg/L	Discharge Conc < TQL
n-Nitrosodi-n-Propylamine	0.013	µg/L	Discharge Conc < TQL
n-Nitrosodiphenylamine	8.3	µg/L	Discharge Conc < TQL
Phenanthrene	1.19	µg/L	Discharge Conc < TQL
Pyrene	23.8	µg/L	Discharge Conc < TQL
1,2,4-Trichlorobenzene	0.083	µg/L	Discharge Conc < TQL