Pennsylvania Department of Environmental Protection

SOUTHWEST REGIONAL OFFICE
CLEAN WATER PROGRAM

Application Type	**Renewal**	**NPDES PERMIT FACT SHEET ADDENDUM 1**	Application No.	**PA0006254**
Facility Type	**Industrial**		APS ID	**1116436**
Major / Minor	**Major**		Authorization ID	**1489819**

Applicant and Facility Information

Applicant Name	**BVPV Styrenics LLC**	Facility Name	**Beaver Valley Site**
Applicant Address	400 Frankfort Road	Facility Address	400 Frankfort Road
	Monaca, PA 15061-2212		Monaca, PA 15061-2212
Applicant Contact	Timothy Ford	Facility Contact	***same as applicant***
Applicant Phone	(724) 770-2468	Facility Phone	***same as applicant***
Applicant Email	tim.ford@styropek.com	Facility Email	***same as applicant***
Client ID	357935	Site ID	241397
SIC Code	2821	Municipality	Potter Township
SIC Description	Manufacturing - Plastics Materials and Resins	County	Beaver
Date Published in PA Bulletin	June 28, 2025	EPA Waived?	No
Comment Period End Date	August 12, 2025 (15-day ext.)	If No, Reason	

Purpose of Application: Renewal of an NPDES permit for discharges from an organic chemical manufacturing facility.

Internal Review and Recommendations

The draft NPDES permit for BVPV Styrenics, LLC's (BVPV) Beaver Valley Site was transmitted by email to Mr. Timothy Ford of BVPV and Ms. Valentina Miller of Langan Engineering & Environmental Service, LLC (consulting for BVPV) on June 12, 2025. The application was also transmitted to the U.S. Environmental Protection Agency, the U.S. Fish & Wildlife Service, the National Marine Fisheries Service, the Pennsylvania Fish and Boat Commission, and the Ohio River Valley Water Sanitation Commission. The draft NPDES permit was published in the *Pennsylvania Bulletin* on June 28, 2025. By email dated June 25, 2025, Mr. Ford of BVPV requested a 15-day extension of the comment period. By letter dated June 25, 2025, DEP granted a 15-day extension of the comment period (the maximum allowed by 25 Pa. Code § 92a.82(d)) through August 12, 2025.

By email dated August 12, 2025, BVPV submitted comments on the draft NPDES permit. BVPV submitted additional comments on October 15, 2025 pursuant to a conference call between DEP and representatives of BVPV on September 25, 2025. DEP's responses to BVPV's comments are provided below following each comment.

BVPV Comment 1: Outfall 001 Sampling Location: In Part A Section I.A. Footnote 6 indicates that samples collected from Outfall 001 shall be representative of stormwater only. A location to collect a stormwater only sample from Outfall 001 does not currently exist at the site. We request that the sampling point for Outfall 001 remain as the combination of non-contact cooling water, miscellaneous non-process waters, excess river intake, and stormwater runoff.

BVPV Supplemental Comment 1: Outfall 001 Outfall Designation: As part of idling activities at the site, non-contact cooling water, miscellaneous non-process waters, excess river intake are no longer generated at the site and discharged to Outfall 001. BVPV is requesting that Outfall 001 be designated as a stormwater only outfall and the effluent limitations and monitoring requirements be adjusted to reflect this condition. If operation at the site is anticipated to change and discharge of water other than stormwater to Outfall 001 is to resume, a permit modification would be requested.

Approve	Deny	Signatures	Date
✓		Ryan C. Decker, P.E. / Environmental Engineer	October 29, 2025
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	November 5, 2025

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DEP Response to BVPV Comment 1 and BVPV Supplemental Comment 1: BVPV's supplemental comment from October 15, 2025 supersedes BVPV's August 12, 2025 comment about representative storm water sampling. The identification of Outfall 001 as a storm only outfall means there is no commingling of storm water with other wastewaters and, consequently, samples collected at the outfall will represent storm water only. However, for completeness and future reference, DEP provides the following response to BVPV's August 12, 2025 comment:

> The instructions for Module 1 of the application state: "**If stormwater sampling is being conducted at an outfall that receives other wastewaters, the applicant must ensure that only stormwater is sampled.** This may require the applicant to sample stormwater at a location that is different than the normal compliance monitoring location, or otherwise at times when only stormwater discharges are occurring." (emphasis in original)
>
> BVPV reported results for storm water on Module 1, which DEP assumed were sampled consistent with the application instructions that require separate storm water samples and which, in turn, implied that BVPV already identified a location to collect separate samples of storm water.
>
> The purpose of separate storm water sampling is to confirm that storm water BMPs are implemented effectively in the corresponding drainage area. When process wastewaters or non-process wastewaters combine and discharge with storm water, DEP cannot confirm whether storm water controls are being implemented effectively. Therefore, sampling that represents only storm water is required.

As stated above, Outfall 001 will only discharge storm water, so it is not necessary to designate an alternative storm water sampling location. If circumstances change and Outfall 001 becomes a commingled discharge of storm water and process/non-process wastewater, then BVPV should designate a representative storm water sampling location at that time.

Changes in Response to Comments: Effluent limits and/or monitoring requirements at Outfall 001 in the draft permit based on the discharge of non-contact cooling water, miscellaneous non-process wastewaters, and excess intake water will be removed from the permit including: continuous flow monitoring (replaced with semi-annual reporting), pH limits (replaced with semi-annual reporting), TRC limits and reporting, and temperature limits and reporting. The monitoring frequencies for copper and styrene will be changed to 1/6 months. The first draft permit erroneously omitted monitoring and reporting for aluminum at Outfall 001, which DEP intended to require as discussed in the Fact Sheet. Therefore, aluminum will be added to Outfall 001 in the second draft permit with a monitoring frequency of 1/6 months. According to DEP's PFAS policy, monitoring for PFOA, PFOS, PFBS, and HFPO-DA generally is not imposed on storm water discharges, but since PFAS were detected in the application screening and separate storm water samples were not collected, DEP cannot attribute the PFAS detections to the wastewaters that will no longer discharge at Outfall 001. Therefore, monitoring for the four PFAS parameters will remain in the permit. The changes to Outfall 001's effluent limits and monitoring requirements are summarized in the table below.

Outfall 001 Revised Effluent Limitations and Monitoring Requirements

Parameter	Mass (pounds)		Concentration (mg/L)			Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant Maximum		
Flow (MGD)	—	Report	—	—	—	~~Continuous~~ 1/6 months	~~Recorded~~ Estimate
pH (s.u.)	—	—	~~6.0 (IMIN)~~	Report	~~9.0~~	~~1/week~~ ~~1/6 months~~	Grab
Aluminum, Total	—	—	—	Report	—	1/6 months	Grab
Copper, Total	—	—	~~Report~~	Report	—	~~2/month~~ 1/6 months	Grab
Styrene, Total	—	—	~~Report~~	Report	—	~~2/month~~ 1/6 months	Grab
~~Temperature (°F)~~	~~—~~	~~—~~	~~—~~	~~110~~	~~—~~	~~1/week~~	~~I-S~~
~~Total Residual Chlorine~~	~~—~~	~~—~~	~~0.5~~	~~1.0~~	~~—~~	~~1/week~~	~~Grab~~
Total Nitrogen	—	—	—	Report	—	1/6 months	Calculation
Total Phosphorus	—	—	—	Report	—	1/6 months	Grab
Chemical Oxygen Demand	—	—	—	Report	—	1/6 months	Grab
Total Suspended Solids	—	—	—	Report	—	1/6 months	Grab
Nitrate + Nitrite-Nitrogen	—	—	—	Report	—	1/6 months	Grab

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Outfall 001 Revised Effluent Limitations and Monitoring Requirements (cont'd)

Parameter	Mass (pounds)		Concentration (mg/L)			Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant Maximum		
Iron, Total	—	—	—	Report	—	1/6 months	Grab
Lead, Total	—	—	—	Report	—	1/6 months	Grab
Zinc, Total	—	—	—	Report	—	1/6 months	Grab
Perfluorooctanoic acid (PFOA) (ng/L)	—	—	—	Report	—	1/quarter	Grab
Perfluorooctanesulfonic acid (PFOS) (ng/L)	—	—	—	Report	—	1/quarter	Grab
Perfluorobutanesulfonic acid (PFBS) (ng/L)	—	—	—	Report	—	1/quarter	Grab
Hexafluoropropylene oxide dimer acid (HFPO-DA) (ng/L)	—	—	—	Report	—	1/quarter	Grab

BVPV Comment 2: Outfall 002 Type of Effluent Correction: In Part A, Section I.B, we request the type of effluent be updated to:

Treated process wastewaters from polystyrene and specialty plastics production and treated wastewaters from maintenance activities, facility idling activities, sewer line jetting, condensate, boiler house blowdown, precipitator blowdown, jilter plant cooling tower blowdown and gravity filter blowdown filter backwash water from the Potable Water Plant, Belt Filter Press wash water, D2, D3, and D4 cooling tower blowdown, stormwater, and treated sanitary wastewaters monitored at IMP 102.

DEP Response to BVPV Comment 2: Based on BVPV's Supplemental Comment 2 (discussed below), the permit will only authorize discharges during idled production, so treated process wastewaters from polystyrene and specialty plastics production will only be authorized to the extent those wastewaters were generated prior to idling and remain in the treatment lagoons and may be discharged.

Changes in Response to Comments: The "Type of Effluent" for Outfall 002 will be changed to: *Treated process wastewaters from polystyrene and specialty plastics production generated before idling and treated wastewaters from maintenance activities, facility idling activities, sewer line jetting, condensate, boiler house blowdown, precipitator blowdown, jilter plant cooling tower blowdown and gravity filter blowdown filter backwash water from the Potable Water Plant, Belt Filter Press wash water, D2, D3, and D4 cooling tower blowdown, stormwater, and treated sanitary wastewaters monitored at IMP 102.*

BVPV Comment 3: Outfall 002 Effluent Limitations - Calculation of Water Quality Based Effluent Limits (WQBELs)

As documented in the Fact Sheet for the draft NPDES permit, DEP developed effluent limits for Outfall 002 consistent with Styropek's request to maintain authorization for process wastewater discharge from Outfall 002. Styropek understands that WQBELs for protection of aquatic life are calculated based on the Q7,10 of the receiving stream. With the facility now idle, and without any process wastewater generated from production operations, discharge through Outfall 002 will not occur at the Q7, 10 stream flow, as the need for discharge will be determined by precipitation.

Considering this condition at the site, and consistent with Styropek's request to maintain authorization for process wastewater discharge, Styropek requests that the renewed NPDES permit be structured with two effluent limit tables for Outfall 002: one table applicable when production operations generating process wastewater discharge to Outfall 002 are in operation, and one table when production operations generating process wastewater discharge to Outfall 002 are idle.

- "Outfall 002A" applicable when production operations generating process wastewater discharge to Outfall 002 are in operation.
- "Outfall 002B" applicable when production operations generating process wastewater discharge to Outfall 002 are idle.

Please see below for the specifics of Styropek's request and comments related to calculation of WQBELs for the Outfall 002 discharge to Racoon Creek.

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Outfall 002A: Discharge when production operations generating process wastewater discharge to Outfall 002 are in operation (WQBELs at Q7,10).

Receiving Stream Depth

Based on review of the Fact Sheet, the Department calculated water quality-based effluent limits for the Outfall 002 discharge to Racoon Creek based on acute water quality criteria using the Department's Toxics Management Spreadsheet (TMS). The Department estimated a receiving stream depth of 1.4 feet at a Q7,10 stream flow of 8.28 cfs. The Department based the depth of 1.4 feet on the minimum gage height observed at USGS Gage 03108000. See Fact Sheet page 54. Styropek notes that stream gage height is not the actual stream depth but rather is a height above the gage datum (i.e., the height above the zero-point elevation of the gage).

To provide more accurate stream depth information, Styropek conducted a bathymetric survey of Racoon Creek in the vicinity of Outfall 002 in July 2025. Stream bed elevations and the Racoon Creek water surface elevation at Outfall 002 were recorded.

Attachment 1 contains the survey results and calculation of the Racoon Creek depth on July 30, 2025, based on the stream bed elevations and the stream surface elevation. Attachment 1 also contains calculation of the Racoon Creek depth at Outfall 002 at a Q7,10 stream flow of 8.28 cfs. The calculations are summarized below.

Table 1

Parameter	Value	Units	Notes
Average Racoon Creek Depth at Outfall 002 (7/30/25)	5.98	ft	Avg. depth of transect across Racoon Creek at Outfall 002 on 7/30/25
7/30/25 Racoon Creek Flow, USGS 03108000	28.7	cfs	Flow at time of creek elevation measurement
USGS 03108000 Racoon Creek Gage height at 28.7 cfs	1.65	ft	At USGS 0310800 7/30/25 at time of creek elevation measurement
USGS 03108000 Racoon Creek Gage height at Q7,10	1.4	ft	Average of recorded gage height with stream flow ~ 8 cfs
Relative change in elevation at Q7,10	-0.25	ft	1.4 – 1.65 ft
Calculated Average Racoon Creek Depth at Outfall 002 at Q7,10 stream flow	5.76	ft	Calculated avg depth based on stream bathymetry and 0.25 ft lower stream water surface elevation than 7/30/25

Using the more accurate site-specific stream depth of 5.76 ft (at Q7,10) in the Department's TMS spreadsheet results in the following WQBELs based on acute water quality criteria. The WQBELs contained in the draft permit Fact Sheet based on acute criteria are also provided for comparison. The TMS spreadsheet with a stream depth of 5.76 ft is included as Attachment 2.

Table 2: Summary of WQBELs Based on Acute Criteria with Updated Stream Depth

Parameter	**Acute WQBELs with Updated Receiving Stream Depth (5.76 ft)**		Draft Permit Acute WQBELs		Discharge Conc. (µg/L)
	M. Avg. (µg/L)	**Max Daily (µg/L)**	M. Avg. (µg/L)	Max Daily (µg/L)	
Chromium, Hexavalent	**Report**	**Report**	Report	Report	< 6
Copper, Total	**96.3**	**150**	54.6	85.1	3,380 †
Free Cyanide	**No monitoring**	**No monitoring**	Report	Report	< 8
Lead, Total	**856**	**1,336**	295	460	690 †
Mercury, Total	**No monitoring**	**No monitoring**	Report	Report	0.21
Nickel, Total	**2,925**	**4,564**	1610	2512	3,980 †
Zinc, Total	**730**	**1,140**	412	644	2,610 †
Acrolein	**6.19**	**9.66**	3.41	5.31	<4.4
Benzo(a)Anthracene	**1.03**	**1.61**	0.57	0.89	59 †
4,6-Dinitro-o-Cresol	**165**	**257**	90.8	142	277 †
Hexachlorobutadiene	**20.6**	**32.2**	11.4	17.7	49 †
Naphthalene	**No monitoring**	**No monitoring**	Report	Report	59 †
Phenanthrene	**10.3**	**16.1**	5.68	8.86	59 †
1,2,4-Trichlorobenzene	**268**	**418**	148	230	140 †

† Department used daily max TBEL concentration for reasonable potential determination

Styropek requests that the WQBELs and conditions shown in bold above be included in the Department's determination of final effluent limits for Outfall 002 when the facility is in production (i.e., production operations generating process wastewater

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discharge to Outfall 002 are operating). Applying the most stringent of the WQBELs in bold in Table 2, the WQBELs from the Department's chronic assessment, and TBELs that the Department has applied, results in the following final effluent limits for Outfall 002 for the pollutants listed above. The draft permit final Outfall 002 effluent limits are also listed.

Table 3: Final Outfall 002 Effluent Limits with Updated Stream Depth (Production Operations Generating Process Wastewater Discharge to Outfall 002)

Parameter	**Styropek Calculated Final Outfall 002 Effluent Limits with Accurate Stream Depth**		Draft Permit Final outfall 002 Effluent Limits		Discharge Conc. (µg/L)
	M. Avg. (µg/L)	**Max Daily (µg/L)**	M. Avg. (µg/L)	Max Daily (µg/L)	
Chromium, Hexavalent	**Report**	**Report**	Report	Report	< 6
Copper, Total	**96.3**	**150**	54.6	85.1	3,380 †
Free Cyanide	**No monitoring**	**No monitoring**	Report	Report	< 8
Lead, Total	**856**	**1,336**	295	460	690 †
Mercury, Total	**No monitoring**	**No monitoring**	Report	Report	0.21
Nickel, Total	**1,690 (TBEL)**	**3,980 (TBEL)**	1610	2512	3,980 †
Zinc, Total	**730**	**1,140**	412	644	2,610 †
Acrolein	**6.19 (annual avg)**	**9.66**	3.41	5.31	<4.4
Benzo(a)Anthracene	**1.03 (annual avg)**	**1.61**	0.57	0.89	59 †
4,6-Dinitro-o-Cresol	**78 (TBEL) (annual avg)**	**257 (WQBEL)**	78	277	277 †
Hexachlorobutadiene	**0.01[1] (chronic) (annual avg)**	**0.016[1] (chronic)**	11.4	17.7	49 †
Naphthalene	**22 (TBEL) (annual avg)**	**59 (TBEL)**	22	59	59 †
Phenanthrene	**10.3 (annul avg)**	**16.1**	5.68	8.86	59 †
1,2,4-Trichlorobenzene	**34.4 (chronic) (annual avg)**	**53.7 (chronic)**	34.4	53.7	140 †

Outfall 002B: Discharge when production operations generating process wastewater discharge to Outfall 002 are idle (WQBELs at 26 cfs stream flow).

Receiving Stream Depth

As noted above, Styropek conducted a bathymetric survey of Racoon Creek at Outfall 002 to more accurately determine the receiving stream depth. Attachment 3 contains the survey results and calculation of the Racoon Creek depth on July 30, 2025, based on the stream bed elevations and the stream surface elevation (calculated average water depth of 5.98 ft on July 30, 2025, also shown in Attachment 1). Racoon Creek stream flow at the time of the July 30, 2025, stream surface elevation measurement was 28.7 cfs.

Receiving Stream WOBEL Design Flow with Production Operations Idle

As previously documented, all production operations at the facility are currently idled. Without any process wastewater discharge, discharge through Outfall 002 would not occur at the Q7,10 stream flow, as the need for discharge will be determined by precipitation.

Accordingly, Styropek proposes to use a stream design flow for Racoon Creek of 26 cfs for the acute WQBEL calculations with the facility production operations generating process wastewater idle. The stream flow of 26 cfs is the 10th percentile stream flow for the prior 25 years as measured at USGS Gage 03108000 (January 2000 - June 2025). The minimum annual number of days at or above 26 cfs over this time frame was 265 days (2000 - 2024). As the discharge to Outfall 002 will likely be pumped through a filtration device (currently pumped through a Disc Filter as referenced in the Fact Sheet), Styropek will have the technical capability to discharge at any time. Therefore, Styropek is amenable to a permit condition prohibiting discharge through Outfall 002 when the daily stream flow at USGS 03108000 is below 26 cfs when the production operations generating process wastewater discharge to Outfall 002 are idle.

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Using the updated stream depth noted above and the updated stream flow of 26 cfs in the Department's TMS spreadsheet results in the following WQBELs based on acute criteria (see Table 4 below and Attachment 4 for the TMS sheets). Note that Attachment 3 contains a minor adjustment to the stream depth to account for the minor difference in stream flow at the time of the survey (28.7 cfs) and the requested stream design flow of 26 cfs (depth adjustment from 5.98 ft to 5.94 ft).

Table 4: WQBELs Based on Acute Criteria with Updated Stream Depth and Stream Design Flow (Production Operations Generating Process Wastewater Discharge to Outfall 002 Idle)

Parameter	**Acute WQBELs with Updated Stream Design Flow and Accurate Stream Depth**		Draft Permit Racoon Creek Acute WQBELs		Discharge Conc. (µg/L)
	M. Avg. (µg/L)	**Max Daily (µg/L)**	M. Avg. (µg/L)	Max Daily (µg/L)	
Chromium, Hexavalent	**Report**	**Report**	Report	Report	< 6
Copper, Total	**209**	**326**	54.6	85.1	3,380 †
Free Cyanide	**No monitoring**	**No monitoring**	Report	Report	< 8
Lead, Total	**Report**	**Report**	295	460	690 †
Mercury, Total	**No monitoring**	**No monitoring**	Report	Report	0.21
Nickel, Total	**6,203**	**9678**	1610	2512	3,980 †
Zinc, Total	**1,590**	**2,480**	412	644	2,610 †
Acrolein	**Report**	**Report**	3.41	5.31	<4.4
Benzo(a)Anthracene	**2.29**	**3.57**	0.57	0.89	59 †
4,6-Dinitro-o-Cresol	**356**	**571**	90.8	142	277 †
Hexachlorobutadiene	**45.7**	**71.4**	11.4	17.7	49 †
Naphthalene	**No monitoring**	**No monitoring**	Report	Report	59 †
Phenanthrene	**22.9**	**35.7**	5.68	8.86	59 †
1,2,4-Trichlorobenzene	**No monitoring**	**No monitoring**	148	230	140 †

† Department used daily max TBEL concentration for reasonable potential determination

Styropek requests that the WQBELs and conditions shown in bold above in Table 4 be included in the Department's determination of final effluent limits for Outfall 002 when production operations generating process wastewater discharge to Outfall 002 are idle. Applying the most stringent of the WQBELs in bold in Table 4, the WQBELs from the Department's chronic assessment, and TBELs that the Department has applied, results in the following final effluent limits for Outfall 002 for the pollutants listed above. The draft permit final Outfall 002 effluent limits are also listed.

Table 5: Final Outfall 002 Effluent Limits with Production Operations Generating Process Wastewater Idle

Parameter	**Styropek Calculated Final Outfall 002 Effluent Limits**		Draft Permit Final outfall 002 Effluent Limits		Discharge Conc. (µg/L)
	M. Avg. (µg/L)	**Max Daily (µg/L)**	M. Avg. (µg/L)	Max Daily (µg/L)	
Chromium, Hexavalent	**Report**	**Report**	Report	Report	< 6
Copper, Total	**209**	**326**	54.6	85.1	3,380 †
Free Cyanide	**No monitoring**	**No monitoring**	Report	Report	< 8
Lead, Total	**320 (TBEL)**	**690 (TBEL)**	295	460	690 †
Mercury, Total	**No monitoring**	**No monitoring**	Report	Report	0.21
Nickel, Total	**1,690 (TBEL)**	**3,980 (TBEL)**	1610	2512	3,980 †
Zinc, Total	**1,050 (TBEL)**	**2,480 (WQBEL)**	412	644	2,610 †
Acrolein	**Report**	**Report**	3.41	5.31	<4.4
Benzo(a)Anthracene	**1.52 (chronic) (annual avg)**	**2.38 (chronic)**	0.57	0.89	59 †
4,6-Dinitro-o-Cresol	**78 (TBEL) (annual avg)**	**277 (TBEL)**	78	277	277 †
Hexachlorobutadiene	**0.01[1] (chronic) (annual avg)**	**0.016[1] (chronic)**	11.4	17.7	49 †
Naphthalene	**22 (TBEL) (annual avg)**	**59 (TBEL)**	22	59	59 †
Phenanthrene	**10.3 (annul avg)**	**16.1**	5.68	8.86	59 †
1,2,4-Trichlorobenzene	**34.4 (chronic) (annual avg)**	**53.7 (chronic)**	34.4	53.7	140 †

[1] Subject to QL compliance determination, as listed in draft permit
† Department used daily max TBEL concentration for reasonable potential determination

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Styropek requests that the final effluent limits and conditions shown in bold in Table 5 be included in the renewal NPDES permit when production operations generating process wastewater discharge to Outfall 002 are idle.

Styropek believes the requested limits presented above more accurately reflect the conditions under which discharge would occur when production operations are idle and also utilize more accurate site-specific information.

Proposed Language for NPDES Permit Outfalls 002A and 002B

To incorporate the requested structure of the NPDES permit regarding Outfall 002, Styropek requests the following language for Outfall 002A and Outfall 002B be included in the NPDES along with the limits and conditions requested above.

- Outfall 002A: *Report monitoring results under Outfall 002A when any production operation generating process wastewater discharge to Outfall 002 is in operation. Report "no discharge" under Outfall 002A when results are reported under Outfall 002B.*
- Outfall 002B: *Report monitoring results under Outfall 002B when all production operations generating process wastewater discharge to Outfall 002 are idle. Discharge when all production operations generating process wastewater discharge to Outfall 002 are idle is prohibited when the daily stream flow at USGS Gage No. 03108000 is less than 26 cfs. Report "no discharge" under Outfall 002B when results are reported under Outfall 002A.*

BVPV Supplemental Comment 2: The comments submitted August 5, 2025, provided calculations of Water Quality Based Effluent limits for Outfall 002 based on both production and idled operations. BVPV requests that only discharge when production operations are idled be considered for incorporation into the draft permit for the Outfall 002 discharge. If operation at the site is anticipated to change and processing is to resume, a permit modification would be requested.

DEP Response to BVPV Comment 3 and BVPV Supplemental Comment 2: DEP appreciates BVPV's collection of site-specific data. The site-specific data gathered by BVPV will be used to refine the WQBELs. Pursuant to BVPV Supplemental Comment 2, the permit will only include effluent limits for the idled discharge scenario. BVPV can submit an amendment application to reauthorize the discharge of process wastewaters before manufacturing operations resume.

BVPV proposes that WQBELs for idle conditions be developed using a receiving stream flow rate of 26 cfs (representing the 10^{th} percentile flow of Racoon Creek) with the additional restriction that BVPV be prohibited from discharging when the flow of Raccoon Creek is less than 26 cfs. There is no precedent for using a 10^{th} percentile stream flow for modeling. DEP is obligated by 25 Pa. Code § 96.4(g) to perform mathematical modeling to develop WQBELs using Q_{7-10} as the steady state design flow for aquatic life and threshold human health criteria and the Harmonic Mean Flow as the steady state design flow for non-threshold (carcinogenic) human health criteria.

The fundamental characteristic of numeric water quality criteria is that they include three components: magnitude, frequency, and duration. This is especially true of water quality criteria designed to protect aquatic life. Each criterion is substantiated based on underlying limitations and conditions specified in the criteria development documentation. Implementation of water quality criteria is invalid unless the underlying limitations and conditions are preserved. The criterion magnitude for many aquatic life criteria is identified on the basis that exposure to concentrations at that magnitude will occur rarely (typically a frequency of no more than once every three years) and for limited periods of time (typically a duration of no more than four days). For the rest of the time, the underlying requirement is that the target organism is not stressed by exposure to the pollutant at any significant level (*i.e.*, that exposure to elevated concentrations is a rare and isolated event). To achieve the underlying frequency and duration components of the water quality criterion, WQBELs must be developed that limit the frequency and duration of instream concentrations of the pollutant of concern.

The Q_{7-10} design flow condition was not arbitrarily selected. It was designed to match the flow profile of natural free-flowing surface waters with the dose-response toxicity profile of pollutants and thereby achieve the underlying frequency and duration components of water quality criteria. Flow management such as that proposed by BVPV is inconsistent with the underlying frequency and duration components of water quality criteria and violates criteria as surely as if instream concentrations exceed the criteria magnitudes.

DEP acknowledges that precipitation-induced discharges during idling conditions are unlikely to occur at Q_{7-10} conditions. However, based on the preceding discussion, the use of Q_{7-10} flow to develop WQBELs is necessitated by DEP's regulatory requirement for steady state modeling and the corresponding need to use a design stream flow that implements the duration

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and frequency components of water quality criteria (*i.e.*, $Q_{7\text{-}10}$ is used as the design stream flow regardless of whether discharges can or will occur when stream flow is at that level).

Changes in Response to Comments: DEP agrees to the modification of WQBELs based on a revised stream depth and will include limits for idle conditions only. DEP does not agree to the modification of WQBELs based on BVPV's proposal to develop WQBELs using the 10th percentile flow of Raccoon Creek. Outfall 002 effluent limits revised based on site-specific data are summarized in the table below. All other limits at Outfall 002 are unchanged.

Outfall 002 Revised Effluent Limitations and Monitoring Requirements

Parameter	Revised Mass Limits (pounds/day)		Revised Concentration Limits (µg/L)		Outfall 002 Draft Permit Concentration Limits (µg/L)	
	Mo. Avg.	Max Daily	Mo. Avg.	Max Daily	Mo. Avg.	Max Daily
Chromium, Hexavalent	Report	Report	Report	Report	Report	Report
Copper, Total	1.09	1.70	96.3	150.0	54.6	85.1
Free Cyanide	—	—	No monitoring	No monitoring	Report	Report
Lead, Total	3.63	7.83	320.0 (TBEL)	690.0 (TBEL)	295.0	460.0
Mercury, Total	—	—	No monitoring	No monitoring	Report	Report
Nickel, Total	19.1	45.1	1,690 (TBEL)	3,980 (TBEL)	1610.0	2512.0
Zinc, Total	8.28	12.9	730	1,139	412.0	644.0
Acrolein	0.070	0.109	6.19 (annual avg)	9.66	3.41	5.31
Benzo(a)Anthracene	0.028	0.028	1.03 (annual avg)	1.61	0.57	0.89
4,6-Dinitro-o-Cresol	0.885	2.92	78 (TBEL) (annual avg)	257 (WQBEL)	78	277
Hexachlorobutadiene	0.005	0.005	0.01 (chronic) (annual avg)	0.016 (chronic)	11.4	17.7
Phenanthrene	0.116	0.182	10.3 (annul avg)	16.1	5.68	8.86

Modeling results to support the limit revisions are attached to this Fact Sheet Addendum.

Effluent data indicate that BVPV will be able to comply with the proposed effluent limits at Outfall 002. To the extent that legacy process wastewater contaminants in the lagoons may be discharged, the precipitation-induced nature of the discharges should facilitate dilution of those contaminants and result in lower effluent concentrations in the effluent during idled conditions.

BVPV Comment 4: Outfall 004 Monitoring

Part A, I.D. of the draft permit incorporates monitoring for Outfall 004. The discharge of river water leaks collected in a sump on the east end of the building to the Ohio River from Outfall 004 have been discontinued. The site would like to remove the monitoring requirements for Outfall 004 at the river pump house from the renewal permit.

DEP Response to BVPV Comment 4: DEP agrees to the removal of effluent limits and monitoring requirements from Outfall 004.

Changes in Response to Comments: The permit's discharge authorization for Outfall 004 will revert to the following:

Discharges shall consist solely of uncontaminated potable/river water leakage.

In addition, the following condition will be added to the permit as Part C, Condition I.K:

When the River Pump House (RPH) is operating, the permittee shall perform weekly inspections of the RPH pumps, tanks, sumps, and related equipment and appurtenances for oil leaks/sheen and shall take necessary measures to prevent the discharge of oil to waters of the Commonwealth.

BVPV Comment 5: Outfall 005 Monitoring

Internal Review and Recommendations

Part A, I.E. of the draft permit incorporates monitoring for Outfall 005. Three samples for oil and grease were collected from Outfall 005 and submitted with the permit renewal application. All results were non-detect values; therefore, the discharge from Outfall 005 represents uncontaminated discharge. The 160 mg/L result for TSS is not believed to be representative of the discharge and the elevated result could have been due to changing condition of the river at the time of sampling. The two TSS results following the 160 mg/L result were orders of magnitude less (6.5 mg/L and 8.3 mg/L) and are more indicative of the typical discharge conditions. Styropek would like to remove the monitoring requirements for Outfall 005 at the river pump house.

DEP Response to BVPV Comment 5: DEP agrees to the removal of effluent limits and monitoring requirements from Outfall 005.

Changes in Response to Comments: The permit's discharge authorization for Outfall 005 will revert to the following:

Discharges shall consist solely of uncontaminated potable/river water leakage.

The condition added to the permit based on DEP's Response to BVPV Comment 4 also will control for Outfall 005.

BVPV Comment 6: Stormwater BMPs

Part C, IV.C.5 of the draft permit, lists Sector-and Site-Specific BMPs, indicated on page 39 of the Fact Sheet to be associated with EPA's "Industrial Stormwater Fact Sheet Series - Sector Y: Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries". To better align the permit language with the idling conditions at the site with potential for restart of processing, we propose that the permit language be adjusted to specify: *During times when production is active and aligns with activities associated with Sector Y: Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries activities, the following sector-specific BMPs shall be implemented lo the extent practicable:*

DEP Response to BVPV Comment 6: DEP understands that some BMPs identified in Part C Condition IV.C.5 of the permit do not apply to the facility because the facility is not operating (*e.g.*, BMPs relating to material loading/unloading activities). However, idle conditions at the site do not preclude the discharge of legacy materials (*e.g.*, plastic beads) that remain at the site from when the facility was operating. The introduction to the sector-specific BMPs section of Part C Condition IV.C.5 of the permit already requires sector-specific BMPs to be implemented to the extent practicable. If a BMP related to a specific activity cannot be implemented because that activity is not conducted at the facility when the facility is idle, then it would not be practicable to implement that BMP.

Changes in Response to Comments: None

BVPV Comment 7: Cooling Water Intake Structure Monitoring

Following idling of process activities at the site and discontinuation of operations of the potable water system, Styropek is no longer utilizing the river intake for cooling water. Due to the idling conditions, we request Part C, Section V. of the draft permit be updated to incorporate the following prior to Sections V.A through V.G: *During times when river intake water is associated with cooling water intake at the facility, the following shall be implemented to the extent practicable:*

DEP Response to BVPV Comment 7: DEP agrees to some modification of the Cooling Water Intake Structure requirements in Part C Condition V of the permit to account for idling of the facility and the current lack of use of the intake to supply cooling water.

Changes in Response to Comments: The requirements in Part C Condition V of the draft permit will be prefaced with the following:

When the intake structure on the Ohio River is used to supply cooling water, the permittee shall comply with the following conditions:

BVPV's proposed qualifying language ("to the extent practicable") is too permissive as to the permittee's discretion for implementing cooling water intake structure requirements, so it is not included.

Internal Review and Recommendations

Part C Conditions V.F. and V.G. are modified to remove "throughout the permit term" and "continue to" because the intake will not be used to supply cooling water throughout the permit term.

In addition, the following paragraph is added to the end of Part C Condition V so DEP knows when the cooling water intake structure requirements apply:

> *The permittee shall notify DEP in writing at least seven (7) days prior to the resumption of use of the intake structure for cooling water withdrawals.*

Please note that use of the intake structure for purposes other than the withdrawal of cooling water (*e.g.*, potable water supply) would not trigger the notification requirement. The complete revised condition is shown below.

V. COOLING WATER INTAKE STRUCTURE(S)

When the facility's intake structure on the Ohio River is used to supply cooling water, the permittee shall comply with the following:

A. Nothing in this permit authorizes a take of endangered or threatened species under the Endangered Species Act.

B. Technology and operational measures employed at the cooling water intake structures must be operated in a way that minimizes impingement mortality and entrainment to the smallest amount, extent, or degree reasonably possible.

C. The location, design, construction or capacity of the intake structure(s) may not be altered without prior approval of DEP.

D. The permittee must notify DEP before changing its source of cooling water.

E. The permittee shall retain data and other records for any information developed pursuant to Section 316(b) of the Clean Water Act for a minimum of ten (10) years.

F. The permittee shall operate and maintain the following technologies or BMPs that constitute Best Technology Available (BTA) for reducing impingement:

- 0.5 foot per second (fps) through-screen actual velocity. The permittee shall monitor the through-screen actual velocity once per week. In lieu of velocity monitoring, the permittee may calculate the through-screen velocity using water flow, water depth, and the screen open areas. The data shall be submitted on the Cooling Water Intake Monitoring Supplemental Report (3800-FM-BCW0010) as an attachment to monthly Discharge Monitoring Reports (DMRs).

G. The permittee shall operate and maintain the following technologies or BMPs that constitute Best Technology Available (BTA) for reducing entrainment:

- Maintenance of actual intake flow of 5% or less of the mean annual flow of the surface waters. The permittee shall monitor intake flows daily. The data shall be submitted on the Cooling Water Intake Monitoring Supplemental Report (3800-FM-BCW0010) as an attachment to monthly Discharge Monitoring Reports (DMRs).

The permittee shall notify DEP in writing at least seven (7) days prior to the resumption of use of the intake structure for cooling water withdrawals.

No other comments were received on the draft permit. Due to the changes made to the draft permit in response to comments, a revised draft permit will be published for a second thirty-day comment period.

Toxics Management Spreadsheet
Version 1.4, May 2023

Discharge Information

Instructions | Discharge | Stream

Facility: **BVPV Styrenics, LLC** NPDES Permit No.: **PA0006254** Outfall No.: **002**

Evaluation Type: **Major Sewage / Industrial Waste** Wastewater Description: **Treated process wastewater**

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
1.36	390	7.57						

	Discharge Pollutant	Units	Max Discharge Conc		Trib Conc (0 if left blank)	Stream Conc (0 if left blank)	Daily CV (0.5 if left blank)	Hourly CV (0.5 if left blank)	Stream CV (0 if left blank)	Fate Coeff (0 if left blank)	FOS (0 if left blank)	Criteria Mod (1 if left blank)	Chem Transl (1 if left blank)
Group 1	Total Dissolved Solids (PWS)	mg/L		730									
Group 1	Chloride (PWS)	mg/L		320									
Group 1	Bromide	mg/L		0.51									
Group 1	Sulfate (PWS)	mg/L		69									
Group 1	Fluoride (PWS)	mg/L		0.041									
Group 2	Total Aluminum	µg/L		71									
Group 2	Total Antimony	µg/L		3.3									
Group 2	Total Arsenic	µg/L		0.98									
Group 2	Total Barium	µg/L		13									
Group 2	Total Beryllium	µg/L	<	0.25									
Group 2	Total Boron	µg/L	<	63									
Group 2	Total Cadmium	µg/L	<	0.34									
Group 2	Total Chromium (III)	µg/L		2770									
Group 2	Hexavalent Chromium	µg/L	<	6									
Group 2	Total Cobalt	µg/L		0.29									
Group 2	Total Copper	µg/L		3380									
Group 2	Free Cyanide	µg/L	<	8									
Group 2	Total Cyanide	µg/L		1200									
Group 2	Dissolved Iron	µg/L		110									
Group 2	Total Iron	µg/L		110									
Group 2	Total Lead	µg/L		690									
Group 2	Total Manganese	µg/L		21									
Group 2	Total Mercury	µg/L		0.21									
Group 2	Total Nickel	µg/L		3980									
Group 2	Total Phenols (Phenolics) (PWS)	µg/L		45									
Group 2	Total Selenium	µg/L	<	1.2									
Group 2	Total Silver	µg/L	<	0.79									
Group 2	Total Thallium	µg/L	<	0.69									
Group 2	Total Zinc	µg/L		2610									
Group 2	Total Molybdenum	µg/L		1.9									
	Acrolein	µg/L	<	4.4									
	Acrylamide	µg/L	<	21									
	Acrylonitrile	µg/L		242									
	Benzene	µg/L		136									
	Bromoform	µg/L	<	0.98									

Group 3	Carbon Tetrachloride	µg/L		38									
	Chlorobenzene	µg/L		28									
	Chlorodibromomethane	µg/L	<	0.84									
	Chloroethane	µg/L		268									
	2-Chloroethyl Vinyl Ether	µg/L	<	1.7									
	Chloroform	µg/L		46									
	Dichlorobromomethane	µg/L	<	0.64									
	1,1-Dichloroethane	µg/L		59									
	1,2-Dichloroethane	µg/L		211									
	1,1-Dichloroethylene	µg/L		25									
	1,2-Dichloropropane	µg/L		230									
	1,3-Dichloropropylene	µg/L		44									
	1,4-Dioxane	µg/L	<	0.63									
	Ethylbenzene	µg/L		108									
	Methyl Bromide	µg/L	<	0.89									
	Methyl Chloride	µg/L		190									
	Methylene Chloride	µg/L		89									
	1,1,2,2-Tetrachloroethane	µg/L	<	0.6									
	Tetrachloroethylene	µg/L		56									
	Toluene	µg/L		80									
	1,2-trans-Dichloroethylene	µg/L		54									
	1,1,1-Trichloroethane	µg/L		54									
	1,1,2-Trichloroethane	µg/L		54									
	Trichloroethylene	µg/L		54									
	Vinyl Chloride	µg/L		268									
Group 4	2-Chlorophenol	µg/L		98									
	2,4-Dichlorophenol	µg/L		112									
	2,4-Dimethylphenol	µg/L		36									
	4,6-Dinitro-o-Cresol	µg/L		277									
	2,4-Dinitrophenol	µg/L		123									
	2-Nitrophenol	µg/L		69									
	4-Nitrophenol	µg/L		124									
	p-Chloro-m-Cresol	µg/L	<	0.44									
	Pentachlorophenol	µg/L	<	0.96									
	Phenol	µg/L		26			6.004						
	2,4,6-Trichlorophenol	µg/L	<	0.25									
Group 5	Acenaphthene	µg/L		59									
	Acenaphthylene	µg/L	<	59									
	Anthracene	µg/L		59									
	Benzidine	µg/L	<	10									
	Benzo(a)Anthracene	µg/L		59									
	Benzo(a)Pyrene	µg/L		61									
	3,4-Benzofluoranthene	µg/L		61									
	Benzo(ghi)Perylene	µg/L	<	0.078									
	Benzo(k)Fluoranthene	µg/L		59									
	Bis(2-Chloroethoxy)Methane	µg/L	<	0.17									
	Bis(2-Chloroethyl)Ether	µg/L	<	0.045									
	Bis(2-Chloroisopropyl)Ether	µg/L	<	0.066									
	Bis(2-Ethylhexyl)Phthalate	µg/L		279									
	4-Bromophenyl Phenyl Ether	µg/L	<	0.36									
	Butyl Benzyl Phthalate	µg/L	<	0.94									
	2-Chloronaphthalene	µg/L	<	0.067									
	4-Chlorophenyl Phenyl Ether	µg/L	<	0.25									
	Chrysene	µg/L		59									
	Dibenzo(a,h)Anthrancene	µg/L	<	0.082									
	1,2-Dichlorobenzene	µg/L		163									
	1,3-Dichlorobenzene	µg/L		44									
	1,4-Dichlorobenzene	µg/L		28									
	3,3-Dichlorobenzidine	µg/L	<	0.66									
	Diethyl Phthalate	µg/L		203									
	Dimethyl Phthalate	µg/L		47									
	Di-n-Butyl Phthalate	µg/L		57									
	2,4-Dinitrotoluene	µg/L		285									

	2,6-Dinitrotoluene	µg/L		641
	Di-n-Octyl Phthalate	µg/L	<	0.78
	1,2-Diphenylhydrazine	µg/L	<	0.22
	Fluoranthene	µg/L		68
	Fluorene	µg/L		59
	Hexachlorobenzene	µg/L		28
	Hexachlorobutadiene	µg/L		49
	Hexachlorocyclopentadiene	µg/L	<	0.56
	Hexachloroethane	µg/L		54
	Indeno(1,2,3-cd)Pyrene	µg/L	<	0.097
	Isophorone	µg/L	<	0.21
	Naphthalene	µg/L		59
	Nitrobenzene	µg/L		68
	n-Nitrosodimethylamine	µg/L	<	0.26
	n-Nitrosodi-n-Propylamine	µg/L	<	0.081
	n-Nitrosodiphenylamine	µg/L	<	0.14
	Phenanthrene	µg/L		59
	Pyrene	µg/L		67
	1,2,4-Trichlorobenzene	µg/L		140
Group 6	Aldrin	µg/L	<	0.031
	alpha-BHC	µg/L	<	0.025
	beta-BHC	µg/L	<	0.044
	gamma-BHC	µg/L	<	0.029
	delta BHC	µg/L	<	0.02
	Chlordane	µg/L	<	0.22
	4,4-DDT	µg/L	<	0.023
	4,4-DDE	µg/L	<	0.02
	4,4-DDD	µg/L	<	0.025
	Dieldrin	µg/L	<	0.031
	alpha-Endosulfan	µg/L	<	0.018
	beta-Endosulfan	µg/L	<	0.03
	Endosulfan Sulfate	µg/L	<	0.018
	Endrin	µg/L	<	0.031
	Endrin Aldehyde	µg/L	<	0.022
	Heptachlor	µg/L	<	0.039
	Heptachlor Epoxide	µg/L	<	0.03
	PCB-1016	µg/L	<	0.057
	PCB-1221	µg/L	<	0.058
	PCB-1232	µg/L	<	0.075
	PCB-1242	µg/L	<	0.077
	PCB-1248	µg/L	<	0.051
	PCB-1254	µg/L	<	0.04
	PCB-1260	µg/L	<	0.046
	PCBs, Total	µg/L	<	0.404
	Toxaphene	µg/L	<	0.28
	2,3,7,8-TCDD	ng/L	<	0.0000032
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		
	Cadmium (AFC)	µg/L	<	0.34
	Free Cyanide (AFC)	µg/L	<	8
	Mercury (AFC)	µg/L		0.21
	Bis(2-Ethylhexyl)Phthalate (AFC)	µg/L		103
	Benzo(a)Anthracene (AFC)	µg/L		59
	4,6-Dinitro-o-Cresol (AFC)	µg/L		277
	Hexachlorobutadiene (AFC)	µg/L		49
	Phenanthrene (AFC)	µg/L		59
	Lead (AFC)	µg/L		690
	Nickel (AFC)	µg/L		3980
	1,2,4-Trichlorobenzene (AFC)	µg/L		140

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Toxics Management Spreadsheet
Version 1.4, May 2023

Stream / Surface Water Information

BVPV Styrenics, LLC, NPDES Permit No. PA0006254, Outfall 002

Instructions | Discharge | Stream

Receiving Surface Water Name: **Raccoon Creek**

No. Reaches to Model: **1**

◉ Statewide Criteria
○ Great Lakes Criteria
○ ORSANCO Criteria

Location	Stream Code*	RMI*	Elevation (ft)*	DA (mi²)*	Slope (ft/ft)	PWS Withdrawal (MGD)	Apply Fish Criteria*
Point of Discharge	033564	0.24	683	184	0.0017		Yes
End of Reach 1	033564	0.01	682.5	184.5	0.0017		Yes

Q 7-10

Location	RMI	LFY (cfs/mi²)*	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	0.24	0.045				175.7	5.76					345	8.1		
End of Reach 1	0.01	0.045				175.7	5.76					345	8.1		

Q h

Location	RMI	LFY (cfs/mi²)	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	0.24														
End of Reach 1	0.01														

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Toxics Management Spreadsheet
Version 1.4, May 2023

Model Results

BVPV Styrenics, LLC, NPDES Permit No. PA0006254, Outfall 002

Instructions | Results | RETURN TO INPUTS | SAVE AS PDF | PRINT | ◉ All ○ Inputs ○ Results ○ Limits

☑ ***Hydrodynamics***

Q ***7-10***

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)
0.24	8.28		8.28	2.104	0.002	5.76	175.7	30.503	0.01	1.37	47.201
0.01	8.30		8.3025								

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)
0.24	47.14		47.14	2.104	0.002	11.425	175.7	15.379	0.025	0.573	24.353
0.01	47.247		47.25								

☑ ***Wasteload Allocations***

☑ ***AFC*** CCT (min): 15 PMF: 0.564 Analysis Hardness (mg/l): 358.98 Analysis pH: 7.86

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	
Fluoride (PWS)	0	0		0	N/A	N/A	N/A	
Total Aluminum	0	0		0	750	750	2,414	
Total Antimony	0	0		0	1,100	1,100	3,540	
Total Arsenic	0	0		0	340	340	1,094	Chem Translator of 1 applied
Total Barium	0	0		0	21,000	21,000	67,590	
Total Boron	0	0		0	8,100	8,100	26,070	
Total Cadmium	0	0		0	6.966	7.82	25.2	Chem Translator of 0.891 applied
Total Chromium (III)	0	0		0	1622.925	5,136	16,530	Chem Translator of 0.316 applied
Hexavalent Chromium	0	0		0	16	16.3	52.4	Chem Translator of 0.982 applied
Total Cobalt	0	0		0	95	95.0	306	
Total Copper	0	0		0	44.808	46.7	150	Chem Translator of 0.96 applied

Free Cyanide	0	0		0	22	22.0	70.8	
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	251.261	415	1,337	Chem Translator of 0.605 applied
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	1.400	1.65	5.3	Chem Translator of 0.85 applied
Total Nickel	0	0		0	1380.561	1,383	4,452	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	28.983	34.1	110	Chem Translator of 0.85 applied
Total Thallium	0	0		0	65	65.0	209	
Total Zinc	0	0		0	346.073	354	1,139	Chem Translator of 0.978 applied
Acrolein	0	0		0	3	3.0	9.66	
Acrylamide	0	0		0	N/A	N/A	N/A	
Acrylonitrile	0	0		0	650	650	2,092	
Benzene	0	0		0	640	640	2,060	
Bromoform	0	0		0	1,800	1,800	5,793	
Carbon Tetrachloride	0	0		0	2,800	2,800	9,012	
Chlorobenzene	0	0		0	1,200	1,200	3,862	
Chlorodibromomethane	0	0		0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0		0	18,000	18,000	57,934	
Chloroform	0	0		0	1,900	1,900	6,115	
Dichlorobromomethane	0	0		0	N/A	N/A	N/A	
1,2-Dichloroethane	0	0		0	15,000	15,000	48,278	
1,1-Dichloroethylene	0	0		0	7,500	7,500	24,139	
1,2-Dichloropropane	0	0		0	11,000	11,000	35,404	
1,3-Dichloropropylene	0	0		0	310	310	998	
Ethylbenzene	0	0		0	2,900	2,900	9,334	
Methyl Bromide	0	0		0	550	550	1,770	
Methyl Chloride	0	0		0	28,000	28,000	90,120	
Methylene Chloride	0	0		0	12,000	12,000	38,623	
1,1,2,2-Tetrachloroethane	0	0		0	1,000	1,000	3,219	
Tetrachloroethylene	0	0		0	700	700	2,253	
Toluene	0	0		0	1,700	1,700	5,472	
1,2-trans-Dichloroethylene	0	0		0	6,800	6,800	21,886	
1,1,1-Trichloroethane	0	0		0	3,000	3,000	9,656	
1,1,2-Trichloroethane	0	0		0	3,400	3,400	10,943	
Trichloroethylene	0	0		0	2,300	2,300	7,403	
Vinyl Chloride	0	0		0	N/A	N/A	N/A	
2-Chlorophenol	0	0		0	560	560	1,802	
2,4-Dichlorophenol	0	0		0	1,700	1,700	5,472	
2,4-Dimethylphenol	0	0		0	660	660	2,124	
4,6-Dinitro-o-Cresol	0	0		0	80	80.0	257	
2,4-Dinitrophenol	0	0		0	660	660	2,124	
2-Nitrophenol	0	0		0	8,000	8,000	25,748	
4-Nitrophenol	0	0		0	2,300	2,300	7,403	
p-Chloro-m-Cresol	0	0		0	160	160	515	
Pentachlorophenol	0	0		0	20.681	20.7	66.6	

Phenol	0	0		0	N/A	N/A	N/A	
2,4,6-Trichlorophenol	0	0		0	460	460	1,481	
Acenaphthene	0	0		0	83	83.0	267	
Anthracene	0	0		0	N/A	N/A	N/A	
Benzidine	0	0		0	300	300	966	
Benzo(a)Anthracene	0	0		0	0.5	0.5	1.61	
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	96,557	
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0		0	4,500	4,500	14,484	
4-Bromophenyl Phenyl Ether	0	0		0	270	270	869	
Butyl Benzyl Phthalate	0	0		0	140	140	451	
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	2,639	
1,3-Dichlorobenzene	0	0		0	350	350	1,126	
1,4-Dichlorobenzene	0	0		0	730	730	2,350	
3,3-Dichlorobenzidine	0	0		0	N/A	N/A	N/A	
Diethyl Phthalate	0	0		0	4,000	4,000	12,874	
Dimethyl Phthalate	0	0		0	2,500	2,500	8,046	
Di-n-Butyl Phthalate	0	0		0	110	110	354	
2,4-Dinitrotoluene	0	0		0	1,600	1,600	5,150	
2,6-Dinitrotoluene	0	0		0	990	990	3,186	
1,2-Diphenylhydrazine	0	0		0	15	15.0	48.3	
Fluoranthene	0	0		0	200	200	644	
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	32.2	
Hexachlorocyclopentadiene	0	0		0	5	5.0	16.1	
Hexachloroethane	0	0		0	60	60.0	193	
Indeno(1,2,3-cd)Pyrene	0	0		0	N/A	N/A	N/A	
Isophorone	0	0		0	10,000	10,000	32,186	
Naphthalene	0	0		0	140	140	451	
Nitrobenzene	0	0		0	4,000	4,000	12,874	
n-Nitrosodimethylamine	0	0		0	17,000	17,000	54,716	
n-Nitrosodi-n-Propylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodiphenylamine	0	0		0	300	300	966	
Phenanthrene	0	0		0	5	5.0	16.1	
Pyrene	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene	0	0		0	130	130	418	
Aldrin	0	0		0	3	3.0	9.66	
alpha-BHC	0	0		0	N/A	N/A	N/A	
beta-BHC	0	0		0	N/A	N/A	N/A	
gamma-BHC	0	0		0	0.95	0.95	3.06	
Chlordane	0	0		0	2.4	2.4	7.72	

4,4-DDT	0	0		0	1.1	1.1	3.54	
4,4-DDE	0	0		0	1.1	1.1	3.54	
4,4-DDD	0	0		0	1.1	1.1	3.54	
Dieldrin	0	0		0	0.24	0.24	0.77	
alpha-Endosulfan	0	0		0	0.22	0.22	0.71	
beta-Endosulfan	0	0		0	0.22	0.22	0.71	
Endosulfan Sulfate	0	0		0	N/A	N/A	N/A	
Endrin	0	0		0	0.086	0.086	0.28	
Endrin Aldehyde	0	0		0	N/A	N/A	N/A	
Heptachlor	0	0		0	0.52	0.52	1.67	
Heptachlor Epoxide	0	0		0	0.5	0.5	1.61	
PCBs, Total	0	0		0	N/A	N/A	N/A	
Toxaphene	0	0		0	0.73	0.73	2.35	
2,3,7,8-TCDD	0	0		0	N/A	N/A	N/A	
Cadmium (AFC)	0	0		0	8.08	8.08	26.0	
Free Cyanide (AFC)	0	0		0	22	22.0	70.8	
Mercury (AFC)	0	0		0	1.65	1.65	5.31	
Bis(2-Ethylhexyl)Phthalate (AFC)	0	0		0	4,500	4,500	14,484	
Benzo(a)Anthracene (AFC)	0	0		0	0.5	0.5	1.61	
4,6-Dinitro-o-Cresol (AFC)	0	0		0	80	80.0	257	
Hexachlorobutadiene (AFC)	0	0		0	10	10.0	32.2	
Phenanthrene (AFC)	0	0		0	5	5.0	16.1	
Lead (AFC)	0	0		0	415	415	1,336	
Nickel (AFC)	0	0		0	1418.1	1,418	4,564	
1,2,4-Trichlorobenzene (AFC)	0	0		0	130	130	418	

☑ ***CFC*** CCT (min): 47.201 PMF: 1 Analysis Hardness (mg/l): 354.12 Analysis pH: 7.93

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	
Fluoride (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	1,086	
Total Arsenic	0	0		0	150	150	740	Chem Translator of 1 applied
Total Barium	0	0		0	4,100	4,100	20,236	
Total Boron	0	0		0	1,600	1,600	7,897	
Total Cadmium	0	0		0	0.591	0.69	3.41	Chem Translator of 0.856 applied
Total Chromium (III)	0	0		0	208.764	243	1,198	Chem Translator of 0.86 applied
Hexavalent Chromium	0	0		0	10	10.4	51.3	Chem Translator of 0.962 applied
Total Cobalt	0	0		0	19	19.0	93.8	
Total Copper	0	0		0	26.384	27.5	136	Chem Translator of 0.96 applied
Free Cyanide	0	0		0	5.2	5.2	25.7	
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	1,500	1,500	7,403	WQC = 30 day average; PMF = 1

Total Lead	0	0		0	9.654	15.9	78.5	Chem Translator of 0.607 applied
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	0.770	0.91	4.47	Chem Translator of 0.85 applied
Total Nickel	0	0		0	151.578	152	750	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	24.6	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	64.2	
Total Zinc	0	0		0	344.894	350	1,726	Chem Translator of 0.986 applied
Acrolein	0	0		0	3	3.0	14.8	
Acrylamide	0	0		0	N/A	N/A	N/A	
Acrylonitrile	0	0		0	130	130	642	
Benzene	0	0		0	130	130	642	
Bromoform	0	0		0	370	370	1,826	
Carbon Tetrachloride	0	0		0	560	560	2,764	
Chlorobenzene	0	0		0	240	240	1,185	
Chlorodibromomethane	0	0		0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0		0	3,500	3,500	17,274	
Chloroform	0	0		0	390	390	1,925	
Dichlorobromomethane	0	0		0	N/A	N/A	N/A	
1,2-Dichloroethane	0	0		0	3,100	3,100	15,300	
1,1-Dichloroethylene	0	0		0	1,500	1,500	7,403	
1,2-Dichloropropane	0	0		0	2,200	2,200	10,858	
1,3-Dichloropropylene	0	0		0	61	61.0	301	
Ethylbenzene	0	0		0	580	580	2,863	
Methyl Bromide	0	0		0	110	110	543	
Methyl Chloride	0	0		0	5,500	5,500	27,145	
Methylene Chloride	0	0		0	2,400	2,400	11,845	
1,1,2,2-Tetrachloroethane	0	0		0	210	210	1,036	
Tetrachloroethylene	0	0		0	140	140	691	
Toluene	0	0		0	330	330	1,629	
1,2-trans-Dichloroethylene	0	0		0	1,400	1,400	6,910	
1,1,1-Trichloroethane	0	0		0	610	610	3,011	
1,1,2-Trichloroethane	0	0		0	680	680	3,356	
Trichloroethylene	0	0		0	450	450	2,221	
Vinyl Chloride	0	0		0	N/A	N/A	N/A	
2-Chlorophenol	0	0		0	110	110	543	
2,4-Dichlorophenol	0	0		0	340	340	1,678	
2,4-Dimethylphenol	0	0		0	130	130	642	
4,6-Dinitro-o-Cresol	0	0		0	16	16.0	79.0	
2,4-Dinitrophenol	0	0		0	130	130	642	
2-Nitrophenol	0	0		0	1,600	1,600	7,897	
4-Nitrophenol	0	0		0	470	470	2,320	
p-Chloro-m-Cresol	0	0		0	500	500	2,468	
Pentachlorophenol	0	0		0	15.867	15.9	78.3	

Phenol	0	0		0	N/A	N/A	N/A	
2,4,6-Trichlorophenol	0	0		0	91	91.0	449	
Acenaphthene	0	0		0	17	17.0	83.9	
Anthracene	0	0		0	N/A	N/A	N/A	
Benzidine	0	0		0	59	59.0	291	
Benzo(a)Anthracene	0	0		0	0.1	0.1	0.49	
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	29,613	
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0		0	910	910	4,491	
4-Bromophenyl Phenyl Ether	0	0		0	54	54.0	267	
Butyl Benzyl Phthalate	0	0		0	35	35.0	173	
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	790	
1,3-Dichlorobenzene	0	0		0	69	69.0	341	
1,4-Dichlorobenzene	0	0		0	150	150	740	
3,3-Dichlorobenzidine	0	0		0	N/A	N/A	N/A	
Diethyl Phthalate	0	0		0	800	800	3,948	
Dimethyl Phthalate	0	0		0	500	500	2,468	
Di-n-Butyl Phthalate	0	0		0	21	21.0	104	
2,4-Dinitrotoluene	0	0		0	320	320	1,579	
2,6-Dinitrotoluene	0	0		0	200	200	987	
1,2-Diphenylhydrazine	0	0		0	3	3.0	14.8	
Fluoranthene	0	0		0	40	40.0	197	
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	9.87	
Hexachlorocyclopentadiene	0	0		0	1	1.0	4.94	
Hexachloroethane	0	0		0	12	12.0	59.2	
Indeno(1,2,3-cd)Pyrene	0	0		0	N/A	N/A	N/A	
Isophorone	0	0		0	2,100	2,100	10,365	
Naphthalene	0	0		0	43	43.0	212	
Nitrobenzene	0	0		0	810	810	3,998	
n-Nitrosodimethylamine	0	0		0	3,400	3,400	16,781	
n-Nitrosodi-n-Propylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodiphenylamine	0	0		0	59	59.0	291	
Phenanthrene	0	0		0	1	1.0	4.94	
Pyrene	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene	0	0		0	26	26.0	128	
Aldrin	0	0		0	0.1	0.1	0.49	
alpha-BHC	0	0		0	N/A	N/A	N/A	

beta-BHC	0	0		0	N/A	N/A	N/A	
gamma-BHC	0	0		0	N/A	N/A	N/A	
Chlordane	0	0		0	0.0043	0.004	0.021	
4,4-DDT	0	0		0	0.001	0.001	0.005	
4,4-DDE	0	0		0	0.001	0.001	0.005	
4,4-DDD	0	0		0	0.001	0.001	0.005	
Dieldrin	0	0		0	0.056	0.056	0.28	
alpha-Endosulfan	0	0		0	0.056	0.056	0.28	
beta-Endosulfan	0	0		0	0.056	0.056	0.28	
Endosulfan Sulfate	0	0		0	N/A	N/A	N/A	
Endrin	0	0		0	0.036	0.036	0.18	
Endrin Aldehyde	0	0		0	N/A	N/A	N/A	
Heptachlor	0	0		0	0.0038	0.004	0.019	
Heptachlor Epoxide	0	0		0	0.0038	0.004	0.019	
PCBs, Total	0	0		0	0.014	0.014	0.069	
Toxaphene	0	0		0	0.0002	0.0002	0.001	
2,3,7,8-TCDD	0	0		0	N/A	N/A	N/A	
Cadmium (AFC)	0	0		0	N/A	N/A	N/A	
Free Cyanide (AFC)	0	0		0	N/A	N/A	N/A	
Mercury (AFC)	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate (AFC)	0	0		0	N/A	N/A	N/A	
Benzo(a)Anthracene (AFC)	0	0		0	N/A	N/A	N/A	
4,6-Dinitro-o-Cresol (AFC)	0	0		0	N/A	N/A	N/A	
Hexachlorobutadiene (AFC)	0	0		0	N/A	N/A	N/A	
Phenanthrene (AFC)	0	0		0	N/A	N/A	N/A	
Lead (AFC)	0	0		0	N/A	N/A	N/A	
Nickel (AFC)	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene (AFC)	0	0		0	N/A	N/A	N/A	

☑ ***THH*** CCT (min): 47.201 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	
Fluoride (PWS)	0	0		0	2,000	2,000	N/A	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	5.6	5.6	27.6	
Total Arsenic	0	0		0	10	10.0	49.4	
Total Barium	0	0		0	2,400	2,400	11,845	
Total Boron	0	0		0	3,100	3,100	15,300	
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	19.7	
Dissolved Iron	0	0		0	300	300	1,481	
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	4,936	
Total Mercury	0	0		0	0.050	0.05	0.25	
Total Nickel	0	0		0	610	610	3,011	
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	1.18	
Total Zinc	0	0		0	N/A	N/A	N/A	
Acrolein	0	0		0	3	3.0	14.8	
Acrylamide	0	0		0	N/A	N/A	N/A	
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	494	
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	28.1	
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	163	
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	336	
Methyl Bromide	0	0		0	100	100.0	494	
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	281	
1,2-trans-Dichloroethylene	0	0		0	100	100.0	494	
1,1,1-Trichloroethane	0	0		0	10,000	10,000	49,355	
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	148	
2,4-Dichlorophenol	0	0		0	10	10.0	49.4	
2,4-Dimethylphenol	0	0		0	100	100.0	494	
4,6-Dinitro-o-Cresol	0	0		0	2	2.0	9.87	

2,4-Dinitrophenol	0	0		0	10	10.0	49.4	
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	19,742	
2,4,6-Trichlorophenol	0	0		0	N/A	N/A	N/A	
Acenaphthene	0	0		0	70	70.0	345	
Anthracene	0	0		0	300	300	1,481	
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	987	
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	0.49	
2-Chloronaphthalene	0	0		0	800	800	3,948	
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	4,936	
1,3-Dichlorobenzene	0	0		0	7	7.0	34.5	
1,4-Dichlorobenzene	0	0		0	300	300	1,481	
3,3-Dichlorobenzidine	0	0		0	N/A	N/A	N/A	
Diethyl Phthalate	0	0		0	600	600	2,961	
Dimethyl Phthalate	0	0		0	2,000	2,000	9,871	
Di-n-Butyl Phthalate	0	0		0	20	20.0	98.7	
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	98.7	
Fluorene	0	0		0	50	50.0	247	
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	19.7	
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	168	
Naphthalene	0	0		0	N/A	N/A	N/A	
Nitrobenzene	0	0		0	10	10.0	49.4	
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	98.7	
1,2,4-Trichlorobenzene	0	0		0	0.07	0.07	0.35	
Aldrin	0	0		0	N/A	N/A	N/A	
alpha-BHC	0	0		0	N/A	N/A	N/A	
beta-BHC	0	0		0	N/A	N/A	N/A	
gamma-BHC	0	0		0	4.2	4.2	20.7	
Chlordane	0	0		0	N/A	N/A	N/A	
4,4-DDT	0	0		0	N/A	N/A	N/A	
4,4-DDE	0	0		0	N/A	N/A	N/A	
4,4-DDD	0	0		0	N/A	N/A	N/A	
Dieldrin	0	0		0	N/A	N/A	N/A	
alpha-Endosulfan	0	0		0	20	20.0	98.7	
beta-Endosulfan	0	0		0	20	20.0	98.7	
Endosulfan Sulfate	0	0		0	20	20.0	98.7	
Endrin	0	0		0	0.03	0.03	0.15	
Endrin Aldehyde	0	0		0	1	1.0	4.94	
Heptachlor	0	0		0	N/A	N/A	N/A	
Heptachlor Epoxide	0	0		0	N/A	N/A	N/A	
PCBs, Total	0	0		0	N/A	N/A	N/A	
Toxaphene	0	0		0	N/A	N/A	N/A	
2,3,7,8-TCDD	0	0		0	N/A	N/A	N/A	
Cadmium (AFC)	0	0		0	N/A	N/A	N/A	
Free Cyanide (AFC)	0	0		0	N/A	N/A	N/A	
Mercury (AFC)	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate (AFC)	0	0		0	N/A	N/A	N/A	
Benzo(a)Anthracene (AFC)	0	0		0	N/A	N/A	N/A	
4,6-Dinitro-o-Cresol (AFC)	0	0		0	N/A	N/A	N/A	
Hexachlorobutadiene (AFC)	0	0		0	N/A	N/A	N/A	
Phenanthrene (AFC)	0	0		0	N/A	N/A	N/A	
Lead (AFC)	0	0		0	N/A	N/A	N/A	
Nickel (AFC)	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene (AFC)	0	0		0	N/A	N/A	N/A	

☑ ***CRL*** CCT (min): 24.353 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	
Fluoride (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		
Acrylamide	0	0		0	0.07	0.07	1.64		
Acrylonitrile	0	0		0	0.06	0.06	1.4		
Benzene	0	0		0	0.58	0.58	13.6		
Bromoform	0	0		0	7	7.0	164		
Carbon Tetrachloride	0	0		0	0.4	0.4	9.36		
Chlorobenzene	0	0		0	N/A	N/A	N/A		
Chlorodibromomethane	0	0		0	0.8	0.8	18.7		
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	22.2		
1,2-Dichloroethane	0	0		0	9.9	9.9	232		
1,1-Dichloroethylene	0	0		0	N/A	N/A	N/A		
1,2-Dichloropropane	0	0		0	0.9	0.9	21.1		
1,3-Dichloropropylene	0	0		0	0.27	0.27	6.32		
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	468		
1,1,2,2-Tetrachloroethane	0	0		0	0.2	0.2	4.68		
Tetrachloroethylene	0	0		0	10	10.0	234		
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	12.9		
Trichloroethylene	0	0		0	0.6	0.6	14.0		

Vinyl Chloride	0	0		0	0.02	0.02	0.47	
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	0.7	
Phenol	0	0		0	N/A	N/A	N/A	
2,4,6-Trichlorophenol	0	0		0	1.5	1.5	35.1	
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	0.002	
Benzo(a)Anthracene	0	0		0	0.001	0.001	0.023	
Benzo(a)Pyrene	0	0		0	0.0001	0.0001	0.002	
3,4-Benzofluoranthene	0	0		0	0.001	0.001	0.023	
Benzo(k)Fluoranthene	0	0		0	0.01	0.01	0.23	
Bis(2-Chloroethyl)Ether	0	0		0	0.03	0.03	0.7	
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0		0	0.32	0.32	7.49	
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	2.81	
Dibenzo(a,h)Anthrancene	0	0		0	0.0001	0.0001	0.002	
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	1.17	
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	1.17	
2,6-Dinitrotoluene	0	0		0	0.05	0.05	1.17	
1,2-Diphenylhydrazine	0	0		0	0.03	0.03	0.7	
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	0.002	
Hexachlorobutadiene	0	0		0	0.01	0.01	0.23	
Hexachlorocyclopentadiene	0	0		0	N/A	N/A	N/A	
Hexachloroethane	0	0		0	0.1	0.1	2.34	
Indeno(1,2,3-cd)Pyrene	0	0		0	0.001	0.001	0.023	
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	0.016	
n-Nitrosodi-n-Propylamine	0	0		0	0.005	0.005	0.12	
n-Nitrosodiphenylamine	0	0		0	3.3	3.3	77.2	
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	
Aldrin	0	0		0	0.0000008	8.00E-07	0.00002	
alpha-BHC	0	0		0	0.0004	0.0004	0.009	
beta-BHC	0	0		0	0.008	0.008	0.19	
gamma-BHC	0	0		0	N/A	N/A	N/A	
Chlordane	0	0		0	0.0003	0.0003	0.007	
4,4-DDT	0	0		0	0.00003	0.00003	0.0007	
4,4-DDE	0	0		0	0.00002	0.00002	0.0005	
4,4-DDD	0	0		0	0.0001	0.0001	0.002	
Dieldrin	0	0		0	0.000001	0.000001	0.00002	
alpha-Endosulfan	0	0		0	N/A	N/A	N/A	
beta-Endosulfan	0	0		0	N/A	N/A	N/A	
Endosulfan Sulfate	0	0		0	N/A	N/A	N/A	
Endrin	0	0		0	N/A	N/A	N/A	
Endrin Aldehyde	0	0		0	N/A	N/A	N/A	
Heptachlor	0	0		0	0.000006	0.000006	0.0001	
Heptachlor Epoxide	0	0		0	0.00003	0.00003	0.0007	
PCBs, Total	0	0		0	0.000064	0.00006	0.001	
Toxaphene	0	0		0	0.0007	0.0007	0.016	
2,3,7,8-TCDD	0	0		0	5E-09	5.00E-09	1.17E-07	
Cadmium (AFC)	0	0		0	N/A	N/A	N/A	
Free Cyanide (AFC)	0	0		0	N/A	N/A	N/A	
Mercury (AFC)	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate (AFC)	0	0		0	N/A	N/A	N/A	
Benzo(a)Anthracene (AFC)	0	0		0	N/A	N/A	N/A	
4,6-Dinitro-o-Cresol (AFC)	0	0		0	N/A	N/A	N/A	
Hexachlorobutadiene (AFC)	0	0		0	N/A	N/A	N/A	
Phenanthrene (AFC)	0	0		0	N/A	N/A	N/A	
Lead (AFC)	0	0		0	N/A	N/A	N/A	
Nickel (AFC)	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene (AFC)	0	0		0	N/A	N/A	N/A	

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

No. Samples/Month: 4

Pollutants	Mass Limits		Concentration Limits				Governing	WQBEL	Comments
	AML	MDL	AML	MDL	IMAX	Units			

Pollutants	(lbs/day)	(lbs/day)	AML	MDL	IMAX	Units	WQBEL	Basis	Comments
Total Antimony	Report	Report	Report	Report	Report	µg/L	27.6	THH	Discharge Conc > 10% WQBEL (no RP)
Total Chromium (III)	13.6	21.2	1,198	1,869	2,995	µg/L	1,198	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Hexavalent Chromium	Report	Report	Report	Report	Report	µg/L	33.6	AFC	Discharge Conc > 10% WQBEL (no RP)
Total Copper	1.09	1.7	96.3	150	241	µg/L	96.3	AFC	Discharge Conc ≥ 50% WQBEL (RP)
Free Cyanide	Report	Report	Report	Report	Report	µg/L	19.7	THH	Discharge Conc > 25% WQBEL (no RP)
Total Lead	0.89	1.39	78.5	123	196	µg/L	78.5	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Total Mercury	0.003	0.004	0.25	0.39	0.62	µg/L	0.25	THH	Discharge Conc ≥ 50% WQBEL (RP)
Total Nickel	8.51	13.3	750	1,171	1,876	µg/L	750	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Total Zinc	8.28	12.9	730	1,139	1,825	µg/L	730	AFC	Discharge Conc ≥ 50% WQBEL (RP)
Acrolein	0.07	0.11	6.19	9.66	15.5	µg/L	6.19	AFC	Discharge Conc ≥ 50% WQBEL (RP)
Acrylamide	0.019	0.029	1.64	2.56	4.1	µg/L	1.64	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Acrylonitrile	0.016	0.025	1.4	2.19	3.51	µg/L	1.4	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Benzene	0.15	0.24	13.6	21.2	33.9	µg/L	13.6	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Carbon Tetrachloride	0.11	0.17	9.36	14.6	23.4	µg/L	9.36	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Chloroform	0.32	0.5	28.1	43.9	70.3	µg/L	28.1	THH	Discharge Conc ≥ 50% WQBEL (RP)
1,2-Dichloroethane	2.63	4.1	232	361	579	µg/L	232	CRL	Discharge Conc ≥ 50% WQBEL (RP)
1,2-Dichloropropane	0.24	0.37	21.1	32.9	52.7	µg/L	21.1	CRL	Discharge Conc ≥ 50% WQBEL (RP)
1,3-Dichloropropylene	0.072	0.11	6.32	9.86	15.8	µg/L	6.32	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Ethylbenzene	Report	Report	Report	Report	Report	µg/L	336	THH	Discharge Conc > 25% WQBEL (no RP)
Toluene	Report	Report	Report	Report	Report	µg/L	281	THH	Discharge Conc > 25% WQBEL (no RP)
1,1,2-Trichloroethane	0.15	0.23	12.9	20.1	32.2	µg/L	12.9	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Trichloroethylene	0.16	0.25	14.0	21.9	35.1	µg/L	14.0	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Vinyl Chloride	0.005	0.008	0.47	0.73	1.17	µg/L	0.47	CRL	Discharge Conc ≥ 50% WQBEL (RP)
2-Chlorophenol	1.68	2.62	148	231	370	µg/L	148	THH	Discharge Conc ≥ 50% WQBEL (RP)
2,4-Dichlorophenol	0.56	0.87	49.4	77.0	123	µg/L	49.4	THH	Discharge Conc ≥ 50% WQBEL (RP)
4,6-Dinitro-o-Cresol	0.11	0.17	9.87	15.4	24.7	µg/L	9.87	THH	Discharge Conc ≥ 50% WQBEL (RP)
2,4-Dinitrophenol	0.56	0.87	49.4	77.0	123	µg/L	49.4	THH	Discharge Conc ≥ 50% WQBEL (RP)
Acenaphthene	0.95	1.48	83.9	131	210	µg/L	83.9	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Benzo(a)Anthracene	0.0003	0.0004	0.023	0.037	0.059	µg/L	0.023	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Benzo(a)Pyrene	0.00003	0.00004	0.002	0.004	0.006	µg/L	0.002	CRL	Discharge Conc ≥ 50% WQBEL (RP)
3,4-Benzofluoranthene	0.0003	0.0004	0.023	0.037	0.059	µg/L	0.023	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Benzo(k)Fluoranthene	0.003	0.004	0.23	0.37	0.59	µg/L	0.23	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Bis(2-Ethylhexyl)Phthalate	0.085	0.13	7.49	11.7	18.7	µg/L	7.49	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Chrysene	0.032	0.05	2.81	4.38	7.02	µg/L	2.81	CRL	Discharge Conc ≥ 50% WQBEL (RP)
1,3-Dichlorobenzene	0.39	0.61	34.5	53.9	86.4	µg/L	34.5	THH	Discharge Conc ≥ 50% WQBEL (RP)
Di-n-Butyl Phthalate	1.12	1.75	98.7	154	247	µg/L	98.7	THH	Discharge Conc ≥ 50% WQBEL (RP)
2,4-Dinitrotoluene	0.013	0.021	1.17	1.83	2.93	µg/L	1.17	CRL	Discharge Conc ≥ 50% WQBEL (RP)
2,6-Dinitrotoluene	0.013	0.021	1.17	1.83	2.93	µg/L	1.17	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Fluoranthene	1.12	1.75	98.7	154	247	µg/L	98.7	THH	Discharge Conc ≥ 50% WQBEL (RP)
Hexachlorobenzene	0.00002	0.00003	0.002	0.003	0.005	µg/L	0.002	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Hexachlorobutadiene	0.003	0.004	0.23	0.37	0.59	µg/L	0.23	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Hexachloroethane	0.027	0.041	2.34	3.65	5.85	µg/L	2.34	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Naphthalene	Report	Report	Report	Report	Report	µg/L	212	CFC	Discharge Conc > 25% WQBEL (no RP)
Nitrobenzene	0.56	0.87	49.4	77.0	123	µg/L	49.4	THH	Discharge Conc ≥ 50% WQBEL (RP)

Phenanthrene	0.056	0.087	4.94	7.7	12.3	µg/L	4.94	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Pyrene	1.12	1.75	98.7	154	247	µg/L	98.7	THH	Discharge Conc ≥ 50% WQBEL (RP)
1,2,4-Trichlorobenzene	0.004	0.006	0.35	0.54	0.86	µg/L	0.35	THH	Discharge Conc ≥ 50% WQBEL (RP)
Benzo(a)Anthracene (AFC)	0.012	0.018	1.03	1.61	2.58	µg/L	1.03	AFC	Discharge Conc ≥ 50% WQBEL (RP)
4,6-Dinitro-o-Cresol (AFC)	1.87	2.92	165	257	413	µg/L	165	AFC	Discharge Conc ≥ 50% WQBEL (RP)
Hexachlorobutadiene (AFC)	0.23	0.37	20.6	32.2	51.6	µg/L	20.6	AFC	Discharge Conc ≥ 50% WQBEL (RP)
Phenanthrene (AFC)	0.12	0.18	10.3	16.1	25.8	µg/L	10.3	AFC	Discharge Conc ≥ 50% WQBEL (RP)
Lead (AFC)	9.71	15.2	856	1,336	2,140	µg/L	856	AFC	Discharge Conc ≥ 50% WQBEL (RP)
Nickel (AFC)	33.2	51.8	2,925	4,564	7,314	µg/L	2,925	AFC	Discharge Conc ≥ 50% WQBEL (RP)
1,2,4-Trichlorobenzene (AFC)	3.04	4.75	268	418	670	µg/L	268	AFC	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
Fluoride (PWS)	N/A	N/A	PWS Not Applicable
Total Aluminum	1,547	µg/L	Discharge Conc ≤ 10% WQBEL
Total Arsenic	49.4	µg/L	Discharge Conc ≤ 10% WQBEL
Total Barium	11,845	µg/L	Discharge Conc ≤ 10% WQBEL
Total Beryllium	N/A	N/A	No WQS
Total Boron	7,897	µg/L	Discharge Conc < TQL
Total Cadmium	3.41	µg/L	Discharge Conc ≤ 10% WQBEL
Total Cobalt	93.8	µg/L	Discharge Conc ≤ 10% WQBEL
Total Cyanide	N/A	N/A	No WQS
Dissolved Iron	1,481	µg/L	Discharge Conc ≤ 10% WQBEL
Total Iron	7,403	µg/L	Discharge Conc ≤ 10% WQBEL
Total Manganese	4,936	µg/L	Discharge Conc ≤ 10% WQBEL
Total Phenols (Phenolics) (PWS)		µg/L	PWS Not Applicable
Total Selenium	24.6	µg/L	Discharge Conc < TQL
Total Silver	70.3	µg/L	Discharge Conc ≤ 10% WQBEL
Total Thallium	1.18	µg/L	Discharge Conc < TQL
Total Molybdenum	N/A	N/A	No WQS
Bromoform	164	µg/L	Discharge Conc ≤ 25% WQBEL
Chlorobenzene	494	µg/L	Discharge Conc ≤ 25% WQBEL
Chlorodibromomethane	18.7	µg/L	Discharge Conc ≤ 25% WQBEL
Chloroethane	N/A	N/A	No WQS

2-Chloroethyl Vinyl Ether	17,274	µg/L	Discharge Conc < TQL
Dichlorobromomethane	22.2	µg/L	Discharge Conc ≤ 25% WQBEL
1,1-Dichloroethane	N/A	N/A	No WQS
1,1-Dichloroethylene	163	µg/L	Discharge Conc ≤ 25% WQBEL
1,4-Dioxane	N/A	N/A	No WQS
Methyl Bromide	494	µg/L	Discharge Conc ≤ 25% WQBEL
Methyl Chloride	27,145	µg/L	Discharge Conc ≤ 25% WQBEL
Methylene Chloride	468	µg/L	Discharge Conc ≤ 25% WQBEL
1,1,2,2-Tetrachloroethane	4.68	µg/L	Discharge Conc ≤ 25% WQBEL
Tetrachloroethylene	234	µg/L	Discharge Conc ≤ 25% WQBEL
1,2-trans-Dichloroethylene	494	µg/L	Discharge Conc ≤ 25% WQBEL
1,1,1-Trichloroethane	3,011	µg/L	Discharge Conc ≤ 25% WQBEL
2,4-Dimethylphenol	494	µg/L	Discharge Conc ≤ 25% WQBEL
2-Nitrophenol	7,897	µg/L	Discharge Conc ≤ 25% WQBEL
4-Nitrophenol	2,320	µg/L	Discharge Conc ≤ 25% WQBEL
p-Chloro-m-Cresol	330	µg/L	Discharge Conc < TQL
Pentachlorophenol	0.7	µg/L	Discharge Conc < TQL
Phenol	19,742	µg/L	Discharge Conc ≤ 25% WQBEL
2,4,6-Trichlorophenol	35.1	µg/L	Discharge Conc < TQL
Acenaphthylene	N/A	N/A	No WQS
Anthracene	1,481	µg/L	Discharge Conc ≤ 25% WQBEL
Benzidine	0.002	µg/L	Discharge Conc < TQL
Benzo(ghi)Perylene	N/A	N/A	No WQS
Bis(2-Chloroethoxy)Methane	N/A	N/A	No WQS
Bis(2-Chloroethyl)Ether	0.7	µg/L	Discharge Conc < TQL
Bis(2-Chloroisopropyl)Ether	987	µg/L	Discharge Conc < TQL
4-Bromophenyl Phenyl Ether	267	µg/L	Discharge Conc < TQL
Butyl Benzyl Phthalate	0.49	µg/L	Discharge Conc < TQL
2-Chloronaphthalene	3,948	µg/L	Discharge Conc < TQL
4-Chlorophenyl Phenyl Ether	N/A	N/A	No WQS
Dibenzo(a,h)Anthrancene	0.002	µg/L	Discharge Conc < TQL
1,2-Dichlorobenzene	790	µg/L	Discharge Conc ≤ 25% WQBEL
1,4-Dichlorobenzene	740	µg/L	Discharge Conc ≤ 25% WQBEL
3,3-Dichlorobenzidine	1.17	µg/L	Discharge Conc < TQL
Diethyl Phthalate	2,961	µg/L	Discharge Conc ≤ 25% WQBEL
Dimethyl Phthalate	2,468	µg/L	Discharge Conc ≤ 25% WQBEL
Di-n-Octyl Phthalate	N/A	N/A	No WQS
1,2-Diphenylhydrazine	0.7	µg/L	Discharge Conc < TQL
Fluorene	247	µg/L	Discharge Conc ≤ 25% WQBEL
Hexachlorocyclopentadiene	4.94	µg/L	Discharge Conc < TQL
Indeno(1,2,3-cd)Pyrene	0.023	µg/L	Discharge Conc < TQL
Isophorone	168	µg/L	Discharge Conc < TQL
n-Nitrosodimethylamine	0.016	µg/L	Discharge Conc < TQL
n-Nitrosodi-n-Propylamine	0.12	µg/L	Discharge Conc < TQL
n-Nitrosodiphenylamine	77.2	µg/L	Discharge Conc < TQL

Aldrin	0.00002	µg/L	Discharge Conc < TQL
alpha-BHC	0.009	µg/L	Discharge Conc < TQL
beta-BHC	0.19	µg/L	Discharge Conc < TQL
gamma-BHC	1.96	µg/L	Discharge Conc < TQL
delta BHC	N/A	N/A	No WQS
Chlordane	0.007	µg/L	Discharge Conc < TQL
4,4-DDT	0.0007	µg/L	Discharge Conc < TQL
4,4-DDE	0.0005	µg/L	Discharge Conc < TQL
4,4-DDD	0.002	µg/L	Discharge Conc < TQL
Dieldrin	0.00002	µg/L	Discharge Conc < TQL
alpha-Endosulfan	0.28	µg/L	Discharge Conc < TQL
beta-Endosulfan	0.28	µg/L	Discharge Conc < TQL
Endosulfan Sulfate	98.7	µg/L	Discharge Conc < TQL
Endrin	0.15	µg/L	Discharge Conc < TQL
Endrin Aldehyde	4.94	µg/L	Discharge Conc < TQL
Heptachlor	0.0001	µg/L	Discharge Conc < TQL
Heptachlor Epoxide	0.0007	µg/L	Discharge Conc < TQL
PCB-1016	N/A	N/A	No WQS
PCB-1221	N/A	N/A	No WQS
PCB-1232	N/A	N/A	No WQS
PCB-1242	N/A	N/A	No WQS
PCB-1248	N/A	N/A	No WQS
PCB-1254	N/A	N/A	No WQS
PCB-1260	N/A	N/A	No WQS
PCBs, Total	0.001	µg/L	Discharge Conc < TQL
Toxaphene	0.001	µg/L	Discharge Conc < TQL
2,3,7,8-TCDD	0.0001	ng/L	Discharge Conc < TQL
Cadmium (AFC)	16.7	µg/L	Discharge Conc ≤ 10% WQBEL
Free Cyanide (AFC)	45.4	µg/L	Discharge Conc ≤ 25% WQBEL
Mercury (AFC)	3.4	µg/L	Discharge Conc ≤ 10% WQBEL
Bis(2-Ethylhexyl)Phthalate (AFC)	9,283	µg/L	Discharge Conc ≤ 25% WQBEL