pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NORTHCENTRAL REGIONAL OFFICE
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET ADDENDUM

Application Type	**New**	Application No.	**PA0233102**
Facility Type	**Industrial**	APS ID	**1034810**
Major / Minor	**Minor**	Authorization ID	**1347364**

Applicant and Facility Information

Applicant Name	**Danzer Veneer Americas, Inc.**	Facility Name	**Danzer Veneer Americas**
Applicant Address	240 N Reach Road	Facility Address	240 N Reach Road
	Williamsport, PA 17701-9101		Williamsport, PA 17701-9101
Applicant Contact	Kevin Falkingham	Facility Contact	Kevin Falkingham
Applicant Phone	(570) 322-4400	Facility Phone	(570) 322-4400
Client ID	287869	Site ID	555406
SIC Code	2435	Municipality	Williamsport City
SIC Description	Manufacturing - Hardwood Veneer And Plywood	County	Lycoming
Date Published in PA Bulletin	May 22, 2021	EPA Waived?	Yes
Comment Period End Date	July 5, 2021 (15-day extension)	If No, Reason	

Purpose of Application: New industrial waste permit to replace existing stormwater permit (PAR224839).

Internal Review and Recommendations

DEP is in receipt of comments from the permittee dated June 28, 2021. The summarized comments and DEP's responses are as follows:

1. **Comment:** Based on information provided to the Department since receipt of the draft permit, and associated communication from the Department, Danzer understands that the effluent limits and monitoring requirements for the following pollutants will not be contained in the final NPDES Permit: 1,3 Dichloropropylene, chlorodibromomethane, 1,1,2,2 tetrachloroethane, hexachlorobutadiene, vinyl chloride, silver, carbon tetrachloride, 1,1,2 trichloroethane, methyl chloride, and tetrachloroethylene.

   Response: Based on the submitted lab results and corrected pollutant groups, DEP agrees that effluent limits and monitoring requirements for the above pollutants are not necessary to protect the receiving water.

2. **Comment:** Acrylamide was not sampled as part of the initial NPDES permit application sampling, as this was an oversight by our contract laboratory. Since the draft permit was issued, Danzer has sampled for Acrylamide and the result was reported by the contract laboratory as non-detect (< 10 mg/L). Acrylamide is not part of Danzer operations, and we have no reason to believe acrylamide would be present in the discharge.

   Response: Based on the non-detect results and no reason to believe that acrylamide would be present in wastewaterproduced by the wet decking process, DEP agrees that no requirements are necessary for acrylamide.

Approve	Return	Deny	Signatures	Date
X			*Derek S. Garner* Derek S. Garner / Project Manager	July 16, 2021
X			*Nicholas W. Hartranft* Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	July 16, 2021

Internal Review and Recommendations

3. **Comment:** Danzer has recalculated the maximum wet decking water usage to be 0.0447 MGD, versus the 0.0282 MGD reported in the application.

   Response: DEP has used the revised maximum flow of 0.0447 MGD in the development of effluent limits.

4. **Comment:** Using the revised maximum flow of 0.0447 MGD results in a new effluent limit recommendation for butyl benzyl phthalate. Given that butyl benzyl phthalate is not a compound used by Danzer, phthalate esters are common contaminates in the environmental monitoring process, the compound is not otherwise expected to be present in the discharge, and that limited monitoring data are available, Danzer proposes DEP establish a "Part C" condition with the concept of gathering data while making efforts to minimize potential contamination. The proposal is as follows:

   - For the first twenty-four months following the permit effective date, the permittee must analyze the Outfall 001 discharge for butyl benzyl phthalate at a frequency of once every two months. The analysis must be conducted using an analytical method(s) approved under 40 CFR 136.
   - The permittee must take appropriate steps in sampling the analysis of butyl benzyl phthalate to reduce the potential for contamination from the environmental process.
   - Twenty-five months from the permit effective date, the permittee must submit a summary of Outfall 001 monitoring data for butyl benzyl phthalate collected during the first 24 months of the NPDES permit to the PADEP Northcentral Regional Office, along with a description of the steps taken to reduce the potential for contamination from the environmental monitoring process.
   - Upon receipt of the monitoring data and information submitted under this requirement, the Department may take action to modify the NPDES permit to contain a schedule for achieving compliance with a WQBEL(s) for butyl benzyl phthalate.

   Response: DEP does not object to Danzer's proposed plan to complete and submit a summary report following the first 24 months of quarterly sampling for butyl benzyl phthalate. However, DEP does not believe it is appropriate to memorialize the proposal as a permit condition. If after 24 months, or anytime during the permit's termthereafter, Danzer feels that sufficient data has been collected regarding butyl benzyl phthalate, then a summary report may be prepared and made part of an application to amend the permit. Upon receipt of an amendment application, DEP would then review the summary report and make a decision regarding the butyl benzyl phthalate requirements.

5. **Comment:** Danzer may not be able to immediately comply with proposed effluent limits for total residual chlorine, total aluminum, total lead, and acrolein. Danzer requests a four-year compliance schedule to achieve the WQBELs.

   Response: DEP does not object to establishing a 4-year compliance schedule in the permit to avoid immediate noncompliance. The schedule, proposed at Part C.II., is as follows:

   A. The permittee shall achieve compliance with final effluent limitations for total residual chlorine, total aluminum, total lead, and acrolein or terminate this discharge in accordance with the following schedule:

Quarterly Updates/Progress Reports	Quarterly from Permit Effective Date to Final Compliance
Compliance with effluent limitations	October 1, 2025

   B. The permittee shall notify DEP in writing if it at any point during the above schedule the effluent limits can be achieved before October 1, 2025 so that DEP may amend the permit to require immediate compliance.

   C. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit to DEP a written notice of compliance or non-compliance with the specific schedule requirement. Each notice of non-compliance shall include the following information:

Internal Review and Recommendations

1. A short description of the non-compliance.

2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement.

3. A description of any factors which tend to explain or mitigate the non-compliance.

4. An estimate of the date that compliance with the elapsed schedule requirement will be achieved and an assessment of the probability that the next scheduled requirement will be met on time.

6. **Comment:** The Outfall 001 "required sample type" for flow is listed as "calculated" in the draft permit. Danzer presumes that this requirement means that the flow rate calculation method provided with NPDES application and associated communications is adequate for reporting and for calculation of mass discharges for comparison to the mass effluent limits. Please confirm our understanding.

   Response: DEP believes that the flow rate calculation method provided with the NPDES application and associated communications is an appropriate method for reporting flow and mass. If Danzer wishes to use an alternate method, such as a meter or pump rate, DEP would be amenable to modifying the permit accordingly.

No comments were received from the public. An internal review of the draft permit did not yield any comments.

SUMMARY OF CHANGES

1. Effluent limits and monitoring requirements for 1,3 Dichloropropylene, chlorodibromomethane, 1,1,2,2 tetrachloroethane, hexachlorobutadiene, vinyl chloride, silver, carbon tetrachloride, 1,1,2 trichloroethane, methyl chloride, and tetrachloroethylene have been removed from the permit. The summarized sample results included with the application were incorrect, leading to the recommendation for limits or monitoring requirements for several parameters. Upon review of the actual lab results, Danzer corrected and resubmitted the summarized results. The resulting new model run indicates that requirements are no longer necessary for these pollutants.

2. The abovementioned revised model run included a result for acrylamide that was not included in the first pollutant group submittal. The model results indicate monitoring requirements may be necessary; however, the sample was a non-detect, acrylamide is not part of Danzer operations, and there is no reason to believe acrylamide would be present in the discharge. Accordingly, DEP has chosen not to establish requirements for acrylamide.

3. The abovementioned revised model included a revised flow of 0.0447; an increase from the application's original reported maximum flow of 0.0282. The increase in flow is a result of the permittee recently calculating the amount of wastewater produced during the wet decking process while the log yard is full. The increase in flow resulted in slightly more stringent concentration effluent limits for total aluminum, total lead, and acrolein and slight increases in their allowable mass loadings. The increase in flow also resulted in a new effluent limit recommendation for butyl benzyl phthalate. Given that butyl benzyl phthalate is not a compound used by Danzer, phthalate esters are common contaminates in the environmental monitoring process, the compound is not otherwise expected to be present in the discharge, and that limited monitoring data are available, Danzer proposed DEP establish a "Part C" condition with the concept of gathering data while making efforts to minimize potential contamination. The proposal is as follows:

   - For the first twenty-four months following the permit effective date, the permittee must analyze the Outfall 001 discharge for butyl benzyl phthalate at a frequency of once every two months. The analysis must be conducted using an analytical method(s) approved under 40 CFR 136.

   - The permittee must take appropriate steps in sampling the analysis of butyl benzyl phthalate to reduce the potential for contamination from the environmental process.

   - Twenty-five months from the permit effective date, the permittee must submit a summary of Outfall 001 monitoring data for butyl benzyl phthalate collected during the first 24 months of the NPDES permit to the

Internal Review and Recommendations

PADEP Northcentral Regional Office, along with a description of the steps taken to reduce the potential for contamination from the environmental monitoring process.

- Upon receipt of the monitoring data and information submitted under this requirement, the Department may take action to modify the NPDES permit to contain a schedule for achieving compliance with a WQBEL(s) for butyl benzyl phthalate.

DEP does not object to the permittee's proposed plan to complete and submit a summary report following the first 24 months of quarterly sampling for butyl benzyl phthalate. However, DEP does not believe it is appropriate to memorialize the proposal as a permit condition. If after 24 months, or anytime during the permit's term thereafter, the permittee feels that sufficient data has been collected regarding butyl benzyl phthalate, then a summary report may be prepared and made part of an application to amend the permit. Upon receipt of an amendment application, DEP would then review the summary report and make a decision regarding the butyl benzyl phthalate requirements.

RECOMMENDATION

Based on these changes, it is recommended that the permit is redrafted and published in the PA Bulletin for an additional thirty day commenting period.

Discharge Information

Instructions | Discharge | Stream

Facility: **Danzer Veneer Americas** NPDES Permit No.: **PA0233201** Outfall No.: **001**

Evaluation Type **Major Sewage / Industrial Waste** Wastewater Description: **Wet Decking 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
0.0447	73.4	6.79						

					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		228									
	Chloride (PWS)	mg/L		44.5									
	Bromide	mg/L	<	0.4									
	Sulfate (PWS)	mg/L											
	Fluoride (PWS)	mg/L											
Group 2	Total Aluminum	µg/L		528									
	Total Antimony	µg/L		0.121									
	Total Arsenic	µg/L	<	0.0015									
	Total Barium	µg/L		98.8									
	Total Beryllium	µg/L	<	0.5									
	Total Boron	µg/L		0.105									
	Total Cadmium	µg/L		0.032									
	Total Chromium (III)	µg/L	<	0.025									
	Hexavalent Chromium	µg/L	<	0.00025									
	Total Cobalt	µg/L		0.392									
	Total Copper	µg/L		3.07									
	Free Cyanide	µg/L											
	Total Cyanide	µg/L		0.006									
	Dissolved Iron	µg/L		0.1									
	Total Iron	µg/L		0.96									
	Total Lead	µg/L		1.8									
	Total Manganese	µg/L		150									
	Total Mercury	µg/L	<	0.001									
	Total Nickel	µg/L		1.96									
	Total Phenols (Phenolics) (PWS)	µg/L	<	1									
	Total Selenium	µg/L	<	2.5									
	Total Silver	µg/L	<	0.274									
	Total Thallium	µg/L	<	0.1									
	Total Zinc	µg/L		20.3									
	Total Molybdenum	µg/L		0.364									
	Acrolein	µg/L		4.5									
	Acrylamide	µg/L	<	10									
	Acrylonitrile	µg/L	<	1									
	Benzene	µg/L	<	0.43									
	Bromoform	µg/L	<	1									

Group 3	Carbon Tetrachloride	µg/L	<	0.5									
	Chlorobenzene	µg/L		1									
	Chlorodibromomethane	µg/L	<	0.39									
	Chloroethane	µg/L	<	1									
	2-Chloroethyl Vinyl Ether	µg/L	<	10									
	Chloroform	µg/L	<	1									
	Dichlorobromomethane	µg/L	<	0.32									
	1,1-Dichloroethane	µg/L	<	1									
	1,2-Dichloroethane	µg/L	<	1									
	1,1-Dichloroethylene	µg/L	<	1									
	1,2-Dichloropropane	µg/L	<	0.42									
	1,3-Dichloropropylene	µg/L	<	0.26									
	1,4-Dioxane	µg/L	<	1									
	Ethylbenzene	µg/L	<	3									
	Methyl Bromide	µg/L	<	1									
	Methyl Chloride	µg/L	<	0.36									
	Methylene Chloride	µg/L	<	5									
	1,1,2,2-Tetrachloroethane	µg/L	<	0.36									
	Tetrachloroethylene	µg/L	<	0.39									
	Toluene	µg/L	<	1									
	1,2-trans-Dichloroethylene	µg/L	<	1									
	1,1,1-Trichloroethane	µg/L	<	1									
	1,1,2-Trichloroethane	µg/L	<	0.24									
	Trichloroethylene	µg/L	<	0.46									
	Vinyl Chloride	µg/L	<	0.46									
Group 4	2-Chlorophenol	µg/L	<	1									
	2,4-Dichlorophenol	µg/L	<	2									
	2,4-Dimethylphenol	µg/L	<	2									
	4,6-Dinitro-o-Cresol	µg/L	<	1									
	2,4-Dinitrophenol	µg/L	<	1									
	2-Nitrophenol	µg/L	<	1									
	4-Nitrophenol	µg/L	<	1									
	p-Chloro-m-Cresol	µg/L	<	1									
	Pentachlorophenol	µg/L	<	1									
	Phenol	µg/L	<	1									
	2,4,6-Trichlorophenol	µg/L	<	1									
Group 5	Acenaphthene	µg/L	<	1									
	Acenaphthylene	µg/L	<	1									
	Anthracene	µg/L	<	1									
	Benzidine	µg/L	<	5									
	Benzo(a)Anthracene	µg/L	<	1									
	Benzo(a)Pyrene	µg/L	<	1									
	3,4-Benzofluoranthene	µg/L	<	1									
	Benzo(ghi)Perylene	µg/L	<	1									
	Benzo(k)Fluoranthene	µg/L	<	1									
	Bis(2-Chloroethoxy)Methane	µg/L	<	1									
	Bis(2-Chloroethyl)Ether	µg/L	<	1									
	Bis(2-Chloroisopropyl)Ether	µg/L	<	1									
	Bis(2-Ethylhexyl)Phthalate	µg/L	<	1									
	4-Bromophenyl Phenyl Ether	µg/L	<	1									
	Butyl Benzyl Phthalate	µg/L		9.45									
	2-Chloronaphthalene	µg/L	<	1									
	4-Chlorophenyl Phenyl Ether	µg/L	<	1									
	Chrysene	µg/L	<	1									
	Dibenzo(a,h)Anthrancene	µg/L	<	1									
	1,2-Dichlorobenzene	µg/L	<	1									
	1,3-Dichlorobenzene	µg/L	<	1									
	1,4-Dichlorobenzene	µg/L	<	1									
	3,3-Dichlorobenzidine	µg/L	<	1									
	Diethyl Phthalate	µg/L	<	1									
	Dimethyl Phthalate	µg/L	<	1									
	Di-n-Butyl Phthalate	µg/L		0.52									
	2,4-Dinitrotoluene	µg/L	<	1									

	2,6-Dinitrotoluene	µg/L	<	1									
	Di-n-Octyl Phthalate	µg/L	<	1									
	1,2-Diphenylhydrazine	µg/L	<	1									
	Fluoranthene	µg/L	<	1									
	Fluorene	µg/L	<	1									
	Hexachlorobenzene	µg/L	<	1									
	Hexachlorobutadiene	µg/L	<	0.27									
	Hexachlorocyclopentadiene	µg/L	<	1									
	Hexachloroethane	µg/L	<	1									
	Indeno(1,2,3-cd)Pyrene	µg/L	<	1									
	Isophorone	µg/L	<	1									
	Naphthalene	µg/L	<	1									
	Nitrobenzene	µg/L	<	1									
	n-Nitrosodimethylamine	µg/L	<	1									
	n-Nitrosodi-n-Propylamine	µg/L	<	1									
	n-Nitrosodiphenylamine	µg/L	<	1									
	Phenanthrene	µg/L	<	1									
	Pyrene	µg/L	<	1									
	1,2,4-Trichlorobenzene	µg/L	<	0.17									
Group 6	Aldrin	µg/L	<	0.0102									
	alpha-BHC	µg/L	<	0.0102									
	beta-BHC	µg/L	<	0.0102									
	gamma-BHC	µg/L	<	0.0102									
	delta BHC	µg/L	<	0.0102									
	Chlordane	µg/L	<	0.0102									
	4,4-DDT	µg/L	<	0.0102									
	4,4-DDE	µg/L	<	0.0102									
	4,4-DDD	µg/L	<	0.0102									
	Dieldrin	µg/L	<	0.0102									
	alpha-Endosulfan	µg/L	<	0.0102									
	beta-Endosulfan	µg/L	<	0.0102									
	Endosulfan Sulfate	µg/L	<	0.0102									
	Endrin	µg/L	<	0.0102									
	Endrin Aldehyde	µg/L	<	0.0102									
	Heptachlor	µg/L	<	0.0102									
	Heptachlor Epoxide	µg/L	<	0.0102									
	PCB-1016	µg/L	<	0.05									
	PCB-1221	µg/L	<	0.05									
	PCB-1232	µg/L	<	0.05									
	PCB-1242	µg/L	<	0.05									
	PCB-1248	µg/L	<	0.05									
	PCB-1254	µg/L	<	0.05									
	PCB-1260	µg/L	<	0.05									
	PCBs, Total	µg/L	<										
	Toxaphene	µg/L	<	0.05									
	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											

Stream / Surface Water Information

Danzer Veneer Americas, NPDES Permit No. PA0233201, Outfall 001

Instructions | Discharge | *Stream*

Receiving Surface Water Name: **UNT to West Branch Susquehanna Riv**

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	020943	0.53	517	0.18			Yes
End of Reach 1	020943	0	516	2.03			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	0.53	0.044										100	7		
End of Reach 1	0	0.044													

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	0.53														
End of Reach 1	0														

Model Results

Danzer Veneer Americas, NPDES Permit No. PA0233201, Outfall 001

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

☐ ***Hydrodynamics***

☑ ***Wasteload Allocations***

☑ ***AFC*** CCT (min): 0.033 PMF: 1 Analysis Hardness (mg/l): 76.133 Analysis pH: 6.81

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	
Total Aluminum	0	0		0	750	750	836	
Total Antimony	0	0		0	1,100	1,100	1,226	
Total Arsenic	0	0		0	340	340	379	Chem Translator of 1 applied
Total Barium	0	0		0	21,000	21,000	23,405	
Total Boron	0	0		0	8,100	8,100	9,028	
Total Cadmium	0	0		0	1.545	1.62	1.8	Chem Translator of 0.955 applied
Total Chromium (III)	0	0		0	455.727	1,442	1,607	Chem Translator of 0.316 applied
Hexavalent Chromium	0	0		0	16	16.3	18.2	Chem Translator of 0.982 applied
Total Cobalt	0	0		0	95	95.0	106	
Total Copper	0	0		0	10.394	10.8	12.1	Chem Translator of 0.96 applied
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	47.933	57.7	64.3	Chem Translator of 0.831 applied
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	1.400	1.65	1.84	Chem Translator of 0.85 applied
Total Nickel	0	0		0	371.773	373	415	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	2.012	2.37	2.64	Chem Translator of 0.85 applied
Total Thallium	0	0		0	65	65.0	72.4	
Total Zinc	0	0		0	93.007	95.1	106	Chem Translator of 0.978 applied
Acrolein	0	0		0	3	3.0	3.34	
Acrylamide	0	0		0	N/A	N/A	N/A	
Acrylonitrile	0	0		0	650	650	724	

Benzene	0	0		0	640	640	713	
Bromoform	0	0		0	1,800	1,800	2,006	
Carbon Tetrachloride	0	0		0	2,800	2,800	3,121	
Chlorobenzene	0	0		0	1,200	1,200	1,337	
Chlorodibromomethane	0	0		0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0		0	18,000	18,000	20,062	
Chloroform	0	0		0	1,900	1,900	2,118	
Dichlorobromomethane	0	0		0	N/A	N/A	N/A	
1,2-Dichloroethane	0	0		0	15,000	15,000	16,718	
1,1-Dichloroethylene	0	0		0	7,500	7,500	8,359	
1,2-Dichloropropane	0	0		0	11,000	11,000	12,260	
1,3-Dichloropropylene	0	0		0	310	310	346	
Ethylbenzene	0	0		0	2,900	2,900	3,232	
Methyl Bromide	0	0		0	550	550	613	
Methyl Chloride	0	0		0	28,000	28,000	31,207	
Methylene Chloride	0	0		0	12,000	12,000	13,374	
1,1,2,2-Tetrachloroethane	0	0		0	1,000	1,000	1,115	
Tetrachloroethylene	0	0		0	700	700	780	
Toluene	0	0		0	1,700	1,700	1,895	
1,2-trans-Dichloroethylene	0	0		0	6,800	6,800	7,579	
1,1,1-Trichloroethane	0	0		0	3,000	3,000	3,344	
1,1,2-Trichloroethane	0	0		0	3,400	3,400	3,789	
Trichloroethylene	0	0		0	2,300	2,300	2,563	
Vinyl Chloride	0	0		0	N/A	N/A	N/A	
2-Chlorophenol	0	0		0	560	560	624	
2,4-Dichlorophenol	0	0		0	1,700	1,700	1,895	
2,4-Dimethylphenol	0	0		0	660	660	736	
4,6-Dinitro-o-Cresol	0	0		0	80	80.0	89.2	
2,4-Dinitrophenol	0	0		0	660	660	736	
2-Nitrophenol	0	0		0	8,000	8,000	8,916	
4-Nitrophenol	0	0		0	2,300	2,300	2,563	
p-Chloro-m-Cresol	0	0		0	160	160	178	
Pentachlorophenol	0	0		0	7.189	7.19	8.01	
Phenol	0	0		0	N/A	N/A	N/A	
2,4,6-Trichlorophenol	0	0		0	460	460	513	
Acenaphthene	0	0		0	83	83.0	92.5	
Anthracene	0	0		0	N/A	N/A	N/A	
Benzidine	0	0		0	300	300	334	
Benzo(a)Anthracene	0	0		0	0.5	0.5	0.56	
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	33,436	
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0		0	4,500	4,500	5,015	
4-Bromophenyl Phenyl Ether	0	0		0	270	270	301	
Butyl Benzyl Phthalate	0	0		0	140	140	156	

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	914	
1,3-Dichlorobenzene	0	0		0	350	350	390	
1,4-Dichlorobenzene	0	0		0	730	730	814	
3,3-Dichlorobenzidine	0	0		0	N/A	N/A	N/A	
Diethyl Phthalate	0	0		0	4,000	4,000	4,458	
Dimethyl Phthalate	0	0		0	2,500	2,500	2,786	
Di-n-Butyl Phthalate	0	0		0	110	110	123	
2,4-Dinitrotoluene	0	0		0	1,600	1,600	1,783	
2,6-Dinitrotoluene	0	0		0	990	990	1,103	
1,2-Diphenylhydrazine	0	0		0	15	15.0	16.7	
Fluoranthene	0	0		0	200	200	223	
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	11.1	
Hexachlorocyclopentadiene	0	0		0	5	5.0	5.57	
Hexachloroethane	0	0		0	60	60.0	66.9	
Indeno(1,2,3-cd)Pyrene	0	0		0	N/A	N/A	N/A	
Isophorone	0	0		0	10,000	10,000	11,145	
Naphthalene	0	0		0	140	140	156	
Nitrobenzene	0	0		0	4,000	4,000	4,458	
n-Nitrosodimethylamine	0	0		0	17,000	17,000	18,947	
n-Nitrosodi-n-Propylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodiphenylamine	0	0		0	300	300	334	
Phenanthrene	0	0		0	5	5.0	5.57	
Pyrene	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene	0	0		0	130	130	145	
Aldrin	0	0		0	3	3.0	3.34	
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	1.06	
Chlordane	0	0		0	2.4	2.4	2.67	
4,4-DDT	0	0		0	1.1	1.1	1.23	
4,4-DDE	0	0		0	1.1	1.1	1.23	
4,4-DDD	0	0		0	1.1	1.1	1.23	
Dieldrin	0	0		0	0.24	0.24	0.27	
alpha-Endosulfan	0	0		0	0.22	0.22	0.25	
beta-Endosulfan	0	0		0	0.22	0.22	0.25	
Endosulfan Sulfate	0	0		0	N/A	N/A	N/A	
Endrin	0	0		0	0.086	0.086	0.096	
Endrin Aldehyde	0	0		0	N/A	N/A	N/A	
Heptachlor	0	0		0	0.52	0.52	0.58	
Heptachlor Epoxide	0	0		0	0.5	0.5	0.56	
Toxaphene	0	0		0	0.73	0.73	0.81	

☑ ***CFC*** CCT (min): 0.033 PMF: 1 Analysis Hardness (mg/l): 76.133 Analysis pH: 6.81

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	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	220	220	245	
Total Arsenic	0	0		0	150	150	167	Chem Translator of 1 applied
Total Barium	0	0		0	4,100	4,100	4,570	
Total Boron	0	0		0	1,600	1,600	1,783	
Total Cadmium	0	0		0	0.204	0.22	0.25	Chem Translator of 0.92 applied
Total Chromium (III)	0	0		0	59.281	68.9	76.8	Chem Translator of 0.86 applied
Hexavalent Chromium	0	0		0	10	10.4	11.6	Chem Translator of 0.962 applied
Total Cobalt	0	0		0	19	19.0	21.2	
Total Copper	0	0		0	7.094	7.39	8.24	Chem Translator of 0.96 applied
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	1,500	1,500	1,672	WQC = 30 day average; PMF = 1
Total Lead	0	0		0	1.868	2.25	2.51	Chem Translator of 0.831 applied
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	0.770	0.91	1.01	Chem Translator of 0.85 applied
Total Nickel	0	0		0	41.292	41.4	46.2	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	5.56	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	14.5	
Total Zinc	0	0		0	93.767	95.1	106	Chem Translator of 0.986 applied
Acrolein	0	0		0	3	3.0	3.34	
Acrylamide	0	0		0	N/A	N/A	N/A	
Acrylonitrile	0	0		0	130	130	145	
Benzene	0	0		0	130	130	145	
Bromoform	0	0		0	370	370	412	
Carbon Tetrachloride	0	0		0	560	560	624	
Chlorobenzene	0	0		0	240	240	267	
Chlorodibromomethane	0	0		0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0		0	3,500	3,500	3,901	
Chloroform	0	0		0	390	390	435	
Dichlorobromomethane	0	0		0	N/A	N/A	N/A	
1,2-Dichloroethane	0	0		0	3,100	3,100	3,455	
1,1-Dichloroethylene	0	0		0	1,500	1,500	1,672	
1,2-Dichloropropane	0	0		0	2,200	2,200	2,452	
1,3-Dichloropropylene	0	0		0	61	61.0	68.0	
Ethylbenzene	0	0		0	580	580	646	
Methyl Bromide	0	0		0	110	110	123	
Methyl Chloride	0	0		0	5,500	5,500	6,130	

Methylene Chloride	0	0		0	2,400	2,400	2,675	
1,1,2,2-Tetrachloroethane	0	0		0	210	210	234	
Tetrachloroethylene	0	0		0	140	140	156	
Toluene	0	0		0	330	330	368	
1,2-trans-Dichloroethylene	0	0		0	1,400	1,400	1,560	
1,1,1-Trichloroethane	0	0		0	610	610	680	
1,1,2-Trichloroethane	0	0		0	680	680	758	
Trichloroethylene	0	0		0	450	450	502	
Vinyl Chloride	0	0		0	N/A	N/A	N/A	
2-Chlorophenol	0	0		0	110	110	123	
2,4-Dichlorophenol	0	0		0	340	340	379	
2,4-Dimethylphenol	0	0		0	130	130	145	
4,6-Dinitro-o-Cresol	0	0		0	16	16.0	17.8	
2,4-Dinitrophenol	0	0		0	130	130	145	
2-Nitrophenol	0	0		0	1,600	1,600	1,783	
4-Nitrophenol	0	0		0	470	470	524	
p-Chloro-m-Cresol	0	0		0	500	500	557	
Pentachlorophenol	0	0		0	5.515	5.52	6.15	
Phenol	0	0		0	N/A	N/A	N/A	
2,4,6-Trichlorophenol	0	0		0	91	91.0	101	
Acenaphthene	0	0		0	17	17.0	18.9	
Anthracene	0	0		0	N/A	N/A	N/A	
Benzidine	0	0		0	59	59.0	65.8	
Benzo(a)Anthracene	0	0		0	0.1	0.1	0.11	
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	6,687	
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0		0	910	910	1,014	
4-Bromophenyl Phenyl Ether	0	0		0	54	54.0	60.2	
Butyl Benzyl Phthalate	0	0		0	35	35.0	39.0	
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	178	
1,3-Dichlorobenzene	0	0		0	69	69.0	76.9	
1,4-Dichlorobenzene	0	0		0	150	150	167	
3,3-Dichlorobenzidine	0	0		0	N/A	N/A	N/A	
Diethyl Phthalate	0	0		0	800	800	892	
Dimethyl Phthalate	0	0		0	500	500	557	
Di-n-Butyl Phthalate	0	0		0	21	21.0	23.4	
2,4-Dinitrotoluene	0	0		0	320	320	357	
2,6-Dinitrotoluene	0	0		0	200	200	223	
1,2-Diphenylhydrazine	0	0		0	3	3.0	3.34	

Fluoranthene	0	0		0	40	40.0	44.6	
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	2.23	
Hexachlorocyclopentadiene	0	0		0	1	1.0	1.11	
Hexachloroethane	0	0		0	12	12.0	13.4	
Indeno(1,2,3-cd)Pyrene	0	0		0	N/A	N/A	N/A	
Isophorone	0	0		0	2,100	2,100	2,341	
Naphthalene	0	0		0	43	43.0	47.9	
Nitrobenzene	0	0		0	810	810	903	
n-Nitrosodimethylamine	0	0		0	3,400	3,400	3,789	
n-Nitrosodi-n-Propylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodiphenylamine	0	0		0	59	59.0	65.8	
Phenanthrene	0	0		0	1	1.0	1.11	
Pyrene	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene	0	0		0	26	26.0	29.0	
Aldrin	0	0		0	0.1	0.1	0.11	
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	0.005	
4,4-DDT	0	0		0	0.001	0.001	0.001	
4,4-DDE	0	0		0	0.001	0.001	0.001	
4,4-DDD	0	0		0	0.001	0.001	0.001	
Dieldrin	0	0		0	0.056	0.056	0.062	
alpha-Endosulfan	0	0		0	0.056	0.056	0.062	
beta-Endosulfan	0	0		0	0.056	0.056	0.062	
Endosulfan Sulfate	0	0		0	N/A	N/A	N/A	
Endrin	0	0		0	0.036	0.036	0.04	
Endrin Aldehyde	0	0		0	N/A	N/A	N/A	
Heptachlor	0	0		0	0.0038	0.004	0.004	
Heptachlor Epoxide	0	0		0	0.0038	0.004	0.004	
Toxaphene	0	0		0	0.0002	0.0002	0.0002	

☑ ***THH*** CCT (min): 0.033 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	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	5.6	5.6	6.24	
Total Arsenic	0	0		0	10	10.0	11.1	
Total Barium	0	0		0	2,400	2,400	2,675	
Total Boron	0	0		0	3,100	3,100	3,455	

Total Cadmium	0	0		0	N/A	N/A	N/A	
Total Chromium (III)	0	0		0	N/A	N/A	N/A	
Hexavalent Chromium	0	0		0	N/A	N/A	N/A	
Total Cobalt	0	0		0	N/A	N/A	N/A	
Total Copper	0	0		0	N/A	N/A	N/A	
Dissolved Iron	0	0		0	300	300	334	
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	1,115	
Total Mercury	0	0		0	0.050	0.05	0.056	
Total Nickel	0	0		0	610	610	680	
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	0.27	
Total Zinc	0	0		0	N/A	N/A	N/A	
Acrolein	0	0		0	3	3.0	3.34	
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	111	
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	N/A	N/A	N/A	
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	36.8	
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	75.8	
Methyl Bromide	0	0		0	100	100.0	111	
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	63.5	
1,2-trans-Dichloroethylene	0	0		0	100	100.0	111	
1,1,1-Trichloroethane	0	0		0	10,000	10,000	11,145	
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	33.4	
2,4-Dichlorophenol	0	0		0	10	10.0	11.1	

2,4-Dimethylphenol	0	0		0	100	100.0	111	
4,6-Dinitro-o-Cresol	0	0		0	2	2.0	2.23	
2,4-Dinitrophenol	0	0		0	10	10.0	11.1	
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	4,458	
2,4,6-Trichlorophenol	0	0		0	N/A	N/A	N/A	
Acenaphthene	0	0		0	70	70.0	78.0	
Anthracene	0	0		0	300	300	334	
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	223	
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	0.11	
2-Chloronaphthalene	0	0		0	800	800	892	
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	1,115	
1,3-Dichlorobenzene	0	0		0	7	7.0	7.8	
1,4-Dichlorobenzene	0	0		0	300	300	334	
3,3-Dichlorobenzidine	0	0		0	N/A	N/A	N/A	
Diethyl Phthalate	0	0		0	600	600	669	
Dimethyl Phthalate	0	0		0	2,000	2,000	2,229	
Di-n-Butyl Phthalate	0	0		0	20	20.0	22.3	
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	22.3	
Fluorene	0	0		0	50	50.0	55.7	
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	4.46	
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	37.9	
Naphthalene	0	0		0	N/A	N/A	N/A	
Nitrobenzene	0	0		0	10	10.0	11.1	
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	22.3	
1,2,4-Trichlorobenzene	0	0		0	0.07	0.07	0.078	
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	4.68	
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	22.3	
beta-Endosulfan	0	0		0	20	20.0	22.3	
Endosulfan Sulfate	0	0		0	20	20.0	22.3	
Endrin	0	0		0	0.03	0.03	0.033	
Endrin Aldehyde	0	0		0	1	1.0	1.11	
Heptachlor	0	0		0	N/A	N/A	N/A	
Heptachlor Epoxide	0	0		0	N/A	N/A	N/A	
Toxaphene	0	0		0	N/A	N/A	N/A	

☑ ***CRL*** CCT (min): 0.675 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	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	N/A	N/A	N/A	
Total Arsenic	0	0		0	N/A	N/A	N/A	
Total Barium	0	0		0	N/A	N/A	N/A	
Total Boron	0	0		0	N/A	N/A	N/A	
Total Cadmium	0	0		0	N/A	N/A	N/A	
Total Chromium (III)	0	0		0	N/A	N/A	N/A	
Hexavalent Chromium	0	0		0	N/A	N/A	N/A	
Total Cobalt	0	0		0	N/A	N/A	N/A	
Total Copper	0	0		0	N/A	N/A	N/A	
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	N/A	N/A	N/A	
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	N/A	N/A	N/A	
Total Nickel	0	0		0	N/A	N/A	N/A	

Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A	
Total Selenium	0	0		0	N/A	N/A	N/A	
Total Silver	0	0		0	N/A	N/A	N/A	
Total Thallium	0	0		0	N/A	N/A	N/A	
Total Zinc	0	0		0	N/A	N/A	N/A	
Acrolein	0	0		0	N/A	N/A	N/A	
Acrylamide	0	0		0	0.07	0.07	0.18	
Acrylonitrile	0	0		0	0.06	0.06	0.15	
Benzene	0	0		0	0.58	0.58	1.49	
Bromoform	0	0		0	7	7.0	18.0	
Carbon Tetrachloride	0	0		0	0.4	0.4	1.03	
Chlorobenzene	0	0		0	N/A	N/A	N/A	
Chlorodibromomethane	0	0		0	0.8	0.8	2.05	
2-Chloroethyl Vinyl Ether	0	0		0	N/A	N/A	N/A	
Chloroform	0	0		0	5.7	5.7	14.6	
Dichlorobromomethane	0	0		0	0.95	0.95	2.44	
1,2-Dichloroethane	0	0		0	9.9	9.9	25.4	
1,1-Dichloroethylene	0	0		0	N/A	N/A	N/A	
1,2-Dichloropropane	0	0		0	0.9	0.9	2.31	
1,3-Dichloropropylene	0	0		0	0.27	0.27	0.69	
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	51.3	
1,1,2,2-Tetrachloroethane	0	0		0	0.2	0.2	0.51	
Tetrachloroethylene	0	0		0	10	10.0	25.7	
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	1.41	
Trichloroethylene	0	0		0	0.6	0.6	1.54	
Vinyl Chloride	0	0		0	0.02	0.02	0.051	
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	0.077	
Phenol	0	0		0	N/A	N/A	N/A	
2,4,6-Trichlorophenol	0	0		0	1.5	1.5	3.85	
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	0.026	
Bis(2-Chloroethyl)Ether	0	0		0	0.03	0.03	0.077	
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0		0	0.32	0.32	0.82	
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	0.31	
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	0.077	
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	0.026	
Hexachlorocyclopentadiene	0	0		0	N/A	N/A	N/A	
Hexachloroethane	0	0		0	0.1	0.1	0.26	
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	8.47	
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	0.000002	
alpha-BHC	0	0		0	0.0004	0.0004	0.001	
beta-BHC	0	0		0	0.008	0.008	0.021	
gamma-BHC	0	0		0	N/A	N/A	N/A	
Chlordane	0	0		0	0.0003	0.0003	0.0008	
4,4-DDT	0	0		0	0.00003	0.00003	0.00008	

4,4-DDE	0	0		0	0.00002	0.00002	0.00005	
4,4-DDD	0	0		0	0.0001	0.0001	0.0003	
Dieldrin	0	0		0	0.000001	0.000001	0.000003	
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	0.00002	
Heptachlor Epoxide	0	0		0	0.00003	0.00003	0.00008	
Toxaphene	0	0		0	0.0007	0.0007	0.002	

☑ ***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	0.28	0.31	750	836	836	µg/L	750	AFC	Discharge Conc ≥ 50% WQBEL (RP)
Total Cadmium	Report	Report	Report	Report	Report	µg/L	0.25	CFC	Discharge Conc > 10% WQBEL (no RP)
Total Copper	Report	Report	Report	Report	Report	µg/L	8.24	CFC	Discharge Conc > 10% WQBEL (no RP)
Total Lead	0.0009	0.001	2.51	3.91	6.27	µg/L	2.51	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Total Manganese	Report	Report	Report	Report	Report	µg/L	1,115	THH	Discharge Conc > 10% WQBEL (no RP)
Total Zinc	Report	Report	Report	Report	Report	µg/L	95.1	AFC	Discharge Conc > 10% WQBEL (no RP)
Acrolein	0.001	0.001	3.0	3.34	3.34	µg/L	3.0	AFC	Discharge Conc ≥ 50% WQBEL (RP)
Acrylamide	0.00007	0.0001	0.18	0.28	0.45	µg/L	0.18	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Butyl Benzyl Phthalate	0.00004	0.00006	0.11	0.17	0.28	µg/L	0.11	THH	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
Total Antimony	6.24	µg/L	Discharge Conc ≤ 10% WQBEL
Total Arsenic	N/A	N/A	Discharge Conc < TQL
Total Barium	2,675	µg/L	Discharge Conc ≤ 10% WQBEL
Total Beryllium	N/A	N/A	No WQS
Total Boron	1,783	µg/L	Discharge Conc ≤ 10% WQBEL

Total Chromium (III)	76.8	µg/L	Discharge Conc < TQL
Hexavalent Chromium	11.6	µg/L	Discharge Conc < TQL
Total Cobalt	21.2	µg/L	Discharge Conc ≤ 10% WQBEL
Total Cyanide	N/A	N/A	No WQS
Dissolved Iron	334	µg/L	Discharge Conc ≤ 10% WQBEL
Total Iron	1,672	µg/L	Discharge Conc ≤ 10% WQBEL
Total Mercury	0.056	µg/L	Discharge Conc < TQL
Total Nickel	46.2	µg/L	Discharge Conc ≤ 10% WQBEL
Total Phenols (Phenolics) (PWS)		µg/L	Discharge Conc < TQL
Total Selenium	5.56	µg/L	Discharge Conc < TQL
Total Silver	2.37	µg/L	Discharge Conc < TQL
Total Thallium	0.27	µg/L	Discharge Conc < TQL
Total Molybdenum	N/A	N/A	No WQS
Acrylonitrile	0.15	µg/L	Discharge Conc < TQL
Benzene	1.49	µg/L	Discharge Conc < TQL
Bromoform	18.0	µg/L	Discharge Conc ≤ 25% WQBEL
Carbon Tetrachloride	1.03	µg/L	Discharge Conc < TQL
Chlorobenzene	111	µg/L	Discharge Conc ≤ 25% WQBEL
Chlorodibromomethane	2.05	µg/L	Discharge Conc < TQL
Chloroethane	N/A	N/A	No WQS
2-Chloroethyl Vinyl Ether	3,901	µg/L	Discharge Conc ≤ 25% WQBEL
Chloroform	14.6	µg/L	Discharge Conc ≤ 25% WQBEL
Dichlorobromomethane	2.44	µg/L	Discharge Conc < TQL
1,1-Dichloroethane	N/A	N/A	No WQS
1,2-Dichloroethane	25.4	µg/L	Discharge Conc ≤ 25% WQBEL
1,1-Dichloroethylene	36.8	µg/L	Discharge Conc ≤ 25% WQBEL
1,2-Dichloropropane	2.31	µg/L	Discharge Conc < TQL
1,3-Dichloropropylene	0.69	µg/L	Discharge Conc < TQL
1,4-Dioxane	N/A	N/A	No WQS
Ethylbenzene	75.8	µg/L	Discharge Conc ≤ 25% WQBEL
Methyl Bromide	111	µg/L	Discharge Conc ≤ 25% WQBEL
Methyl Chloride	6,130	µg/L	Discharge Conc < TQL
Methylene Chloride	51.3	µg/L	Discharge Conc ≤ 25% WQBEL
1,1,2,2-Tetrachloroethane	0.51	µg/L	Discharge Conc < TQL
Tetrachloroethylene	25.7	µg/L	Discharge Conc < TQL
Toluene	63.5	µg/L	Discharge Conc ≤ 25% WQBEL
1,2-trans-Dichloroethylene	111	µg/L	Discharge Conc ≤ 25% WQBEL
1,1,1-Trichloroethane	680	µg/L	Discharge Conc ≤ 25% WQBEL
1,1,2-Trichloroethane	1.41	µg/L	Discharge Conc < TQL
Trichloroethylene	1.54	µg/L	Discharge Conc < TQL
Vinyl Chloride	0.051	µg/L	Discharge Conc < TQL
2-Chlorophenol	33.4	µg/L	Discharge Conc < TQL
2,4-Dichlorophenol	11.1	µg/L	Discharge Conc < TQL
2,4-Dimethylphenol	111	µg/L	Discharge Conc < TQL
4,6-Dinitro-o-Cresol	2.23	µg/L	Discharge Conc < TQL

2,4-Dinitrophenol	11.1	µg/L	Discharge Conc < TQL
2-Nitrophenol	1,783	µg/L	Discharge Conc < TQL
4-Nitrophenol	524	µg/L	Discharge Conc < TQL
p-Chloro-m-Cresol	160	µg/L	Discharge Conc < TQL
Pentachlorophenol	0.077	µg/L	Discharge Conc < TQL
Phenol	4,458	µg/L	Discharge Conc < TQL
2,4,6-Trichlorophenol	3.85	µg/L	Discharge Conc < TQL
Acenaphthene	18.9	µg/L	Discharge Conc < TQL
Acenaphthylene	N/A	N/A	No WQS
Anthracene	334	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	0.026	µg/L	Discharge Conc < TQL
Bis(2-Chloroethoxy)Methane	N/A	N/A	No WQS
Bis(2-Chloroethyl)Ether	0.077	µg/L	Discharge Conc < TQL
Bis(2-Chloroisopropyl)Ether	223	µg/L	Discharge Conc < TQL
Bis(2-Ethylhexyl)Phthalate	0.82	µg/L	Discharge Conc < TQL
4-Bromophenyl Phenyl Ether	60.2	µg/L	Discharge Conc < TQL
2-Chloronaphthalene	892	µg/L	Discharge Conc < TQL
4-Chlorophenyl Phenyl Ether	N/A	N/A	No WQS
Chrysene	0.31	µg/L	Discharge Conc < TQL
Dibenzo(a,h)Anthrancene	0.0003	µg/L	Discharge Conc < TQL
1,2-Dichlorobenzene	178	µg/L	Discharge Conc ≤ 25% WQBEL
1,3-Dichlorobenzene	7.8	µg/L	Discharge Conc ≤ 25% WQBEL
1,4-Dichlorobenzene	167	µg/L	Discharge Conc ≤ 25% WQBEL
3,3-Dichlorobenzidine	0.13	µg/L	Discharge Conc < TQL
Diethyl Phthalate	669	µg/L	Discharge Conc < TQL
Dimethyl Phthalate	557	µg/L	Discharge Conc < TQL
Di-n-Butyl Phthalate	22.3	µg/L	Discharge Conc ≤ 25% WQBEL
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	0.077	µg/L	Discharge Conc < TQL
Fluoranthene	22.3	µg/L	Discharge Conc < TQL
Fluorene	55.7	µg/L	Discharge Conc < TQL
Hexachlorobenzene	0.0002	µg/L	Discharge Conc < TQL
Hexachlorobutadiene	0.026	µg/L	Discharge Conc < TQL
Hexachlorocyclopentadiene	1.11	µg/L	Discharge Conc < TQL
Hexachloroethane	0.26	µg/L	Discharge Conc < TQL
Indeno(1,2,3-cd)Pyrene	0.003	µg/L	Discharge Conc < TQL
Isophorone	37.9	µg/L	Discharge Conc < TQL
Naphthalene	47.9	µg/L	Discharge Conc ≤ 25% WQBEL

Nitrobenzene	11.1	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	8.47	µg/L	Discharge Conc < TQL
Phenanthrene	1.11	µg/L	Discharge Conc < TQL
Pyrene	22.3	µg/L	Discharge Conc < TQL
1,2,4-Trichlorobenzene	0.078	µg/L	Discharge Conc < TQL
Aldrin	0.000002	µg/L	Discharge Conc < TQL
alpha-BHC	0.001	µg/L	Discharge Conc < TQL
beta-BHC	0.021	µg/L	Discharge Conc < TQL
gamma-BHC	0.95	µg/L	Discharge Conc < TQL
delta BHC	N/A	N/A	No WQS
Chlordane	0.0008	µg/L	Discharge Conc < TQL
4,4-DDT	0.00008	µg/L	Discharge Conc < TQL
4,4-DDE	0.00005	µg/L	Discharge Conc < TQL
4,4-DDD	0.0003	µg/L	Discharge Conc < TQL
Dieldrin	0.000003	µg/L	Discharge Conc < TQL
alpha-Endosulfan	0.062	µg/L	Discharge Conc < TQL
beta-Endosulfan	0.062	µg/L	Discharge Conc < TQL
Endosulfan Sulfate	22.3	µg/L	Discharge Conc < TQL
Endrin	0.033	µg/L	Discharge Conc < TQL
Endrin Aldehyde	1.11	µg/L	Discharge Conc < TQL
Heptachlor	0.00002	µg/L	Discharge Conc < TQL
Heptachlor Epoxide	0.00008	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
Toxaphene	0.0002	µg/L	Discharge Conc < TQL