

Application Type Renewal
Facility Type Industrial
Major / Minor Minor

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

Application No. PA0209457
APS ID 1090269
Authorization ID 1442978

Applicant and Facility Information

Applicant Name	<u>Jeld-Wen, Inc.</u>	Facility Name	<u>Jeld-Wen, Inc. Fiber Division PA</u>
Applicant Address	<u>PO Box 311 825 Shiner Road</u> <u>Towanda, PA 18848-0311</u>	Facility Address	<u>825 Shiner Road</u> <u>Towanda, PA 18848-9207</u>
Applicant Contact	<u>Lance Stevens</u>	Facility Contact	<u>Lance Stevens</u>
Applicant Phone	<u>(570) 268-8737</u>	Facility Phone	<u>(570) 268-8737</u>
Client ID	<u>129046</u>	Site ID	<u>259347</u>
SIC Code	<u>2493</u>	Municipality	<u>Wysox Township</u>
SIC Description	<u>Manufacturing - Reconstituted Wood Products</u>	County	<u>Bradford</u>
Date Application Received	<u>May 30, 2023</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>June 12, 2023</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of a NPDES Permit</u>		

Summary of Review

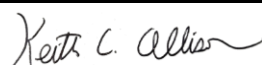
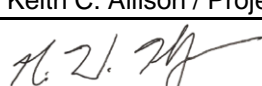
This facility produces composite wood door facings and trim boards from processed wood fibers in Wysox Township, Bradford County. The manufacturing process includes grinding of wood chips, pressing, cutting, and coating. A map of the facility location is attached.

Industrial discharges from the facility approved under this permit are from boiler regeneration water. Discharge occurs up to three times per day.

All other process wastewater other than the boiler regen water is sent to two treatment lagoons. From the lagoons water can be reused in the process or discharged through a spray irrigation system permitted under WQM Permit No. 0883204. The lagoons also receive pre-treated wastewater from the facility's sewage treatment plant. These discharges are not discharged to surface waters and are not included in this NPDES Permit.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Approve	Deny	Signatures	Date
✓		 Keith C. Allison / Project Manager	May 23, 2024
✓		 Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	May 23, 2024

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.026</u>
Latitude	<u>41° 46' 3.62"</u>	Longitude	<u>-76° 24' 56.57"</u>
Quad Name	<u>Towanda, PA</u>	Quad Code	<u></u>
Wastewater Description: <u>Water Treatment Effluent</u>			
Receiving Waters	<u>Laning Creek (WWF, MF)</u>	Stream Code	<u>30206 (Laning Creek)</u>
NHD Com ID	<u>66400183</u>	RMI	<u>1.19 (Laning Creek)</u>
Drainage Area	<u>13.3 mi² @ Laning Creek</u>	Yield (cfs/mi ²)	<u>0.00580</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.0771</u>	Q ₇₋₁₀ Basis	<u>USGS StreamStats</u>
	<u>740 @ Discharge point</u>		
Elevation (ft)	<u>710 @ Laning Creek</u>	Slope (ft/ft)	<u>0.0032</u>
Watershed No.	<u>4-D</u>	Chapter 93 Class.	<u>WWF, MF</u>
Existing Use	<u>N/A</u>	Existing Use Qualifier	<u>N/A</u>
Exceptions to Use	<u>None</u>	Exceptions to Criteria	<u>None</u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>FLOW REGIME MODIFICATION</u>		
Source(s) of Impairment	<u>URBAN RUNOFF/STORM SEWERS</u>		
TMDL Status	<u></u>	Name	<u></u>
Nearest Downstream Public Water Supply Intake	<u>Danville Municipal Authority</u>		
PWS Waters	<u>Susquehanna River</u>	Distance from Outfall (mi)	<u>Approx. 130</u>

Changes Since Last Permit Issuance: None

Other Comments: The 001 discharge is to a swale along the north side of the property along a railway. The swale ultimately discharges into a wetland area to the east of the property which then drains to Laning Creek. The discharge generally sits in the swale area and infiltrates rather than draining to the wetland, as noted in facility inspections.

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

The discharge is not a contributor to the impairment to Laning Creek noted above and therefore, it will not receive additional requirements due to the impairment.

Stormwater Discharges from Industrial Activities

Stormwater discharges from the facility are from three outfalls as noted below. Drainage from other areas of the site are sent to the wastewater treatment lagoons.

Outfall Number	Latitude/Longitude	Area Drained:
002	41° 45' 48" 76° 25' 25"	294,008 ft ² , Northwest portion of facility from shipping lot and roof.
003	41° 45' 50" 76° 24' 50"	1,578,933 ft ² , South and Southeast portion of facility from mill and parking lot.
004	41° 46' 2" 76° 24' 52"	1,239,701 ft ² , North and Northeast portion of facility from mill and log storage.

As a SIC code 2493 facility it would be subject to Appendix D for Timber Products of the PAG03 General Permit for Discharges of Stormwater from Industrial Activities. The current Appendix D monitoring includes twice per year sampling for Total Nitrogen (new), Total Phosphorus (new), pH, COD, TSS, Pentachlorophenol, Total Arsenic, Total Chromium, and Total Copper. Therefore, this monitoring will be included for these stormwater outfalls. The Appendix D monitoring includes Benchmark values for TSS and COD of 120 mg/L and 100 mg/L, respectively. Benchmark levels have not been exceeded in two straight period over the past permit term.

Compliance History

DMR Data for Outfall 001 (from April 1, 2023 to March 31, 2024)

Parameter	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23
Flow (MGD) Average Monthly	0.0223	0.0245	0.0205	0.0192	0.0227	0.0224	0.0149	0.0260	0.0259	0.0246	0.0251	0.025
Flow (MGD) Daily Maximum	0.0456	0.0484	0.0464	0.0307	0.0439	0.0324	0.0390	0.0432	0.0386	0.0455	0.0440	0.033
pH (S.U.) Instantaneous Minimum	6.14	6.26	6.17	6.16	6.18	6.12	6.29	6.29	6.15	6.1	6.25	6.12
pH (S.U.) Instantaneous Maximum	7.41	8.03	8.34	8.2	7.71	6.98	6.90	7.31	7.06	7.33	7.73	7.05
TSS (mg/L) Average Monthly	29.6	5.5	17.3	12.1	6.2	4.3	7.5	11.3	11.6	14.9	2.8	4.1
TSS (mg/L) Daily Maximum	76	13.2	19.2	22.0	15.6	12.6	16.0	35.6	44.8	51	3.6	8.2
Total Dissolved Solids (mg/L) Daily Maximum	13600	6410	17700	14700	12100	12300	8420	13700	12100	10600	9160	16200
Oil and Grease (mg/L) Average Monthly	< 9.3	< 9.39	< 9.49	< 9.44	< 9.58	< 9.59	< 9.57	< 8.26	< 9.33	< 9.49	< 9.59	< 9.56
Oil and Grease (mg/L) Daily Maximum	< 9.45	< 9.60	< 10.0	< 9.6	< 9.8	< 10.0	< 9.80	< 9.45	< 9.45	< 9.6	< 10	< 10
Total Arsenic (lbs/day) Daily Maximum	0.0139			0.0053			0.0073			0.0034		
Total Arsenic (ug/L) Daily Maximum	34.5			14.5			22.6			8.9		
Total Copper (lbs/day) Daily Maximum	0.0088			0.0028			0.0014			0.0048		
Total Copper (ug/L) Daily Maximum	21.8			7.6			4.2			12.7		
Dissolved Iron (lbs/day) Daily Maximum	< 0.0747			< 0.0677			< 0.0601			< 0.0702		
Dissolved Iron (mg/L) Daily Maximum	< 0.185			< 0.185			< 0.185			< 0.185		
Dissolved Iron (mg/L) Instantaneous Maximum	< 0.185			< 0.185			< 0.185			< 0.185		

Total Mercury (lbs/day) Average Monthly	0.00006	0.0001	< 0.00002	0.00002	0.00003	0.00002	0.00001	0.00003	0.00004	0.00005	0.00005	0.00008
Total Mercury (lbs/day) Daily Maximum	0.00012	0.0002	< 0.00004	0.00004	0.00006	0.00003	0.00003	0.00006	0.00006	0.00009	0.00009	0.00010
Total Mercury (mg/L) Average Monthly	0.0003	0.0005	< 0.00009	0.0002	0.0002	0.0001	0.0001	0.0002	0.0002	0.0002	0.0003	0.0004
Total Mercury (mg/L) Daily Maximum	0.0003	0.0005	< 0.00009	0.0002	0.0002	0.0001	0.0001	0.0002	0.0002	0.0002	0.0003	0.0004
Total Selenium (lbs/day) Daily Maximum	0.0111			0.0167			< 0.0018			0.0082		
Total Selenium (ug/L) Daily Maximum	27.6			45.5			< 5.55			21.6		
Sulfate (lbs/day) Daily Maximum	3400			2819			2730			3327		
Sulfate (mg/L) Daily Maximum	8420			7770			8400			8770		
Total Zinc (lbs/day) Daily Maximum	< 0.0041			< 0.0037			< 0.0033			< 0.0038		
Total Zinc (ug/L) Daily Maximum	< 10.1			< 10.1			< 10.1			< 10.1		

Compliance History

Summary of Inspections:		The facility has been inspected over the past permit term by the Department. The most recent inspection on September 20, 2022 identified no violations.
Other Comments:		A WMS query found no open violations in eFACTS for Jeld-Wen, Inc. The permittee received a December 29, 2022 NOV for five unauthorized discharges from September through December 2022.

Existing Effluent Limitations and Monitoring Requirements – Outfall 001								
Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/day	Weir
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
TSS	XXX	XXX	XXX	30	100	150	1/week	Grab
Total Dissolved Solids	XXX	XXX	XXX	XXX	Report	XXX	1/month	Grab
Oil and Grease	XXX	XXX	XXX	15	20	30	1/week	Grab
Total Arsenic (ug/L)	XXX	Report	XXX	XXX	Report	XXX	1/quarter	Grab
Total Copper (ug/L)	XXX	Report	XXX	XXX	Report	XXX	1/quarter	Grab
Dissolved Iron	XXX	Report	XXX	Report Daily Max	XXX	7.0	1/quarter	Grab
Total Mercury	Report	Report	XXX	Report	Report	XXX	1/month	Grab
Total Selenium (ug/L)	XXX	Report	XXX	XXX	Report	XXX	1/quarter	Grab
Sulfate	XXX	Report	XXX	XXX	Report	XXX	1/quarter	Grab
Total Zinc (ug/L)	XXX	Report	XXX	XXX	Report	XXX	1/quarter	Grab

Existing Effluent Limitations and Monitoring Requirements – Stormwater Outfalls 002-004								
Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Arsenic	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Chromium	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Copper	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Pentachloro-phenol	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Development of Effluent Limitations

Outfall No. 001 Design Flow (MGD) 0.026
 Latitude 41° 45' 51.00" Longitude -76° 25' 19.00"
 Wastewater Description: Water Treatment Effluent

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Parameter	Limit (mg/l)	SBC	Federal Regulation	State Regulation
pH	6.0 – 9.0 S.U.	Min – Max	---	95.2(1)
Oil and Grease	15	Daily Ave	---	95.2(2)
	30	Inst. Max.	---	
Dissolved Iron	7	Inst. Max	---	95.2(4)

Comments: The above limits from Chapter 95 are applicable and are included in the existing permit for this discharge and will remain.

No Federal Effluent Limitation Guidelines specifically apply to this discharge. 40 CFR 429 for Timber Products does not apply to boiler regeneration water discharges. BPJ limits have previously been developed for the discharge based on the ELGs at 40 CFR 423 for Stream Electric Power Generating discharges. See below under Best Professional Judgment limitations for more discussion of these limits.

Water Quality-Based Limitations

BOD, NH3, & DO

The discharge does not contain significant levels of BOD and NH3-N to warrant limitations or monitoring for these parameters.

Toxics Management

A “Reasonable Potential Analysis” was performed to determine additional parameters with the reasonable potential to violate water quality standards by the discharge to Laning Creek. The Toxics Management Spreadsheet (TMS) is a mass-balance water quality analysis model that includes consideration for mixing and other factors to determine recommended water quality-based effluent limits. The model incorporates the water quality criteria of 25 Pa.Code §93. See the Toxics Management Spreadsheet in Attachment B.

The reasonable potential analysis found the parameters listed in the table below, besides zinc, to be candidates for limitations or monitoring in the NPDES permit. Total Zinc monitoring is currently included in the permit but is no longer recommended and will thus be removed.

Reasonable Potential Analysis Results

Pollutant	Reported Max Discharge Conc. (µg/L)	Reported Average Discharge Conc. (µg/L)	Average Monthly Limit (µg/L)	Reasonable Potential Analysis Recommendation
Total Arsenic	39.5	13.9	29.2	Establish Limits
Total Copper	27.7	15.8	104	Monitor
Dissolved Iron	223	<163	875	Monitor
Total Mercury	0.6	0.3	0.15	Establish Limits
Total Selenium	21.6	8.2	14.6	Establish Limits
Total Zinc	25.9	12.5	846	No Monitoring

Because the limitations for Arsenic, Mercury, and Selenium do not appear to be consistently achievable based on available data a compliance schedule will be included for the permittee to meet these final limitations with monitoring only in the interim. Monitoring for Arsenic, Mercury, and Selenium will now be twice per month while Copper and Dissolved Iron will be quarterly.

See the attached draft NPDES permit for the proposed compliance schedule.

Emerging Pollutants (TDS, Sulfate, Chloride, Bromide, 1,4-Dioxane)

The existing permit includes monitoring for Total Dissolved Solids (TDS) and Sulfates due to the loading of TDS discharged. The TDS concentration over the past permit term per available eDMR data has averaged 9448 mg/L and the monitoring for both TDS and Sulfates will remain but at a reduced frequency from monthly to quarterly.

Chesapeake Bay/Nutrient Requirements

A portion of the Chesapeake Bay and many of its tidal tributaries have been listed as impaired under Section 303(d) of the Water Pollution Control Act, 33 U.S.C. §1313(d). Total Nitrogen and Total Phosphorus cap loads have been established for significant dischargers in Pennsylvania to reduce the total nutrient load to the Bay and meet State of Maryland Water Quality Standards. The Jeld-Wen facility is not a Chesapeake Bay Significant Industrial Wastewater discharger. Nutrient loadings are minimal for this discharge of boiler regeneration water and therefore, no additional monitoring is being required at this time.

Chemical Additives

No chemicals that the Department considers to be Chemical Additives are included in the discharge.

Best Professional Judgment (BPJ) Limitations

Comments: Existing BPJ limits are included in the permit and are based upon the Steam Generation ELGs as mentioned above. Specifically, 40 CFR 423.15(a)(3) for low volume wastewater sources has been applied and these limitations are listed below. These limits remain applicable and will remain in the permit.

Parameter	Limit (mg/l)	SBC
TSS	30	Monthly Ave.
	100	Daily Max
Oil and Grease	15	Monthly Ave.
	20	Daily Max

PFAS

Under direction from EPA, the Department has begun requiring monitoring for Per- and Polyfluoroalkyl substances (PFAS)-related compounds. Therefore, this discharge will receive annual monitoring for PFOA, PFOS, HFPO-DA, and PFBS.

Anti-Backsliding

No water quality-based or best professional judgment effluent limitations were made less stringent than the existing limits in this proposed draft permit consistent with the anti-backsliding requirements of 40 CFR 122.44(l).

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/day	Weir
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
TSS	XXX	XXX	XXX	30	100	150	1/week	Grab
Total Dissolved Solids	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Oil and Grease	XXX	XXX	XXX	15	20	30	1/week	Grab
Total Arsenic (ug/L) – Interim	XXX	Report	XXX	XXX	Report	XXX	2/month	Grab
Total Arsenic (ug/L) – Final	0.006	0.01	XXX	29.2	45.5	72.9	2/month	Grab
Total Copper (ug/L)	XXX	Report	XXX	XXX	Report	XXX	1/quarter	Grab
Dissolved Iron	XXX	Report	XXX	XXX	Report	7.0	1/quarter	Grab
Total Mercury (ug/L) – Interim	XXX	Report	XXX	Report	Report	XXX	2/month	Grab
Total Mercury (ug/L) – Final	0.00003	0.00005	XXX	0.15	0.23	0.36	2/month	Grab
Total Selenium (ug/L) – Interim	XXX	Report	XXX	XXX	Report	XXX	2/month	Grab
Total Selenium (ug/L) – Final	0.003	0.005	XXX	14.6	22.7	36.4	2/month	Grab
Sulfate	XXX	Report	XXX	XXX	Report	XXX	1/quarter	Grab
PFOA (ng/L)	XXX	Report	XXX	XXX	Report	XXX	1/year	Grab
PFOS (ng/L)	XXX	Report	XXX	XXX	Report	XXX	1/year	Grab

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
PFBS (ng/L)	XXX	Report	XXX	XXX	Report	XXX	1/year	Grab
HFPO-DA (ng/L)	XXX	Report	XXX	XXX	Report	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001

Other Comments: The TDS and Sulfate monitoring frequencies have been reduced from monthly to quarterly. Final effluent limitations are new for Arsenic, Mercury, and Selenium with more frequent monitoring. Monitoring for PFAS is new as mentioned above. Monitoring for Zinc has been removed.

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 002, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Arsenic	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Chromium	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Copper	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Pentachloro-phenol	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: Outfall 002

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (386-0400-001), SOPs and/or BPJ.

Outfall 003, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Arsenic	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Chromium	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Copper	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Pentachloro-phenol	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: Outfall 003

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (386-0400-001), SOPs and/or BPJ.

Outfall 004, Effective Period: Permit Effective Date through Permit Expiration Date.

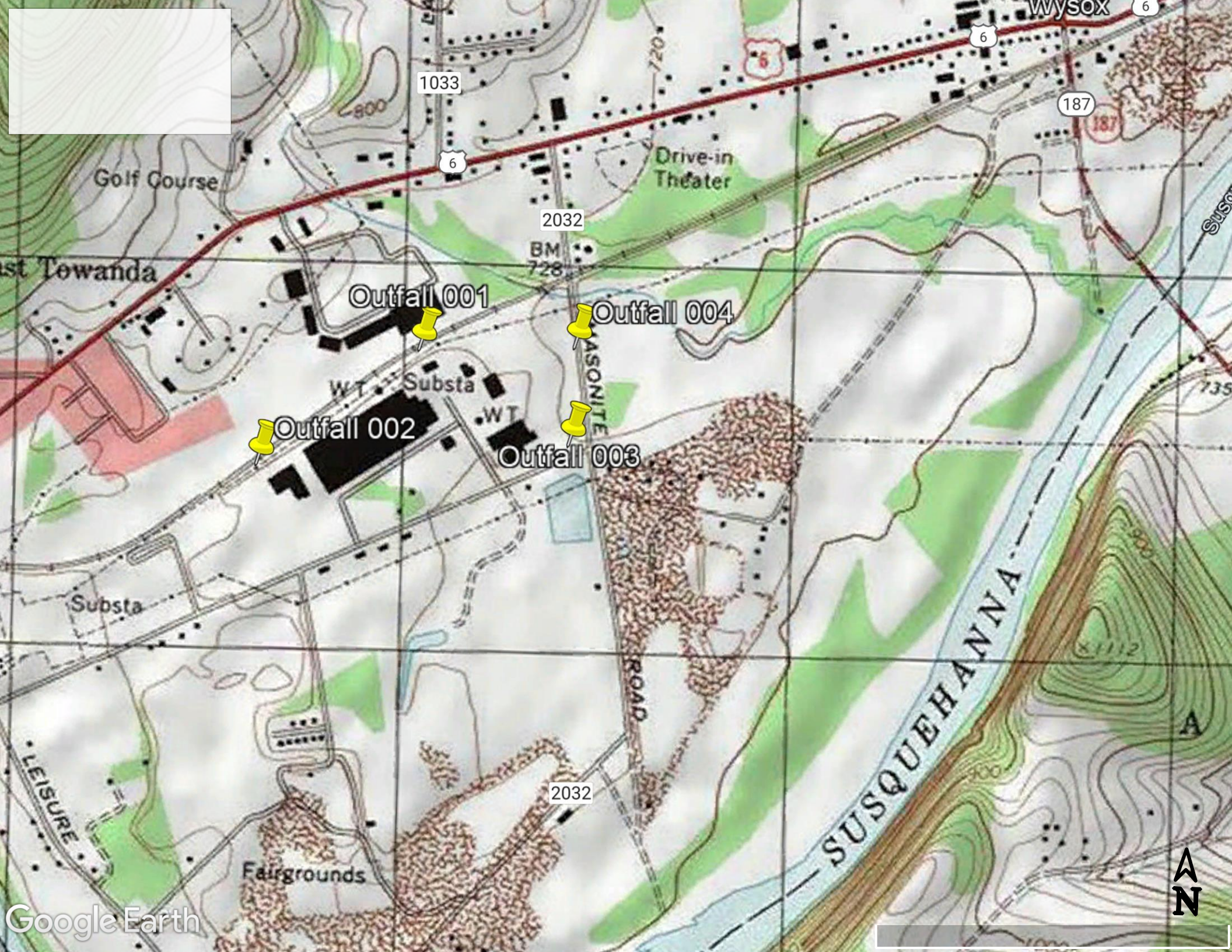
Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Arsenic	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Chromium	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Copper	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Pentachloro-phenol	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: Outfall 004

Tools and References Used to Develop Permit	
<input type="checkbox"/>	WQM for Windows Model (see Attachment)
<input checked="" type="checkbox"/>	Toxics Management Spreadsheet (see Attachment B)
<input type="checkbox"/>	TRC Model Spreadsheet (see Attachment)
<input type="checkbox"/>	Temperature Model Spreadsheet (see Attachment)
<input checked="" type="checkbox"/>	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
<input checked="" type="checkbox"/>	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
<input type="checkbox"/>	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
<input checked="" type="checkbox"/>	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
<input type="checkbox"/>	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
<input type="checkbox"/>	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
<input type="checkbox"/>	Pennsylvania CSO Policy, 386-2000-002, 9/08.
<input type="checkbox"/>	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
<input type="checkbox"/>	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
<input type="checkbox"/>	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
<input checked="" type="checkbox"/>	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
<input type="checkbox"/>	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
<input type="checkbox"/>	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
<input type="checkbox"/>	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
<input checked="" type="checkbox"/>	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
<input type="checkbox"/>	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
<input type="checkbox"/>	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
<input type="checkbox"/>	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
<input type="checkbox"/>	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
<input type="checkbox"/>	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
<input type="checkbox"/>	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 386-2000-020, 10/97.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
<input type="checkbox"/>	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 386-2000-010, 3/1999.
<input checked="" type="checkbox"/>	Design Stream Flows, 386-2000-003, 9/98.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
<input type="checkbox"/>	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
<input type="checkbox"/>	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
<input type="checkbox"/>	SOP:
<input type="checkbox"/>	Other:

Attachments:

- A. Discharge Location Map
- B. Toxics Management Spreadsheet



Wysox

1033

6

187

Golf Course

Drive-in Theater

2032

BM 728

Outfall 001

Outfall 004

st Towanda

WT

Substa

WT

Outfall 002

Outfall 003

MASONITE

ROAD

Substa

SUSQUEHANNA

735

LEISURE

Fairgrounds

2032

SUSQUEHANNA

N

Discharge Information

Instructions **Discharge** Stream

Facility: **Jeld-Wen, Inc.** NPDES Permit No.: **PA0209457** Outfall No.: **001**
 Evaluation Type: **Major Sewage / Industrial Waste** Wastewater Description:

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
0.026	1207	6.68						

Discharge Pollutant	Units	Max Discharge Conc	0 if left blank		0.5 if left blank		0 if left blank			1 if left blank	
			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	16200								
	Chloride (PWS)	mg/L	761								
	Bromide	mg/L	1.56								
	Sulfate (PWS)	mg/L	< 15400								
	Fluoride (PWS)	mg/L									
Group 2	Total Aluminum	µg/L	69.3								
	Total Antimony	µg/L	< 0.35								
	Total Arsenic	µg/L	39.5								
	Total Barium	µg/L	324								
	Total Beryllium	µg/L	< 0.68								
	Total Boron	µg/L	< 2								
	Total Cadmium	µg/L	< 0.12								
	Total Chromium (III)	µg/L	< 39.8								
	Hexavalent Chromium	µg/L	< 0.25								
	Total Cobalt	µg/L	0.55								
	Total Copper	µg/L	27.7								
	Free Cyanide	µg/L									
	Total Cyanide	µg/L	< 6								
	Dissolved Iron	µg/L	223								
	Total Iron	µg/L	252								
	Total Lead	µg/L									
	Total Manganese	µg/L	< 17								
	Total Mercury	µg/L	0.6								
	Total Nickel	µg/L	11								
	Total Phenols (Phenolics) (PWS)	µg/L	< 4								
Total Selenium	µg/L	21.6									
Total Silver	µg/L	< 1.37									
Total Thallium	µg/L	< 0.07									
Total Zinc	µg/L	25.9									
Total Molybdenum	µg/L										
Acrolein	µg/L	<									
Acrylamide	µg/L	<									
Acrylonitrile	µg/L	<									
Benzene	µg/L	<									
Bromoform	µg/L	<									

Stream / Surface Water Information

Jeld-Wen, Inc., NPDES Permit No. PA0209457, Outfall 001

Instructions Discharge **Stream**

Receiving Surface Water Name:

No. Reaches to Model: 1

- Statewide Criteria
- Great Lakes Criteria
- ORSANCO Criteria

Location	Stream Code*	RMI*	Elevation (ft)*	DA (mi ²)*	Slope (ft/ft)	PWS Withdrawal (MGD)	Apply Fish Criteria*
Point of Discharge	030206	1.19	710	13.3			Yes
End of Reach 1	030206	0.001	690	15			Yes

Q₇₋₁₀

Location	RMI	LFY (cfs/mi ²)*	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness*	pH*	Hardness	pH
Point of Discharge	1.19	0.0058										100	7		
End of Reach 1	0.001	0.0058													

Q_h

Location	RMI	LFY (cfs/mi ²)*	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness	pH	Hardness	pH
Point of Discharge	1.19														
End of Reach 1	0.001														

Model Results

Jeld-Wen, Inc., NPDES Permit No. PA0209457, Outfall 001

Instructions

Results

RETURN TO INPUTS

SAVE AS PDF

PRINT

All

Inputs

Results

Limits

Hydrodynamics

Q₇₋₁₀

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)
1.19	0.08		0.08	0.04	0.003	0.392	8.685	22.174	0.035	2.106	3.228
0.001	0.09		0.087								

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)
1.19	0.79		0.79	0.04	0.003	0.927	8.685	9.368	0.103	0.703	1.858
0.001	0.879		0.88								

Wasteload Allocations

AFC

CCT (min):

PMF:

Analysis Hardness (mg/l):

Analysis pH:

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Total Aluminum	0	0		0	750	750	2,188	
Total Antimony	0	0		0	1,100	1,100	3,210	
Total Arsenic	0	0		0	340	340	992	Chem Translator of 1 applied
Total Barium	0	0		0	21,000	21,000	61,275	
Total Boron	0	0		0	8,100	8,100	23,635	
Total Cadmium	0	0		0	9.220	10.5	30.6	Chem Translator of 0.878 applied
Total Chromium (III)	0	0		0	2056.731	6,509	18,991	Chem Translator of 0.316 applied
Hexavalent Chromium	0	0		0	16	16.3	47.5	Chem Translator of 0.982 applied
Total Cobalt	0	0		0	95	95.0	277	
Total Copper	0	0		0	58.846	61.3	179	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 Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	1.400	1.65	4.81	Chem Translator of 0.85 applied
Total Nickel	0	0		0	1763.299	1,767	5,155	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	47.665	56.1	164	Chem Translator of 0.85 applied
Total Thallium	0	0		0	65	65.0	190	
Total Zinc	0	0		0	442.182	452	1,319	Chem Translator of 0.978 applied

 CFC

 CCT (min):

 PMF:

 Analysis Hardness (mg/l):

 Analysis pH:

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	220	220	642	
Total Arsenic	0	0		0	150	150	438	Chem Translator of 1 applied
Total Barium	0	0		0	4,100	4,100	11,963	
Total Boron	0	0		0	1,600	1,600	4,669	
Total Cadmium	0	0		0	0.729	0.86	2.52	Chem Translator of 0.843 applied
Total Chromium (III)	0	0		0	267.538	311	908	Chem Translator of 0.86 applied
Hexavalent Chromium	0	0		0	10	10.4	30.3	Chem Translator of 0.962 applied
Total Cobalt	0	0		0	19	19.0	55.4	
Total Copper	0	0		0	34.178	35.6	104	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	4,377	WQC = 30 day average; PMF = 1
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	0.770	0.91	2.64	Chem Translator of 0.85 applied
Total Nickel	0	0		0	195.848	196	573	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	14.6	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	37.9	
Total Zinc	0	0		0	445.800	452	1,319	Chem Translator of 0.986 applied

 THH

 CCT (min):

 PMF:

 Analysis Hardness (mg/l):

 Analysis pH:

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	500,000	500,000	N/A	
Chloride (PWS)	0	0		0	250,000	250,000	N/A	
Sulfate (PWS)	0	0		0	250,000	250,000	N/A	
Total Aluminum	0	0		0	N/A	N/A	N/A	

Total Antimony	0	0		0	5.6	5.6	16.3	
Total Arsenic	0	0		0	10	10.0	29.2	
Total Barium	0	0		0	2,400	2,400	7,003	
Total Boron	0	0		0	3,100	3,100	9,045	
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	875	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Manganese	0	0		0	1,000	1,000	2,918	
Total Mercury	0	0		0	0.050	0.05	0.15	
Total Nickel	0	0		0	610	610	1,780	
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	0.7	
Total Zinc	0	0		0	N/A	N/A	N/A	

 CRL

 CCT (min):

 PMF:

 Analysis Hardness (mg/l):

 Analysis pH:

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

Total Thallium	0	0		0	N/A	N/A	N/A	
Total Zinc	0	0		0	N/A	N/A	N/A	

Recommended WQBELs & Monitoring Requirements

No. Samples/Month: 4

Pollutants	Mass Limits		Concentration Limits				Governing WQBEL	WQBEL Basis	Comments
	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units			
Total Arsenic	0.006	0.01	29.2	45.5	72.9	µg/L	29.2	THH	Discharge Conc ≥ 50% WQBEL (RP)
Total Copper	Report	Report	Report	Report	Report	µg/L	104	CFC	Discharge Conc > 10% WQBEL (no RP)
Dissolved Iron	Report	Report	Report	Report	Report	µg/L	875	THH	Discharge Conc > 10% WQBEL (no RP)
Total Mercury	0.00003	0.00005	0.15	0.23	0.36	µg/L	0.15	THH	Discharge Conc ≥ 50% WQBEL (RP)
Total Selenium	0.003	0.005	14.6	22.7	36.4	µg/L	14.6	CFC	Discharge Conc ≥ 50% WQBEL (RP)

Other Pollutants without Limits or Monitoring