pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0087718**
Facility Type	**Industrial**	APS ID	**560472**
Major / Minor	**Minor**	Authorization ID	**1441380**

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

Applicant and Facility Information

Applicant Name	**Crystal Spring Hardwood Inc.**	Facility Name	**Crystal Spring Hardwood**
Applicant Address	345 S. Valley Road	Facility Address	345 S. Valley Road
	Crystal Spring, PA 15536-0034		Crystal Spring, PA 15536
Applicant Contact	Mark Young	Facility Contact	Mark Young
Applicant Phone	(814) 598-8351	Facility Phone	(814) 735-2050
Client ID	242902	Site ID	465765
SIC Code	2421	Municipality	Brush Creek Township
SIC Description	Manufacturing - Sawmills And Planing Mills, General	County	Fulton
Date Application Received	May 24, 2023	EPA Waived?	Yes
Date Application Accepted	May 24, 2023	If No, Reason	

Purpose of Application: NPDES permit renewal.

Summary of Review

The application submitted by the applicant requests a NPDES renewal permit for the Crystal Springs Hardwood located at 345 South Valley Road, Crystal Spring, PA 15536 in Fulton County, municipality of Brush Creek Township. The NPDES expired on November 30, 2023. The application for renewal was received by DEP Southcentral Regional Office (SCRO) on May 24, 2023.

The subject facility is a 0.00012 MGD (120 gal/day) treatment facility. The applicant does not anticipate any proposed upgrades to the treatment facility in the next five years. The NPDES application has been processed as an Industrial Wastewater Facility (Minor without Effluent Limitation Guidelines (ELG)) due to the type of wastewater and the design flow rate for the facility.

Sludge use and disposal description and location(s): N/A

Changes from the previous permit: There is a new second kiln 20 x 100 ft building with estimate 50-gallon every two days discharge going to the same dry ditch and enter to a holding tank. Discharge rate and frequency are monitored and adjusted to fall within 120 gpd limit of the permit.

Based on the review outline in this fact sheet, it is recommended that the permit be drafted and published in the Pennsylvania Bulletin for public comments for 30 days.

Approve	Deny	Signatures	Date
X		*Hilaryle* Hilary H. Le / Environmental Engineering Specialist	October 27, 2023
X		*Maria D. Bebenek for Daniel W. Martin* Daniel W. Martin, P.E. / Environmental Engineer Manager	December 7, 2023

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.00012
Latitude	39º 57' 5.03"	Longitude	-78º 13' 50.22"
Quad Name	Breezewood	Quad Code	
Wastewater Description:	IW Process Effluent without ELG		

Outfall No.	002	Design Flow (MGD)	0
Latitude	39º 57' 3.65"	Longitude	-78º 13' 48.45"
Quad Name	Breezewood	Quad Code	
Wastewater Description:	Stormwater		

Receiving Waters	Little Brush Creek to Brush Creek (HQ-CWF)	Stream Code	14292
NHD Com ID	65848547	RMI	0.30
Drainage Area	21.6 mi.^{2}	Yield (cfs/mi^2)	0.04
Q_{7-10} Flow (cfs)	0.869	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1150	Slope (ft/ft)	
Watershed No.	11-C	Chapter 93 Class.	HQ-CWF, MF, TSF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	

Nearest Downstream Public Water Supply Intake	Saxton Municipal Water Authority		
PWS Waters	Raystown Juniata River	Flow at Intake (cfs)	
PWS RMI	38.5 miles	Distance from Outfall (mi)	Approximate 49.0 miles

Changes Since Last Permit Issuance:

Drainage Area
The discharges are to Little Brush Creek at RMI 0.30 miles. A drainage area upstream of the discharge is estimated to be 21.6 mi.^{2}, according to USGS PA StreamStats available at: https://streamstats.usgs.gov/ss/.

Streamflow
According to StreamStats, the discharge point on Little Brush Creek has a Q_{7-10} of 0.869 cfs and a drainage area of 21.6 mi.^{2}, which results in a Q_{7-10} low flow yield of 0.04 cfs/mi.^{2}. This information is used to obtain a chronic or 30-day (Q_{30-10}), and an acute or 1-day (Q_{1-10}) exposure stream flow for the discharge point as follows (Guidance No. 391-2000-023):

Q_{7-10} = 0.869 cfs
Low Flow Yield = 0.869 cfs / 21.6 mi.^{2} = 0.04 cfs/mi.^{2}
Q_{30-10} = 1.36 * 0.869 cfs = 1.18 cfs
Q_{1-10} = 0.64 * 0.869 cfs = 0.56 cfs

Little Brush Creek
25 Pa. Code § 93.9n classifies little Brush Creek to Brush Creek as High Quality-Cold Water Fishes, Migratory Fishes, and Trout Stocking Fishes (HQ-CWF, MF, & TSF) surface water. Based on the 2022 Integrated Report, Little Brush Creek, assessment unit ID 23368, is not impaired. A TMDL currently does not exist for this stream segment, therefore, no TMDL has been taken into consideration during this review.

PWS Intake

The nearest downstream public water supply intake is the Saxton Municipal Water Authority on Raystown Juniata River. It is approximately 49.0 miles downstream of the discharge. Due to the distance, dilution, and effluent limits the discharge is not expected to impact the water supply.

Permit History

In 1996, Genwove purchased the site from Sabbeth Industries. Sabbeth Industries had operated the facility for approximately 15 years without a permit. On February 27, 1998, a permit was issued to Genwove U.S. Ltd. which was due to expire on March 1, 2003. During the permit renewal process, Crystal Spring Hardwood purchased the facility from Genwove.

The issuance of a NPDES permit is necessary for the boiler blowdown from a kiln to dry untreated wood. The blowdown is discharged to a concrete holding tank and then is discharged at a quantity of 50 gallons approximately 2x/day. (See Fact Sheet from August 23, 2005).

Treatment Facility Summary

Site location

The physical address for the facility is 345 South Valley Road, Crystal Spring, PA 15536. A topographical and an aerial photograph of the facility are depicted as Figure 1 and Figure 2.

Figure 1: Topographical map of the subject facility

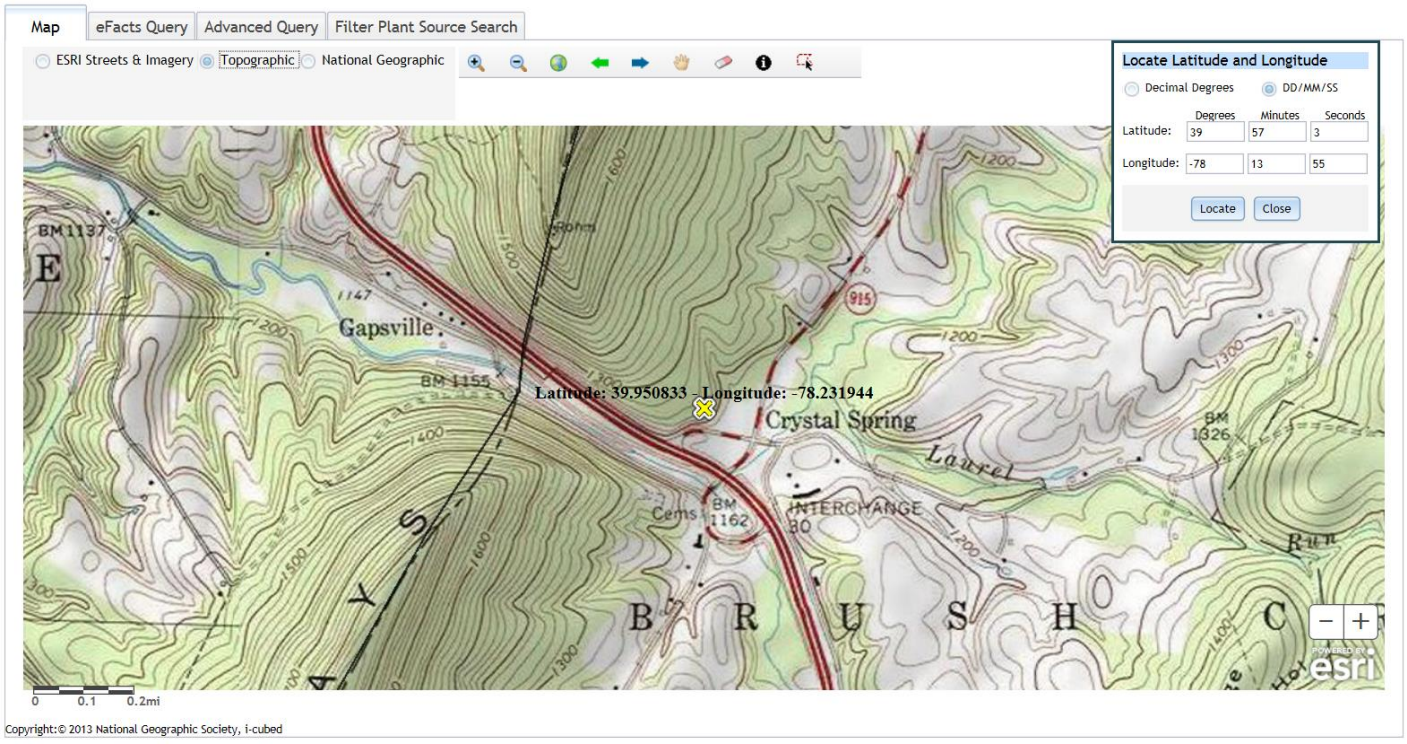
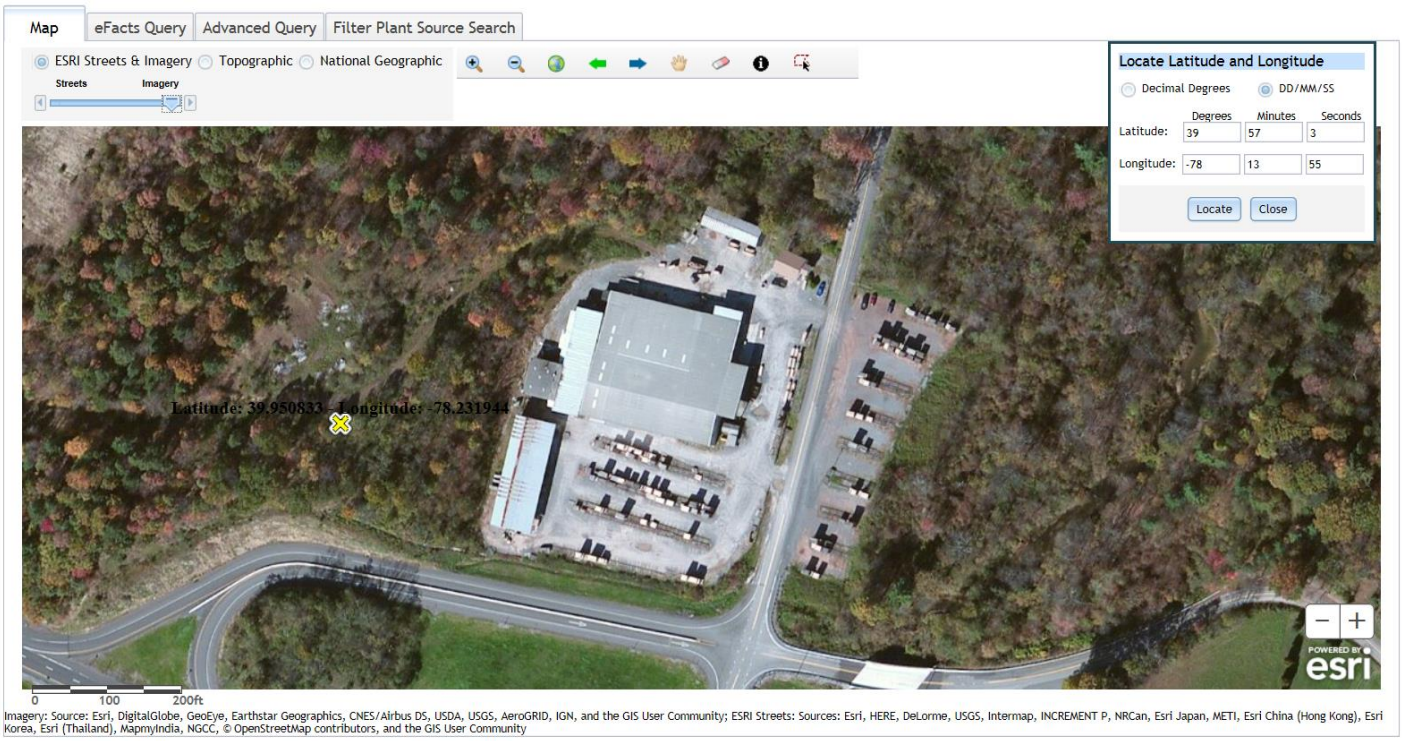
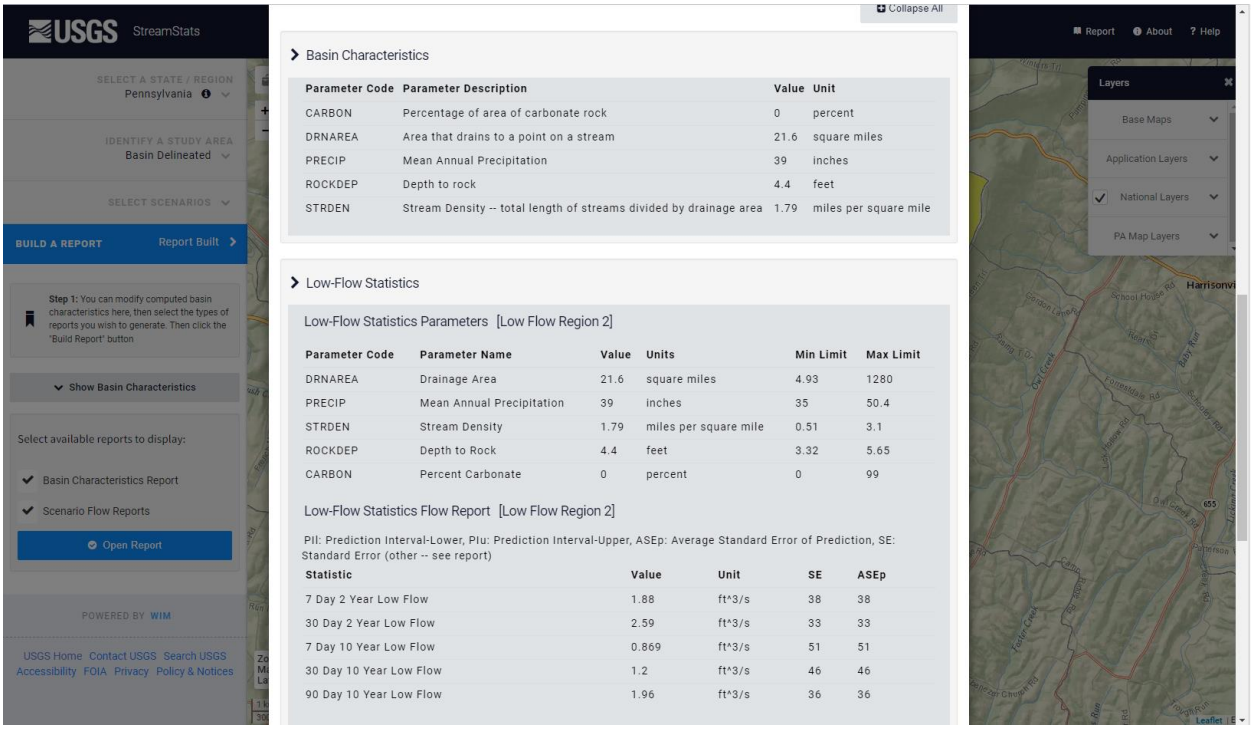


Figure 2: Aerial Photograph of the subject facility





Process Flow Diagram

The subject facility is a 0.00012 MGD (120 gal/day) design flow facility. There is a new second kiln 20 x 100 ft building with estimate 50-gallon every two days discharge going to the same dry ditch and enter to a holding tank. Given the small flow rate increase, it has been assumed that the holding tank should be able to handle the additional flow rate. Discharge rate and frequency are monitored and adjusted to fall within 120 gpd limit of the permit.

Process water (outfall 001) is generated from collection of liquid from kiln drying. Non-process water is generated from the boiler blowdown. Both the process water and non-process water are collected in an underground holding tank to cool and neutralize wastewater pH prior to discharging to Outfall 001. The facility is being evaluated for flow, pH, $CBOD_5$, COD, Total Copper, and Total Zinc. The existing permit limits for the facility is summarized below.

3800-PM-BCW0011 Rev. 9/2016
Permit

Permit No. PA0087718

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. A. For Outfall 001 , **Latitude** 39° 57' 5.03" , **Longitude** 78° 13' 50.22" , **River Mile Index** 0.3 , **Stream Code** 14292

Receiving Waters: Little Brush Creek

Type of Effluent: IW Process Effluent without ELG

1. The permittee is authorized to discharge during the period from **December 1, 2018** through **November 30, 2023**.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

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	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab
Copper, Total	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab
Zinc, Total	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 001

The stormwater outfall 002 is evaluated for pH, CBOD5, COD, TSS, Oil and Grease, TKN, Total Phosphorus, and Total Iron. The existing permit limits for this outfall is summarized below.

3800-PM-BCW0011 Rev. 9/2016
Permit

Permit No. PA0087718

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. B. For Outfall 002 , **Latitude** 39° 57' 3.65" , **Longitude** 78° 13' 48.45" , **River Mile Index** 0.3 , **Stream Code** 14292

Receiving Waters: Little Brush Creek

Type of Effluent: Stormwater

1. The permittee is authorized to discharge during the period from **December 1, 2018** through **November 30, 2023**.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

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	Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Total Suspended Solids	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Oil and Grease	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Total Kjeldahl Nitrogen	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Iron, Total	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 002

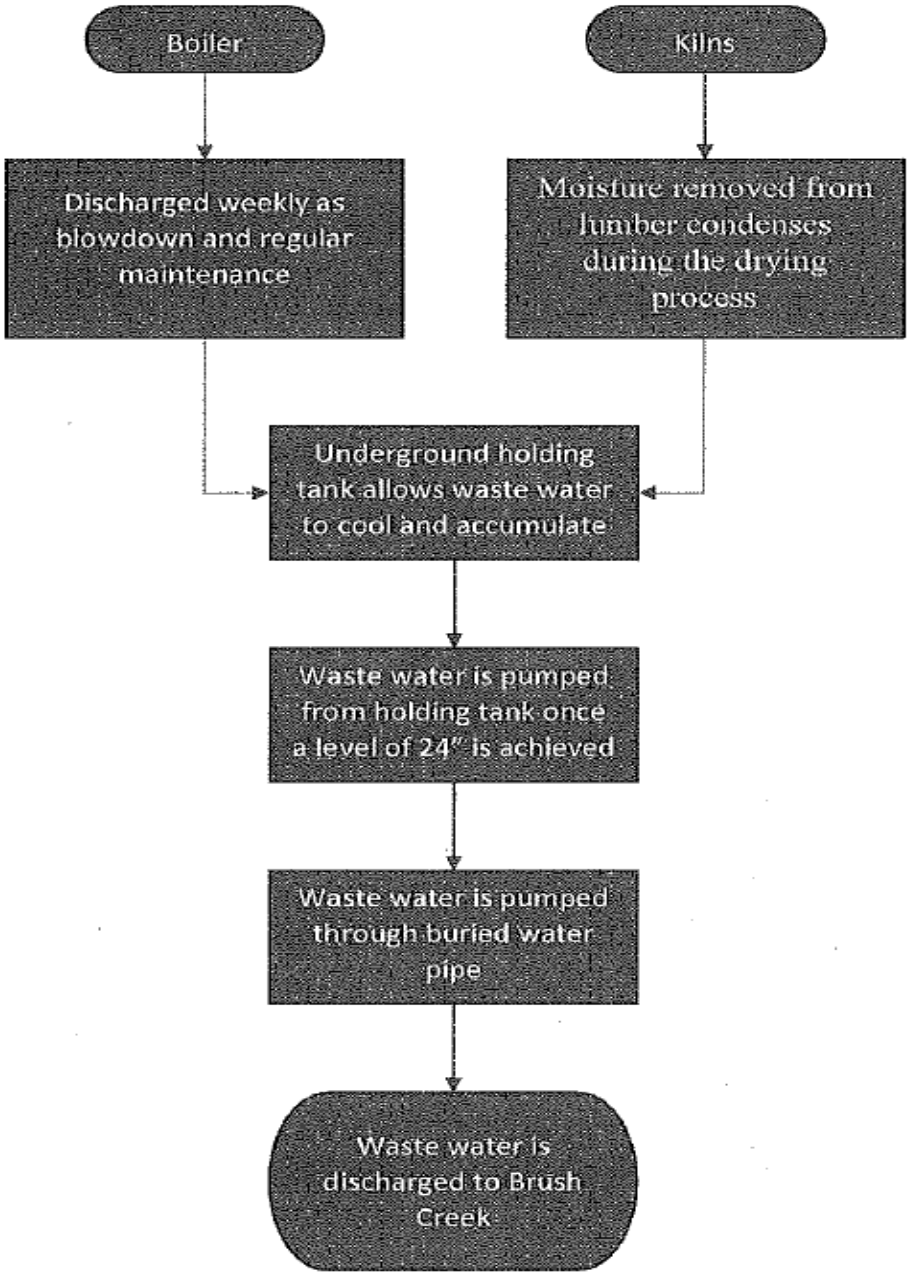
Chemical Additives

Chemical additives are chemical products introduced into a waste stream that is used for cleaning, disinfecting, or maintenance and which may be detected in effluent discharged to waters of the Commonwealth. Chemicals excluded are those used for neutralization of waste streams, the production of goods, and treatment of wastewater.

The subject facility utilizes the following chemicals as part of their treatment process.

Superhot Boiler Treatment manufactured by State Industrial Products. This additive is used on a daily basis as needed for boiler treatment. The reported maximum usage rate provided by the facility is 5 gallons/month or 1.38 lbs/day [i.e. (5 gal/month * (1 month / 30 days) * (8.34 lbs / gal) = 1.38 lbs/day)].

The facility's reported process flow is shown in the figure.



Compliance History	
Summary of DMRs:	The DMRs reported 12 months is summarized in the Table below (Page # 8).
Summary of Inspections:	**3/15/2023**: Mr. Clark, DEP WQS, conducted compliance evaluation inspection. There were no violations noted during inspection. The facility discharge water from lumber drying kilns and boiler blow down. The outfall looked clear, no flow during inspection. The field test for pH was within permit limits. The facility notified that they now have a second kiln building on site. It is a 20 x 100 ft building with its own sump pit to collect the condensate water. The water is pumped through a flexible hose out to the same dry ditch, about 50 ft. below the outfall pipe. The operator estimated that 50 gallons of condensate is discharge every two days. It's the same water that's discharged from other kilns and going to the same dry ditch.
Other Comments:	There are currently no open violations associated with the permittee or the facility.

Other Comments:

Compliance History

DMR Data for Outfall 001 (from September 1, 2022 to August 31, 2023)

Parameter	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23	JAN-23	DEC-22	NOV-22	OCT-22	SEP-22
Flow (MGD) Average Monthly	0.00005	0.00005	0.00005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Flow (MGD) Daily Maximum	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
pH (S.U.) IMAX	6.84	6.59	7.92	8.01	7.83	7.52	7.52	6.72	7.62	7.47	7.37	7.60
pH (S.U.) IMAX	6.84	6.59	7.92	8.01	7.83	7.52	7.52	6.72	7.62	7.47	7.37	7.60
CBOD5 (mg/L) Average Monthly	33.7	32.4	37.7	16.3	41.7	36.4	24.1	41.0	6.10	3.64	3.77	< 3.00
COD (mg/L) Average Monthly	92.3	104	119	42.8	87.8	124	61.5	91.1	20.5	31.9	20.5	27.3
Total Copper (mg/L) Average Monthly	0.0361	0.0299	0.142	0.0470	< 0.0100	0.380	< 0.0100	0.432	0.314	0.0189	0.0670	0.0168
Total Zinc (mg/L) Average Monthly	< 0.0200	0.0465	0.0459	< 0.0200	< 0.0200	0.0360	< 0.0200	0.0264	0.0420	< 0.0200	0.0232	< 0.0200

DMR Data for Outfall 002 (from September 1, 2022 to August 31, 2023)

Parameter	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23	JAN-23	DEC-22	NOV-22	OCT-22	SEP-22
pH (S.U.) IMAX									7.21			
CBOD5 (mg/L) IMAX									4.26			
COD (mg/L) IMAX									< 15.0			
TSS (mg/L) IMAX									< 8.00			
Oil and Grease (mg/L) IMAX									< 5.25			
TKN (mg/L) IMAX									< 0.5000			
Total Phosphorus (mg/L) IMAX									0.0480			
Total Iron (mg/L) IMAX									< 0.200			

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.0001
Latitude 39º 57' 5.03" **Longitude** -78º 13' 50.22"
Wastewater Description: IW Process Effluent without ELG

Technology-Based Limitations

The majority of industrial wastewater is filter backwash. DEP's technical guidance No. 362-2183-003 addresses technology-based control requirements along with the following recommended Best Practicable Control Technology Currently Available (BPT) effluent requirements for WTP sludge and filter backwash:

Parameter	Limit (mg/L)	SBC
Flow	Monitor	Average Monthly (Table 6-3)
pH	6.0 S.U.	Minimum
	9.0 S.U.	Maximum
$CBOD_5$	Monitoring	Average Monthly (Table 6-3)
COD	Monitoring	Average Monthly (Table 6-3)
Copper, Total	No effluent (ug/L)	1/month (Table 6-3)
Zinc, Total	No effluent (ug/L)	1/month (Table 6-3)

Water Quality-Based Limitations

DEP's SOP No. BPNPSM-PMT-032 recommends the average monthly flow as a design flow in water quality modeling unless a different flow is determined to be more representative of conditions. According to the application, the design capacity of the IWTP is 0.0001 MGD with the average flow of 0.0001 MGD and maximum of 0.00012 MGD during production.

Flow
The requirement to monitor the volume of effluent will remain in the draft permit per 40 CFR §122.44(i)(1)(ii).

pH
The minimum and maximum pH of 6.0 and 9.0, respectively, will be maintained per part 40 CFR § 423.12(b)(1) and 25 Pa. Code § 95.2(1).

$CBOD_5$
Due to anti-backsliding requirements, the monitoring requirements for $CBOD_5$ will continue in the proposed permit.

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

Toxics
The Application for Individual Permit to Discharge Industrial Wastewater Instructions specifies which pollutant groups require sampling. Typically, a minimum of three (3) effluent analyses should be completed for each pollutant at each outfall and internal monitoring point. The sampling events should occur at least a week apart.

The facility sampled had one or two or three samples events for many of the Pollutants in Groups 1 and 2. A summary of the pollutants in Groups 1 and 2 submitted in the application is shown in the Table below.

Pollutant Group 1		
Parameter (mg/L)	***Max Avg. Monthly Concentration***	***No Analyses***
TDS	198	2
Bromide	< 0.036	3
Chloride	2.92	3
Sulfate	46.8	3
Sulfide	< 0.6	1
Fluoride	0.244	3
Total Hardness	102	3

Pollutant Group 2		
Parameter (ug/L)	***Max Avg. Monthly Concentration***	***No. Analyses***
Aluminum, Total	319	3
Antimony, Total	< 0.348	3
Arsenic, Total	< 2.5	3
Barium, Total	22.1	
Beryllium, Total	< 0.676	3
Boron, Total	0.059	3
Cadmium, Total	0.165	3
Chromium, Total	< 0.00199	3
Chromium, Hexavalent	< 0.00199	3
Cobalt, Total	0.638	3
Copper, Total	93.7	3
Cyanide, Total	< 0.006	3
Iron, Total	923	2
Iron, dissolved	760	2
Lead, Total	2.67	3
Manganese, Total	175	3
Mercury, Total	< 0.000521	3
Molybdenum, Total	4.23	3
Nickel, Total	2.67	3
Phenols, Total	0.034	3
Selenium, Total	< 0.84	2
Silver, Total	< 1.37	3
Thallium, Total	< 0.068	3
Zinc, Total	50.6	3

DEP utilizes a Toxics Management Spreadsheet (TMS) (last modified on May 2023, ver. 1.4) to facilitate calculations necessary for completing a reasonable potential analysis for toxic pollutants. Since the worksheet does not calculate discharge flow rate below 1000 gpd, the discharge flow rate for the toxics sheet was modelled at 1000 gpd even though the facility discharges a flow rate of 120 gpd.

However, due to anti-backsliding requirements, the monitoring requirements for Total Copper and Total Zinc will continue in the proposed permit. Additionally, chemical oxygen demand (COD) will continue monitoring in the proposed permit as it is a common parameter used to measure effluent quality in industrial applications.

Whole Effluent Toxicity (WET)
This is not applicable to the subject facility.

Total Maximum Daily Loading (TMDL)
The subject facility does not discharge into a local TMDL.

Chesapeake Bay TMDL Requirement
Based upon the supplement the subject facility has been categorized as a Sector C discharger. The supplement defines Sector C as a sewage facility is considered non-significant dischargers if it is a Phase 4 facility or Phase 5 facility having a specified flow rate (i.e., Phase 4 facility ≥ 0.2 MGD and < 0.4 MGD, Phase 5 facility > 0.002 MGD and < 0.2 MGD), a small flow/single residence sewage treatment facilities (≤ 0.002 MGD), or a non-significant IW facilities. These facilities may be covered by statewide general permits or may have individual NPDES permits.

For non-significant IW facilities, monitoring and reporting of TN and TP will be required throughout the permit term in renewed or amended permits anytime the facility has the potential to introduce a net TN or TP increase to the load contained within the intake water used in processing.

Based upon the anticipated flow rate of the discharge and the non-usage of nitrogen and phosphorus additives, the facility is not subject to Sector C monitoring requirements.

The subject facility is not listed in Attachment B in the Phase 2 WIP as a non-significant industrial waste dischargers with a cap load.

Anti-Degradation Requirement

The subject facility's discharge will be to special protection waters and the permit conditions are imposed to protect existing instream water quality and uses. While HQ waters could be impacted by this discharge, very minimal impact is anticipated with the very low discharge flow rate for the subject facility.

Anti-Backsliding Requirement

Anti-backsliding is a federal regulation which prohibits a permit from being renewed, reissued, or modified containing effluent limitations which are less stringent than the comparable effluent limitations in the previous permit (40 CFR 122.l.1 and 40 CFR 122.l.2). A review of the existing permit limitations with the proposed permit limitations confirm that the facility is consistent with anti-backsliding requirements. The facility has proposed effluent limitations that are as stringent as the existing permit.

Development of Effluent Limitations

Outfall No. 002 **Design Flow (MGD)** 0
Latitude 39º 57' 3.65" **Longitude** -78º 13' 48.45"
Wastewater Description: Stormwater

Technology-Based Limitations

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

Parameter	Limit (mg/L)	SBC
pH (S.U.)	Monitor	IMAX 1/year
$CBOD_5$	Monitor	IMAX 1/year
COD	Monitor	IMAX 1/year
TSS	Monitor	IMAX 1/year
Oil and Grease	Monitor	IMAX 1/year
Total Kjeldahl Nitrogen	Monitor	IMAX 1/year
Total Phosphorus	Monitor	IMAX 1/year
Iron, Total	Monitor	IMAX 1/year

Anti-Degradation

The effluent limits for this discharge have been developed to ensure that existing instream water uses and the level of water quality necessary to protect the existing uses are maintained and protected. No High-Quality Waters are impacted by this discharge. No Exceptional Value Waters are impacted by this discharge.

303(d) Listed Streams

The discharge is located on a stream segment that is designated on the 303(d) list as impaired. There is a recreational impairment for industrial point source – organic enrichment.

Class A Wild Trout Fisheries

No Class A Wild Trout Fisheries are impacted by this discharge.

Anti-Backsliding

Pursuant to 40 CFR § 122.44(l)(1), all proposed permit requirements addressed in this fact sheet are at least as stringent as the requirements implemented in the existing NPDES permit unless any exceptions are addressed by DEP in this fact sheet.

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	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/month	Grab
$CBOD_5$	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab
COD	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab
Total Copper	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab
Total Zinc	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab

Compliance Sampling Location:

Other Comments:

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	Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
$CBOD_5$	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
COD	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
TSS	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Oil and Grease	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
TKN	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Total Iron	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab

Compliance Sampling Location:

Other Comments:

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☐	Toxics Management Spreadsheet (see Attachment)
☐	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☐	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
☐	Pennsylvania CSO Policy, 386-2000-002, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
☐	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
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