pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

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

Application Type	**New**	Application No.	**PA0233293**
Facility Type	**Storm Water**	APS ID	**1066846**
Major / Minor	**Minor**	Authorization ID	**1402069**

Applicant and Facility Information

Applicant Name	**Natural Wood USA, LLC**	Facility Name	**Natural Wood USA**
Applicant Address	434 Swartz Road	Facility Address	434 Swartz Road
	Lewisburg, PA 17837-8802		Lewisburg, PA 17837
Applicant Contact	Shawn Rudy	Facility Contact	Shawn Rudy
Applicant Phone	570-939-0720	Facility Phone	570-939-0720
Client ID	371007	Site ID	858372
SIC Code	2421	Municipality	Buffalo Township
SIC Description	Manufacturing - Sawmills and Planing Mills, General	County	Union
Date Application Received	July 5, 2022	EPA Waived?	Yes
Date Application Accepted	July 19, 2022	If No, Reason	N/A
Purpose of Application	New industrial stormwater permit for existing sawmill facility under new management		

Summary of Review

INTRODUCTION

Shawn Rudy, General Manager, has submitted an NPDES permit application for industrial stormwater runoff from a sawmill operation in Buffalo Township, Union County.

APPLICATION

Rudy, of Natural Wood USA, LLC (NWUSA), has submitted the *NPDES Application for Individual Permit to Discharge Industrial Stormwater* (DEP #3800-PM-BCW0403b). This application was received by the Department on July 05, 2022 and considered administratively complete on July 19, 2022. Rudy is both the client and site contact for this application. His additional contact information is (email) srudy@naturalwoodusa.com. The engineering consultant is Tyler Hartline, PE, Project Designer with Mid-Penn Engineering Corporation of Lewisburg, PA. His contact information is (phone) 570-524-2214 and (email) twh@mid-pennengineering.com.

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.

The case file, permit application package and draft permit will be available for public review at the Department's Northcentral Regional Office. The address for this office is 208 West Third Street, Williamsport, PA 17701. An appointment can be made to review these materials during the comment period by calling the file coordinator at 570-327-3636.

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Approve	Deny	Signatures	Date
X		Jeffrey J. Gocek, EIT — Project Manager	03/30/2023
X		Nicholas W. Hartranft, PE — Environmental Engineer Manager	03/30/2023

COMPLIANCE HISTORY

The WMS Query Open Violations by Client revealed no unresolved violations for NWUSA.

The following is historical data for Outfalls 004 and 005 under a previous NPDES permit at this site. See below.

004 - Parameter	2018 – 1	2018 – 2	2019 – 1	2019 – 2	2020 – 1	2020 – 2	2021 – 1	2021 - 2	2022 - 1
Total Arsenic	< 0.05	< 0.05	< 0.05	< 0.01	E	E	0.0065	< 0.02	E
COD	128	46.5	26.3	116	E	E	65.8	77.5	E
Total Chromium	< 0.01	< 0.01	< 0.01	< 0.005	E	E	0.024	0.012	E
Total Copper	< 0.005	<0.005	< 0.005	< 0.005	E	E	0.029	0.021	E
Pentachlorophenol	< 0.0317	<0.0244	< 0.0317	< 5	< 5	E	< 2.6	< 2.5	E
pH	7.61	7.76	7.91	7.52	E	E	7.4	7.8	E
TSS	575	78.3	19	31	E	E	620	485	E

005 - Parameter	2018 – 1	2018 – 2	2019 – 1	2019 – 2	2020 – 1	2020 – 2	2021 – 1	2021 - 2	2022 - 1
Total Arsenic	< 0.05	< 0.05	< 0.05	< 0.01	E	E	< 0.05	< 0.02	E
COD	348	306	41.1	39.2	E	E	38.7	79.7	E
Total Chromium	0.0307	< 0.01	6.9	< 0.005	E	E	0.013	0.013	E
Total Copper	0.0645	0.0126	< 0.005	0.005	E	E	0.0071	0.021	E
Pentachlorophenol	< 0.0351	<0.0345	< 0.0351	< 5	< 5	E	< 2.4	< 2.5	E
pH	7.53	7.78	7.84	7.43	E	E	7.0	7.8	E
TSS	3790	747	36	25	E	E	50	568	E

The last Department inspection at this site, a Compliance Evaluation Inspection (CEI), was conducted February 09, 2021. No violations were attributed to Outfalls 004 and 005.

SITE BACKGROUND

In December 2008, the Department and Kuhns Brothers Lumber entered into a *Consent Order & Agreement (COA)* for violations documented by inspections conducted in March and April 2008. The March 2008 inspection was the result of a complaint received describing the unlawful discharge of industrial waste to the nearby Unnamed Tributary to Spruce Run, which is protected for High-Quality Cold-Water Fishes (HQ-CWF). The March 2008 inspection documented two separate instances of black leachate from the mulch pile overflowing from two different containment ponds to the Unnamed Tributary to Spruce Run. The inspection also documented the discharge of lumber kiln condensate and boiler blowdown from the kiln drying operation to the Unnamed Tributary to Spruce Run. Additional mulch leachate discharges were documented in the April 2008 inspection. Also, in April 2008, two benthic macroinvertebrate surveys were conducted on the Unnamed Tributary to Spruce Run and concluded that the degradation of the high-quality stream was caused by the contaminated industrial and stormwater discharges from the site. A WQM permit was issued in 2011 to Kuhns Brothers Lumber for the construction of a new leachate storage impoundment. Despite being required by the COA, the impoundment was never constructed due to financial constraints.

NPDES PERMIT BACKGROUND

The first permit, #PAS224804, was issued to Kuhns Brothers Lumber in 2011 to regulate industrial stormwater discharges leaving the site. The permit was renewed in 2017.

INDUSTRIAL ACTIVITY

Site Operations

The NWUSA facility is located on approximately 17.6 acres in Buffalo Township, Union County. The site is located on both the north and south sides of Swartz Road, approximately one-half mile west of the intersection with Spruce Run Road. The site includes material storage areas, de-barking equipment, sawmills, lumber storage yards, offices, a retail store and maintenance facilities. This facility processes raw logs into board lumber. Approximately 78.7% of the site has impervious surface. Following the delivery, hardwood logs are sorted and stockpiled in the log storage east of the sawmill. The logs are debarked and milled into rough-cut lumber. All bark and wood chips are stockpiled outside at the northeast corner of the property. The sawed lumber is also stored outside in various locations. Sawdust is stored at the northeast corner of the sawmill.

See Attachment 01 for a map of the site location. See Attachment 02 for a site plan.

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NWUSA listed a Standard Industrial Classification (SIC) code of 2421 on the application. According to http://www.osha.gov, SIC 2421 is *Sawmills and Planing Mills, General*; defined as "Establishments primarily engaged in sawing rough lumber and timber from logs and bolts, or resawing cants and flitches into lumber, including box lumber and softwood cut stock; planning mills combined with sawmills, and separately operated planning mills which are engaged primarily in producing surfaced lumber and standard workings or patterns of lumber. This industry includes establishments primarily engaged in sawing lath and railroad ties and in producing tobacco hogshead stock, wood chips and snow fence lath".

Potential Contaminants

The de-barking and rough sawing produce residual waste in the form of trimmed bark, log cut-offs and sawdust. These wastes are conveyed to and stored outside at the northeast corner of the site.

Material transfer occurs when there is need to replenish oil and fuel storage, fuel vehicles and/or equipment. There is potential for spills or leaks during the transfer. The chemical and material inventory includes cleaning liquids, lubricants, solvents, paint, grease, oil, hydraulic fluid, argon, propane, diesel and gasoline.

STORMWATER MANAGEMENT

Site Characteristics

Runoff from the project site currently discharges through various locations. Stormwater from the northwest portion of the site will be conveyed to stormwater detention pond (SDP) #1, located at the northern portion of the site. Stormwater from northeast portion of the site will be conveyed to SDP #2. Stormwater from the southern portion of the site will be conveyed to SDP #3.

There are no new impervious areas proposed for facility construction that are expected to result in an increase of stormwater rate or volume.

See Attachment 03 for the runoff direction of the site.

Best Management Practices (BMPs)

Site runoff will be collected in three proposed SDPs. These ponds will allow suspended solids to settle to the bottom and the remaining pollutants to be treated by the vegetation, infiltration, and evaporation. SDP characteristics are presented in the table below.

Outfall	SDP	SDP Area (SF)	SDP Volume (CF)	Site Location
001	1	17,973	73,080	Northwest
002	2	25,667	69,097	Northeast
003	3	35,070	76,281	South

Additional BMPs include effluent skimmers, vegetated channels, rock filters and routine maintenance. Accumulated sediment will be removed from existing drainage channels. The outfalls, see below, will be vegetated to assist in stabilization and treatment. These will be inspected bi-weekly and after large precipitation events.

OUTFALLS

Uncontaminated runoff leaves the industrial site via three outfalls. Outfall characteristics are presented in the below table. Each outfall occurs at the overflow of the respective SDP.

Outfall	Latitude	Longitude	Receiving Stream	RMI	SDP
001	41° 00' 31.7"	-76° 59' 30.1"	UNT to Spruce Run	0.71	1
002	41° 00' 31.1"	-76° 59' 18.2"	UNT to Spruce Run	0.54	2
003	41° 00' 23.4"	-76° 59' 28.9"	UNT to Spruce Run	0.66	3

Drainage area characteristics are presented below table.

Outfall	Drainage Area (ft^2)	% Impervious	Drainage Description
001	292,686	88	Fresh cut hardwood lumber
002	150,043	85	Raw hardwood logs and sawdust
003	223,724	87	Fresh cut hardwood lumber

A $Q_{7,10}$ flow for the receiving stream was not calculated since no modeling is performed for intermittent discharges of precipitation and/or runoff.

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RECEIVING STREAM

Stream Characteristics

The nearest surface water, Unnamed Tributary to Spruce Run, will receive any uncontaminated runoff from the industrial site. According to 25 PA § 93.9L, this stream is protected for *High-Quality Cold-Water Fishes* (HQ-CWF) and *Migratory Fishes* (MF). These are the streams *Designated Uses*, which is defined in 25 PA § 93.1 as "those uses specified in §§ 93.9a – 93.9z for each waterbody or segment whether or not the use is being attained". Designated uses are regulations promulgated by the Environmental Quality Board (EQB) throughout the rulemaking process. This stream currently has no *Existing Use*, which is defined in 25 PA § 93.1 as "those uses actually attained in the waterbody on or after November 28, 1975 whether or not they are included in the water quality standards".

The receiving stream is attaining its designated uses for recreation and aquatic life. This stream is identified by Department stream code 18981 and is located in State Water Plan watershed 10C (Buffalo and White Deer Creeks).

Downstream Potable Water Intake

The nearest downstream public water supply intake is the Sunbury Municipal Authority at Sunbury, PA, located 21 river miles downstream on the Susquehanna River.

ANTI-DEGRADATION BACKGROUND

40 CFR §§ 131.12 and 131.32 require Pennsylvania (PA) to adopt an anti-degradation policy and include this policy as a required element of the surface water quality standards program. According to the Department's "Water Quality Anti-Degradation Implementation Guidance" (#391-0300-002), it is the Department's policy to protect the existing uses of all surface waters and the existing quality of High Quality (HQ) and Exceptional Value (EV) waters. The basic concept of anti-degradation is to promote the maintenance and protection of existing water quality for High Quality (HQ) and Exceptional Value (EV) waters, and protection of existing uses for all surface waters because it recognizes that existing water quality and uses have inherent value worthy of protection and preservation. As a required element of PA's water quality standards, the Anti-Degradation (Antideg) program introduces levels of protection for deserving waterbodies above the basic standards. The exception occurs, in the case of HQ waters, when the Department finds (after satisfaction of intergovernmental coordination and public participation requirements) that allowing a lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.

The existing uses are protected when the Department makes a final decision on any permit or approval for an activity that may affect a protected use. The existing uses are also protected based on the Department's evaluation of the best available information that indicates the protected use of a waterbody. For new, additional or increased point source discharges to an HQ or EV water, the person proposing the discharge is required to utilize a nondischarge alternative that is both cost-effective and environmentally sound when compared with the cost of the proposed discharge. If a nondischarge alternative is not cost effective and environmentally sound, the person must use the best available combination of treatment, pollution prevention and wastewater reuse technologies to assure that any discharge is non-degrading. This process, known as the Anti-Degradation Best Available Combination of Technologies (ABACT) analysis, establishes a minimum level of performance for dischargers in HQ or EV waters based on the more stringent of water quality-based effluent limits (WQBELs) or ABACT.

ANTI-DEGRADATION ANALYSIS

Watershed

As indicated above, the watershed is protected for *High Quality-Cold Water Fishes (HQ-CWF)* and *Migratory Fishes (MF)*.

Wastewater/Stormwater

No process wastewater will be discharged from this industrial site. This permit will authorize the discharge of uncontaminated runoff.

Alternatives Analysis

Non-discharge alternatives were evaluated as part of the application. The following alternatives were considered infeasible.

1. The land application of stormwater would be infeasible since it would require the construction of a system much more elaborate and expensive than the one currently in place/proposed.
2. The construction of alternative discharge locations would be infeasible since the site is small and there are no storm sewers or sanitary sewers serving this location.
3. The constructed of treatment wetlands would be infeasible since there is limited site space available, it would be expensive to construct, and difficult/expensive to maintain.

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Best Management Practices

NWUSA considers the zero discharge of stormwater to be both infeasible and cost prohibitive, as described above. NWUSA will utilize the following BMPs for the management of stormwater.

1. Runoff will be conveyed to the impoundments via vegetated berms, rip-rapped channels and the constructed conveyance channels.
2. A Preparedness, Prevention and Contingency (PPC) Plan will be implemented at the site. See below.
3. Various industrial BMPs, described in the PPC Plan and/or required by the permit, will also be implemented at the site.

ABACT Approval

The Department considers the above BMPs acceptable and constitute ABACT for the protection of the Unnamed Tributary to Spruce Run.

PREPAREDNESS, PREVENTION AND CONTINGENCY PLAN

A Preparedness, Prevention and Contingency (PPC) Plan for this site was submitted with the *NPDES Application for Individual Permit to Discharge Industrial Stormwater*. This plan is dated May 2022.

The industrial BMPs detailed in the PPC Plan are material compatibility, pre-release planning, inspection/monitoring program, preventative maintenance, housekeeping program, security, external factor planning, and employee training.

DEVELOPMENT OF STORMWATER MONITORING

The following monitoring requirements were developed as Appendix D of the Department's *Authorization to Discharge Under the NPDES General Permit for Discharges of Stormwater Associated with Industrial Activity* (PAG-03, revised December 2022). This appendix identified pollutants of concern associated with various Timber Products industries.

Timber Products facilities which use chlorophenolic formulations must monitor for Penatchlorophenol. For all other facilities, the monitoring of Pentachlorophenol is optional. Facilities which use chromium, copper and/or arsenic formulations must monitor for Total Arsenic, Total Chromium and Total Copper. For all other facilities, the monitoring of Total Arsenic, Total Chromium and Total Copper is optional. If monitoring is not conducted, the permittee shall use a No Discharge Indicator (NODI) on the DMR in lieu of sample data.

After two years of sample data showing non-detect values, NWUSA may submit a permit amendment to remove parameters which are not relevant to this operation.

Parameter	Monitoring Requirements		Benchmark Values
	Minimum Measurement Frequency	Sample Type	
Total Nitrogen (mg/L)	1/6 months	Calculation	XXX
Total Phosphorus (mg/L)	1/6 months	Grab	XXX
pH (SU)	1/6 months	Grab	9.0
Chemical Oxygen Demand (mg/L)	1/6 months	Grab	120
Total Suspended Solids (mg/L)	1/6 months	Grab	100
Pentachlorophenol (mg/L)	1/6 months	Grab	XXX
Total Arsenic (mg/L)	1/6 months	Grab	XXX
Total Chromium (mg/L)	1/6 months	Grab	XXX
Total Copper (mg/L)	1/6 months	Grab	XXX

Benchmark values are not effluent limitations. They represent the threshold concentration for the determination of whether existing site BMPs are effective in controlling or preventing stormwater pollution. Two consecutive monitoring period exceedances will require the permittee to develop and submit a corrective action plan (CAP).

Appendix D also specifies sector-specific BMPs. These will be included in the permit as part of a special condition. In addition to the monitoring requirements, an annual inspection will be required by the Department's stormwater requirements.

STANDARD OPERATING PROCEDURES

The review of this application was in accordance with the Department's *Standard Operating Procedure (SOP) for Clean Water Program Establishing Effluent Limitations for Individual Industrial Permits* (SOP #BPNPSM-PMT-032) and the *SOP for Clean Water Program New and Reissuance Industrial Waste and Industrial Stormwater Individual NPDES Permit Applications* (SOP #BPNPSM-PMT-001).

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PROPOSED SUPPLEMENTAL DISCHARGE MONITORING REPORTS

Annual Inspection Form
Daily Effluent Monitoring Report Form
Lab Accreditation Form
Non-Compliance Reporting Form

PROPOSED SPECIAL CONDITIONS

Stormwater Outfalls and Authorized Non-Stormwater Discharges
Best Management Practices
Routine Inspections
Preparedness, Prevention and Contingency Plan
Stormwater Monitoring Requirements
Other Requirements

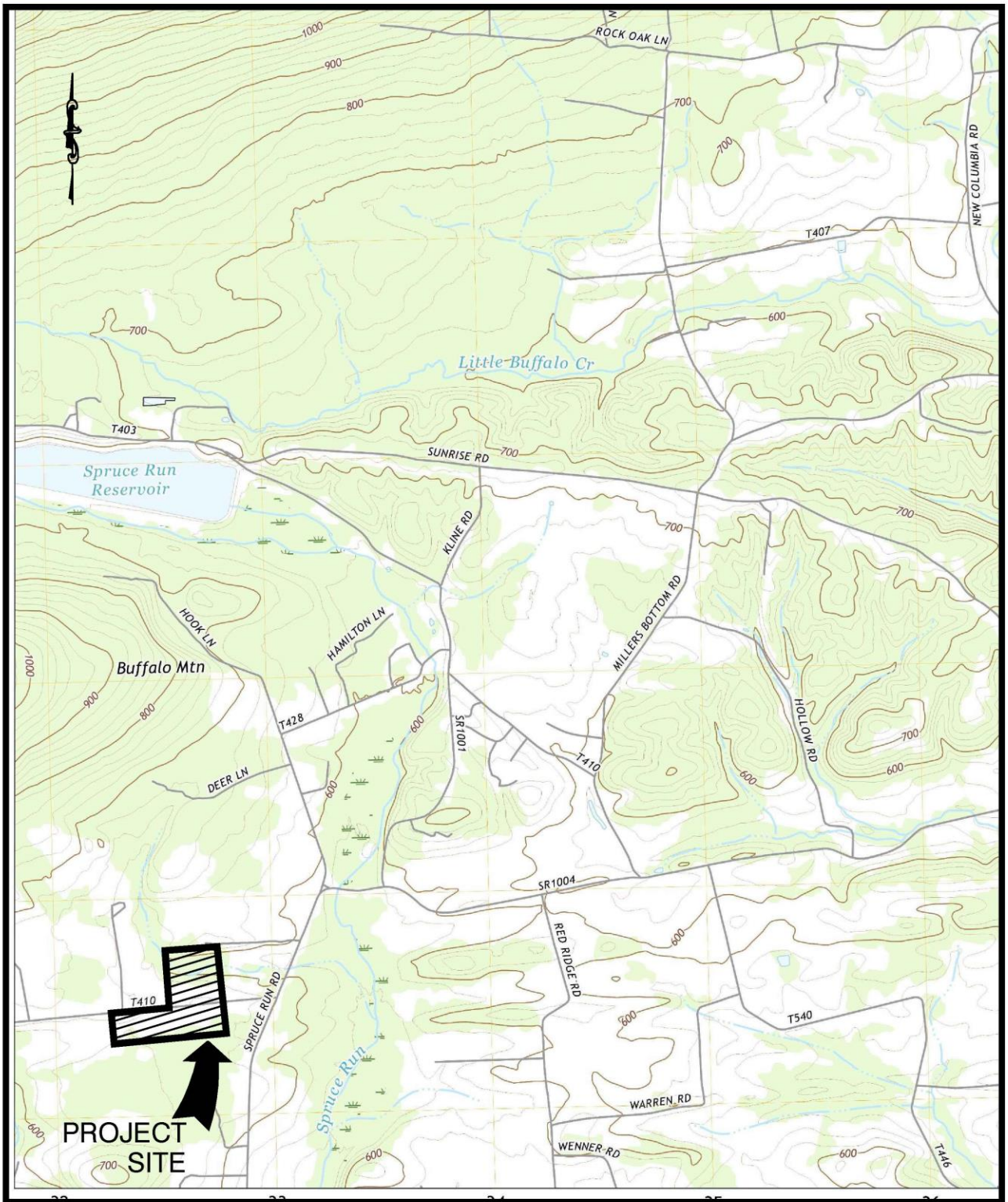
PROPOSED STORMWATER MONITORING REQUIREMENTS

Outfall 001, Outfall 002 & Outfall 003 - Effective Period: Permit Effective Date through Permit Expiration Date

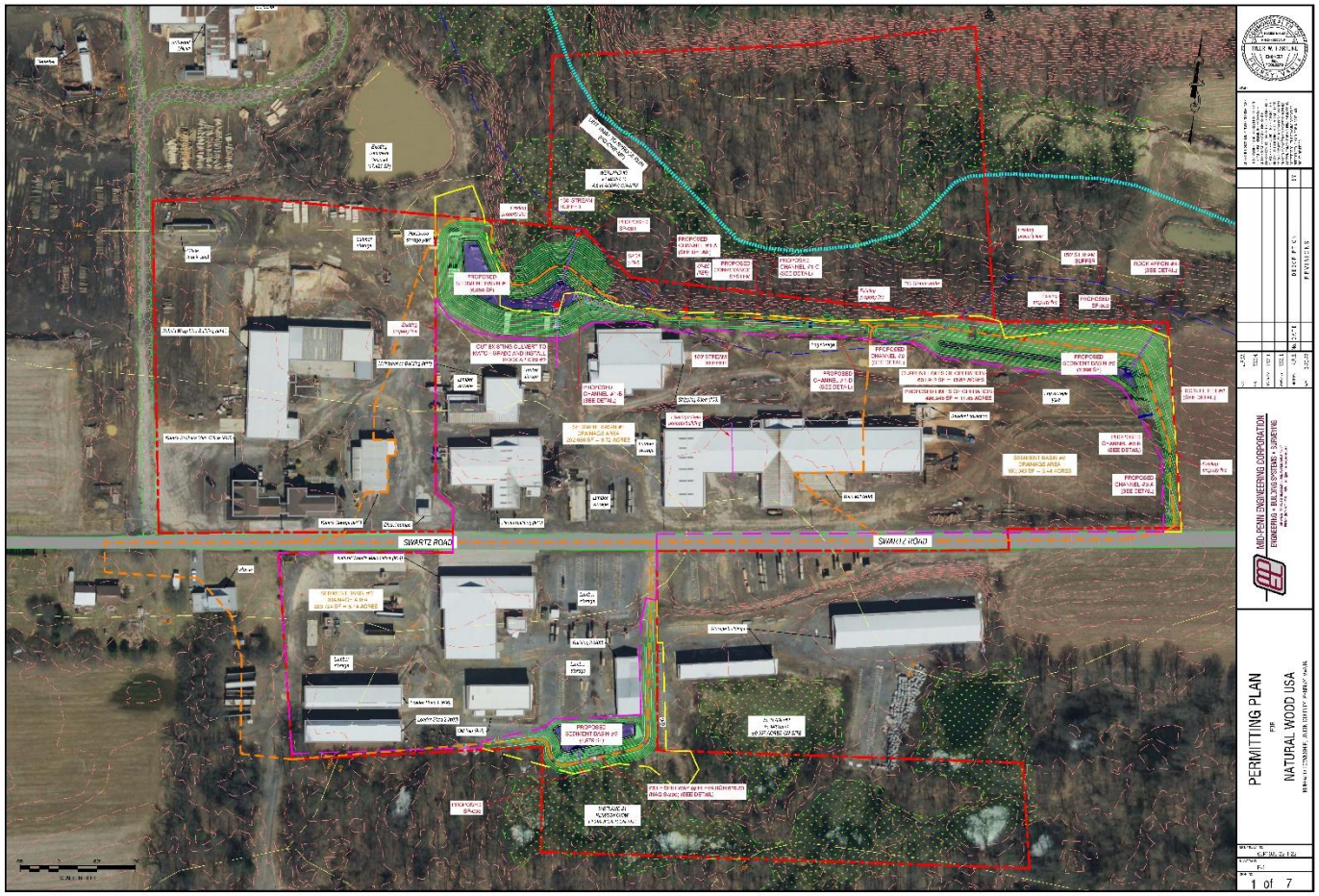
Discharge Parameter	Mass Limits (lb/day)		Concentration Limits in mg/L, unless noted				Monitoring Requirements	
	Monthly Average	Daily Maximum	Minimum	Monthly Average	Daily Maximum	IMAX	Minimum Measurement Frequency	Required Sample Type
Total Nitrogen (mg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Calculation
Total Phosphorus (mg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
pH (SU)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Chemical Oxygen Demand (mg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids (mg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Pentachlorophenol (mg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Arsenic (mg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Chromium (mg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Copper (mg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

END of Fact Sheet.

ATTACHMENT 01



ATTACHMENT 02



ATTACHMENT 03