

Application Type           New            
Facility Type           Stormwater            
Major / Minor           Minor          

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

Application No.           PA0233277            
APS ID           1065881            
Authorization ID           1400439          

**Applicant and Facility Information**

Applicant Name	<u>          Northeast Softwoods, LLC          </u>	Facility Name	<u>          Northeast Softwoods          </u>
Applicant Address	<u>          2440 Earlstown Road, Suite 500          </u> <u>          Centre Hall, PA 16828-9146          </u>	Facility Address	<u>          86 Kuhns Lane          </u> <u>          Lewisburg, PA 17837-8802          </u>
Applicant Contact	<u>          Sasha McCarthy          </u>	Facility Contact	<u>          Sasha McCarthy          </u>
Applicant Phone	<u>          814-380-2493          </u>	Facility Phone	<u>          814-380-2493          </u>
Client ID	<u>          370702          </u>	Site ID	<u>          858123          </u>
SIC Code	<u>          2421          </u>	Municipality	<u>          Buffalo Township          </u>
SIC Description	<u>          Manufacturing - Sawmills and Planing Mills, General          </u>	County	<u>          Union          </u>
Date Application Received	<u>          June 21, 2022          </u>	EPA Waived?	<u>          Yes          </u>
Date Application Accepted	<u>          July 18, 2022          </u>	If No, Reason	<u>          N/A          </u>
Purpose of Application	<u>          New industrial stormwater permit for existing sawmill facility under new management          </u>		

**Summary of Review**

INTRODUCTION

Sasha McCarthy, owner, has submitted an NPDES permit application for industrial stormwater runoff from a sawmill operation in Buffalo Township, Union County.

APPLICATION

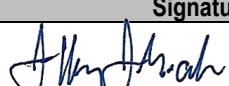
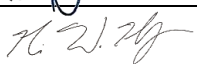
McCarthy, the owner of Northeast Softwoods, LLC (NESW), has submitted the *NPDES Application for Individual Permit to Discharge Industrial Stormwater* (DEP #3800-PM-BCW0403b). This application was received by the Department on June 21, 2022 and considered administratively complete on July 18, 2022. McCarthy is both the client and site contact for this application. His additional contact information is (email) [sasha@nesoftwoods.com](mailto:sasha@nesoftwoods.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) [tw@mid-pennengineering.com](mailto:tw@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	02/21/2023
X		Nicholas W. Hartranft, PE	 Environmental Engineer Manager	02/21/2023

COMPLIANCE HISTORY

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

The following is historical data for Outfalls 001 and 003 under a previous NPDES permit at this site. See below.

001 - 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	< 0.005	< 0.02	E	E
COD	64.8	37.3	51.8	347	E	34.2	53.7	E	E
Total Chromium	< 0.01	< 0.01	9.2	< 0.005	E	< 0.005	0.0072	E	E
Total Copper	< 0.005	0.00822	< 0.005	< 0.005	E	< 0.005	0.0070	E	E
Pentachlorophenol	< 0.0364	< 0.0345	< 0.0364	< 5	E	< 2.6	< 2.5	E	E
pH	7.05	7.62	7.78	6.83	E	6.90	7.30	E	E
TSS	22	307	187	45	E	250	236	E	E

003 - Parameter	2018 - 1	2018 - 2	2019 - 1	2019 - 2	2020 - 1	2020 - 2	2021 - 1	2021 - 2	2022 - 1
Total Arsenic	< 0.05	< 0.01	< 0.05	< 0.01	E	< 0.005	< 0.02	E	E
COD	75.6	110	< 20	46.3	E	45.5	47.3	E	E
Total Chromium	< 0.01	< 0.01	< 0.01	< 0.005	E	0.014	< 0.005	E	E
Total Copper	< 0.005	0.00927	< 0.005	< 0.005	E	0.0072	< 0.005	E	E
Pentachlorophenol	< 0.0444	< 0.0364	< 0.0444	< 5	E	< 2.6	< 2.5	E	E
pH	7.13	7.92	7.28	7.55	E	7.10	7.20	E	E
TSS	75	440	57	5700	E	120	48	E	E

The last Department inspection at this site, a Compliance Evaluation Inspection (CEI), was conducted February 09, 2021. Exceedances for TSS were documented at Outfalls 001 and 003 for the second half of 2020. Further implementation of Best Management Plans (BMPs) was recommended by the Department to abate TSS issues.

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 ACTIVITYSite Operations

The NESW facility is located on approximately 24.98 acres in Buffalo Township, Union County. This facility processes raw logs into board lumber. Approximately 68.3% of this is impervious surface. Operations at the facility consist of the delivery, storage, and sorting of softwood logs, debarking, grinding, milling, planing, sawdust collection and storage, transportation, kiln drying, storage of lumber, and the loading of trucks. The industrial site includes log storage areas (western portion of site), sorting, de-barking equipment, two sawmills, planing operations, wood-drying (electronic dehumidification) kilns (northwest portion of the site), lumber storage yards, offices and maintenance facilities. In addition, there are containers which store debarking and mill waste which is hauled off-site for disposal. Sawdust from the lumber milling process is stored in a dust bin east of Mill #1. Cisterns at the kilns collect condensate from the drying process. This condensate is periodically hauled by a waste hauler to a disposal facility.

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

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NESW 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; planing mills combined with sawmills, and separately operated planing 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 processing of logs, by de-barking and rough sawing, produces residual waste in the form of trimmed bark, log cut-offs and sawdust. This material is conveyed directly to and stored in containers on-site for transport to off-site uses such as mulch manufacturing or agricultural uses. All waste from milling are immediately chipped and stored in container on-site for transport off-site. Sawdust is stored in a 3-walled storage bin and is later loaded into trucks for sale to local agricultural operations.

The kiln drying of rough-cut lumber produces a large amount of condensate which can contain pollutants such as acidic volatile organic compounds (VOCs). The excess moisture is extracted from the drying lumber and collected in large storage tanks. This liquid is stored on-site for disposal off-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. Some runoff from the kiln area (northwestern portion) exits the site via sheet flow into the existing conveyance channel east along the northern property boundary to a proposed stormwater detention pond (#2). Other runoff from the below the kiln area flows east and is collected in a ditch along the main access drive which conveys it north to the above described boundary channel. Other runoff is collected in the same roadside ditch and is conveyed south to the existing stormwater detention pond (#1). Runoff on the western portion of the site is conveyed, with some off-site runoff, via diversion channels and berms to the existing stormwater detention pond (#1). Runoff on the eastern portion of the site flows east by sheet flow to the 150-foot wooded stream buffer. 3 sediment traps, or forebays, will be used prior to the two stormwater detention ponds.

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 runoff flow direction.

### Best Management Practices (BMPs)

Site runoff will be collected in two stormwater detention ponds (SDPs): one existing and one proposed. 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 1, at the southeastern corner of the property, will be remediated by the excavation of accumulated sediment and the installation of a new outfall structure. SDP 2 will be constructed at the northeastern corner of the property. A vegetated swale will be installed to collect a portion of the site's stormwater runoff that is currently leaving the site untreated. This runoff will be redirected to SDP 1.

Three sediment forebays will be utilized, tributary to the two stormwater detention ponds. The forebays are settling basins designed to slow runoff and settle out sediment prior to other BMPs. Forebays 1 and 3 are tributary to SDP 1, while Forebay 2 is tributary to SDP 2. Forebay 3 is existing, while 1 and 2 are proposed.

Additional BMPs include vegetated berms, rip-rapped channels and the constructed conveyance channels 1-A, 1-B, 1-C and 2. 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.

See Attachment 04 for site plan identifying the constructed conveyance channels.

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OUTFALLS

Uncontaminated runoff leaves the industrial site via two outfalls. Outfall characteristics are presented in the below table.

Outfall	Latitude	Longitude	Receiving Stream	RMI	Drainage Area (ft <sup>2</sup> )	% Impervious	SDP
001	41° 00' 34.1"	-76° 59' 36.5"	UNT to Spruce Run	0.82	849,034	56	1
002	41° 00' 39.1"	-76° 59' 37.6"	UNT to Spruce Run	1.02	253,178	92	2

Each outfall occurs at the overflow of the respective SDP. Within the drainage area of Outfall 001, the following materials are exposed to precipitation: raw soft and hardwood logs, chippings/scratch wood, softwood lumber and sawdust. Within the drainage area of Outfall 002, the following materials are exposed to precipitation: raw softwood logs, chippings/scratch wood and softwood lumber.

A Q<sub>7,10</sub> flow for the receiving stream was not calculated since no modeling is performed for intermittent discharges of precipitation and/or runoff.

RECEIVING STREAMStream 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.

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## 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 reuse of stormwater for dust suppression is infeasible since it would likely pollute the receiving stream.
3. 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.

### Best Management Practices

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

1. The storage and off-site disposal of kiln condensate to prevent contamination of runoff.
2. Runoff will be conveyed to the impoundments via vegetated berms, rip-rapped channels and the constructed conveyance channels.
3. A Preparedness, Prevention and Contingency (PPC) Plan will be implemented at the site. See below.
4. 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 Creek.

### 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/waste inventory, 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 Penachlorophenol. 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, NESW may submit a permit amendment to remove parameters which are not relevant to this operation.

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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 #BNPNSM-PMT-032)* and the *SOP for Clean Water Program New and Reissuance Industrial Waste and Industrial Stormwater Individual NPDES Permit Applications (SOP #BNPNSM-PMT-001)*.

PROPOSED SUPPLEMENTAL DISCHARGE MONITORING REPORTS

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

PROPOSED SPECIAL CONDITIONS

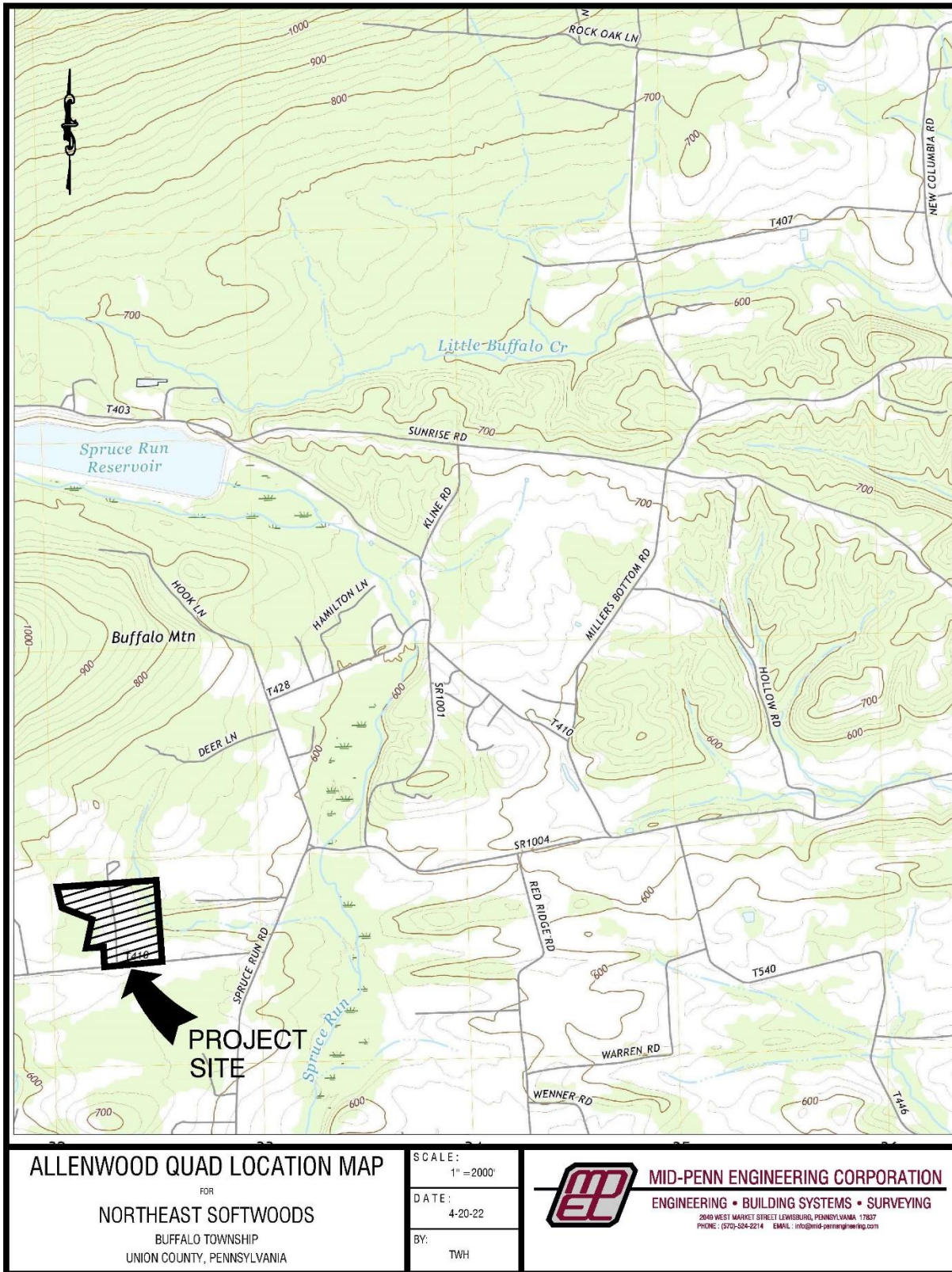
- Stormwater Outfalls and Authorized Non-Stormwater Discharges
- Best Management Practices
- Routine Inspections
- Preparedness, Prevention and Contingency Plan
- Stormwater Monitoring Requirements
- Other Requirements

PROPOSED STORMWATER MONITORING REQUIREMENTS

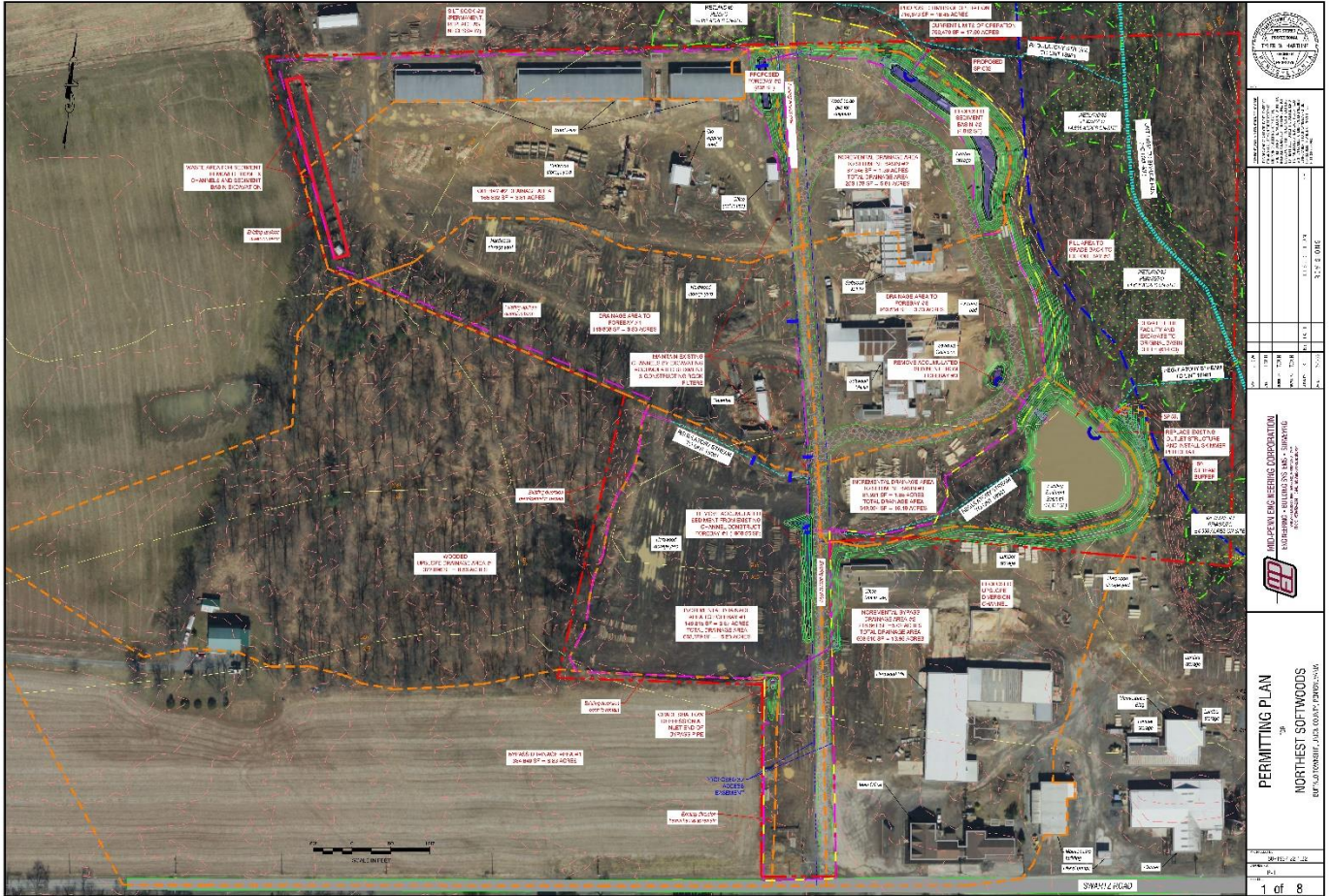
*Outfall 001 and Outfall 002 - Effective Period: Permit Effective Date through Permit Expiration Date*

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

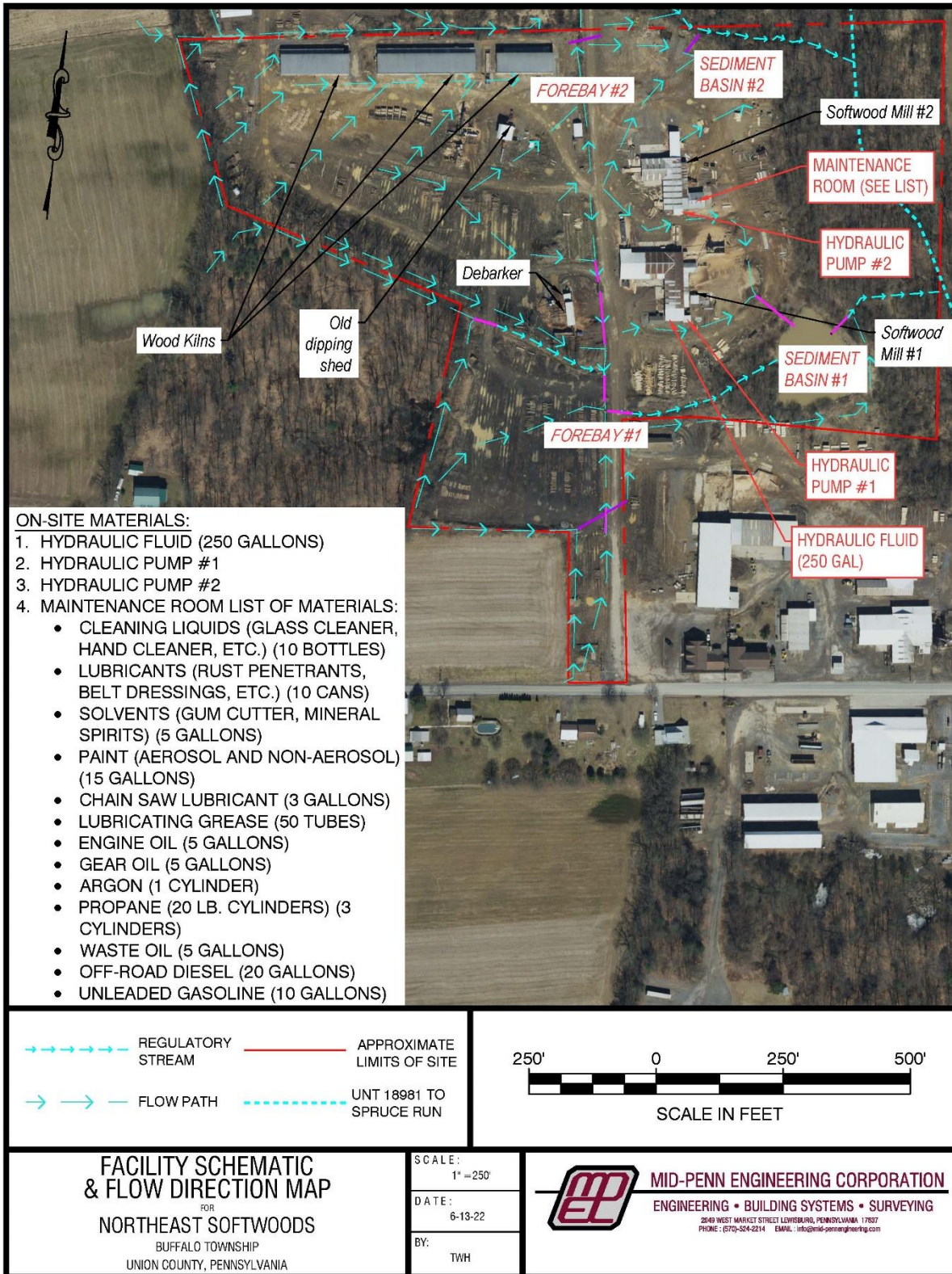
END of Fact Sheet.



ATTACHMENT 02







ATTACHMENT 04

