

***Moss Neck Sand and Gravel Operation  
19198 Tidewater Trail, Woodford, VA 19973***

***STORM WATER POLLUTION PREVENTION PLAN (SWPPP)***

*In compliance with:*

***Virginia Pollution Discharge Elimination System (VPDES)  
VAG840234***

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## I. Introduction

### a. SWPPP Purpose

This Storm Water Pollution Prevention Plan (SWPPP) has been developed as requirement of the Virginia Pollution Discharge Elimination System (VPDES) program for regulating storm water discharge from industrial facilities. Development, proper implementation, and dedicated monitoring of the SWPPP will allow the Moss Neck Sand and Gravel Operation [herein known as the Moss Neck Mine for the purposes of this report] to control pollutants and comply with all established regulations. The primary purpose of this SWPPP is to:

- 1) Identify potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges from the site,
- 2) Describe the practices that have been used to reduce pollutants in storm water discharges to assure compliance with the conditions of the Permit, and
- 3) Establish an implementation schedule to ensure that the proposed plan is properly implemented while monitoring the plan's effectiveness in meeting the design goals.

### b. SWPPP Content

The following components are included in this SWPPP:

- Description of the facilities and existing conditions
- Description of potential storm water contaminations
- Description of measure to be taken and Best Management Practices (BMP's) to be implemented
- Description of the monitoring and inspection plan to be implemented
- Identification of a SWPPP coordinator, SWPPP team members and the responsibilities involved, and
- Description of the requirements for permit compliance.

## II. Facility Description

### a. Facility Location

The Moss Neck Sand and Gravel Operation (Moss Neck Mine) is located at 19198 Tidewater Trail, Woodford VA 22580. **Figure 1** contains a general vicinity map of the area.

### b. Site Description

The Moss Neck Mine entrance is located on Tidewater Trail, Highway 17. The site is bordered by existing forest stands to the North and South, agricultural fields to the West and Tidewater Trail Highway 17 to the East. There is a sand and gravel wash plant, truck scale, scale office, fuel station, and two sheds on-site. **Figure 2** is a facility sketch of existing conditions, illustrating pertinent on-site structures and includes approximate drainage zone locations, patterns of storm water drainage and locations of any discharge points.

### c. Site Activities

The Moss Neck Mine is classified as a code 3273 under the 1987 Standard Industrial Classification (SIC) guild lines and as code 327320 under the 2002 North American Industry Classification System (NAICS). Normal operating hours are 6am to 6pm and there is an average of six full-time employees on schedule with approximately 50 trucks operating out of this facility on a regular basis.

d. *Existing Drainage and Discharge Conditions*

The site can be divided into two drainage zones (DZ-1, DZ-2). Flow is directed by berms, swales, and grading to one of three sedimentation basins for storage and treatment before discharging at one of two discharge points (outfall 002, outfall 003). **Figure 3** is a facility sketch of existing conditions that depicts typical patterns of storm water drainage and locations of any discharge. Additional information about each drainage zone and discharge point can be found in **Table 1**.

### III. **Potential Storm Water Contaminants**

a. *Material Storage*

**Table 2** identifies materials that are used, stored, or produced on-site that may contribute to storm water pollution. A physical description and the probable storm water pollutants are included. This SWPPP is focused on limiting the pollution from these sources.

b. *Spill and Leak History*

There are no records of any spills or leaks of any material in this facility within the past three years.

c. *Potential Areas for Storm Water Contamination*

The following core areas with potential for storm water contamination were considered in the development of this SWPPP:

- **Truck Loading Area:** This area includes heavy equipment used for truck loading for material hauling. Contamination may occur through leaking trucks and equipment or spills from overloaded trucks.
- **Fueling Station:** This area includes a fueling station in the eastern portion of the property. Contamination may occur in this area through improper fueling or leaking trucks and equipment.
- **Stockpile Materials:** Several mounds of stockpile material (sand, gravel, etc.) are located throughout the site. Contamination may occur in through sediment runoff.

**Table 1** includes site-specific information regarding storm water pollution potential from these areas.

d. *Emergency Contact Information*

Any chemical or oil spill will be recorded on standard inspection forms (**Appendix B**). In the event of an emergency spill, the Environmental Protection Agency, and the National Response Center at (1-800-424-8802) will be contacted. In the event of a spill situation, a standard spill response procedure will be followed (**Appendix A**). This procedure and emergency contact information will be visible and readily available in the site office.

### IV. **Best Management Practices [BMP's]**

This section will detail the controls and measures that have been implemented to comply with permit requirements. All Best Management Practices (BMPs) used as control measures in this project were selected to meet or exceed EPA and local requirements. **Table 3** contains specific information and a schedule for target implementation of these control measures. **Figure 3** is a facility sketch of proposed control measures depicting approximate locations of implementation.

a. *Existing BMP's*

The following is a list of effective BMP's that are currently in place at the Moss Neck Mine:

- Equipment Inspections: Vehicles and equipment used on-site are routinely inspected for fluid leaks and any other potential pollutants to storm water. All vehicles and equipment will receive regular preventative maintenance to reduce the chance of fluid leakage. Any potential problems will be addressed as necessary.
- Spill Prevention and Response: Located adjacent to the equipment parking area is a fueling station. The double walled tank is separated from site traffic by concrete barrier walls. A 55-gallon spill kit is kept at the fueling station for use in the event of a spill. All other chemicals used on-site are stored in an adjacent shed. In the event of a spill site staff will contain the spill. The site manager will contact the Safety Department at Chaney Enterprises who will coordinate cleanup efforts with an appropriate contractor if needed. Safety Department personnel will report spills to the appropriate state and federal agencies. See **Appendix A** for Spill Response and Emergency Contact Information.
- Sediment and Erosion Control: Topsoil stockpiles are vegetated. Vegetated berms are used to direct water to sedimentation basins and contain the aggregate stockpile and mining areas. Inlets and outfalls to sedimentation basins are reinforced with rip rap. Flocculant logs have been placed at the inlets to the sedimentation basin at outfall 002.
- Site Grading: The site is graded to direct water to the sedimentation basins and contain any material within the appropriate boundaries.  
Sedimentation Basins: All run off water from the wash plant and yard is directed south into the top of the 3-tiered sedimentation basin structure.  
Process water from the wash plant is also discharged into the 3-tier sedimentation basin structure which flows to Outfall 003. Flocculant is used to aid in settling out solids from the process water.
- Berms: Vegetated and non-vegetated berms are used to contain run off on-site and direct it to the proper sedimentation basins. Non-vegetated berms around the mining area will be modified as mining progresses to contain the changing conditions in the mining area.

b. *Implementation of Proposed SWM Control Measures*

The following is a list of appropriate control measures that have been implement at the Moss Neck Mine:

- Fueling Station: The fueling station will be inspected for potential leak hazards and any changes will be implemented immediately. A spill kit is maintained at the fueling station for use in the event of a spill situation.
- Material Storage: Any fluid canisters (truck oil, grease) housed on-site are stored in a shed adjacent to the equipment parking area to be kept out of contact with storm water. Any partially used, bagged material is transferred to a sealable container and properly labeled. Items such as brooms, dust pans, plastic gloves, kitty litter and extra sealable containers are on-site always.
- Stockpiles: All stockpiles will be consolidated daily, and employees will ensure that there is no sediment, sand/or aggregate leaving the appropriate holding areas. These areas are inspected twice a day and re consolidated when needed.
- Equipment Inspections: Vehicles and equipment is inspected daily for fluid leaks and any other potential pollutants to storm water. All vehicles and equipment will receive regular preventative maintenance to reduce the chance of fluid leakage.

- General Housekeeping: General good housekeeping measures are implemented into a routine schedule to promote site compliance.
- Air Pollution: Dust suppression methods and regular sweeping will aid in minimizing air pollution that could originate from the site.
- Environmental Training: Comprehensive environmental training is done annually for all site staff. Specific training is done throughout the year to complement the annual training. Training will cover at a minimum water management and treatment, spill prevention and response, and BMP's.
- Sedimentation Basins: The 3-teir basin structure is dredged a minimum of once a month depending on plant operations dredging can be more frequently. A log of dredging is kept and can be found in **Appendix F**.

## V. Facility Monitoring Plan

### a. Routine Inspections

Routine inspections are conducted throughout the site to decrease the likelihood of a potential pollution situation. Visual inspections and site evaluations are conducted no less than one time each quarter. Inspection forms are completed, signed by the SWPPP Coordinator and kept in the on-site file. A sample inspection form can be found in **Appendix B**.

### b. SWPPP Updates and Amendments

Any changes to operating conditions of the Moss Neck Mine that require modification of existing BMPs or implementation of new BMPs are recorded in the on-site file (**Appendix C**) for insertion into an updated SWPPP and submitted with the annual compliance assessment (discussed in Section VII. D). This SWPPP shall be amended to include any change in design, construction, operation, or maintenance of the facility that has a significant effect on the potential for the discharge of pollutants to surface waters and that has not been addressed in the normal implementation of the SWPPP. This SWPPP shall also be updated whenever it is found to be ineffective in meeting the requirements of the VPDES Permit and any other applicable regulatory guidelines.

## VI. SWPPP Implementation Task Force

### a. SWPPP Coordinator

The SWPPP Coordinator for the Moss Neck Mine is Victor Vilece the Environmental Project Manager for Chaney Enterprises and can be reached at 301-861-6094.

### b. SWPPP Coordinator Responsibilities

The SWPPP Coordinator is responsible for the following:

- Manage the SWPPP team in the implementation of the SWPPP plan,
- Assign inspection duties,
- Oversee employee training,
- Ensure regulatory compliance of site activities,
- Measure overall effectiveness of SWPPP implementation and
- Address any site operation changes with appropriate SWPPP modifications.

c. *SWPPP Implementation Task Force Team Members*

The following team members will assist the SWPPP Coordinator in all aspects of the SWPPP implementation:

- Victor Vilece    Environmental Project Manager    Land    301-861-6094
- Kyle Murray    Land General Manager    Land    443-871-3440
- Chad Martin    Land Project Engineer    Land    240-585-2595
- Chris McCoy    EHS Manager    Safety    240-299-7172

**VII. Compliance Requirements**

a. *On-site Record Retention*

A copy of the most recently updated version of this SWPPP is retained in the onsite office. Copies of completed inspection forms will also be kept on-site for reference purposes. Additionally, all employee training records and certifications shall be made readily available.

b. *Employee Training*

An annual environmental education seminar is incorporated into ongoing employee training protocol to educate employees about the pollution prevention issues relating to this SWPPP. Employees are introduced to the requirements of the SWPPP and are instructed on how to monitor the implemented BMPs for maximum effectiveness. A site walk through is conducted to illustrate proper good-housekeeping measures in action and to identify what employees should look for to reduce pollution potential. Hands-on demonstrations are used as a training tool to inform employees of procedures to follow when responding to a spill situation. **Appendix D** contains a copy of the sign-in sheet that is used at the seminar to record attendees.

c. *Implementation Schedule*

A proposed schedule for the implementation of this SWPPP can be found in **Table 3**. An implementation schedule for E&S Controls and BMPs is shown in **Table 4**. These schedules are modified if there is any change to the sequence or expected completion dates and updated schedules are inserted into the SWPPP file.

d. *Annual SWPPP Compliance Assessment*

A designated SWPPP team member will conduct an annual compliance assessment to ensure that the facility is complying with all requirements detailed in this SWPPP. All BMPs and E&S controls said to be in place are inspected, adherence to the implementation schedule is verified and a confirmation of an active employee training program is made. An assessment report is completed, and a copy of the assessment is kept on record. A sample assessment form can be found in **Appendix E**.



e. *Corporate Certification*

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Victor Vilece

Name

Environmental Project Manager

Title

---

Signature

**FIGURE 1**  
**GENERAL VICINITY MAP**



## FIGURE 2

### Topographical Map



**FIGURE 3**  
**Sketch of Existing Conditions**

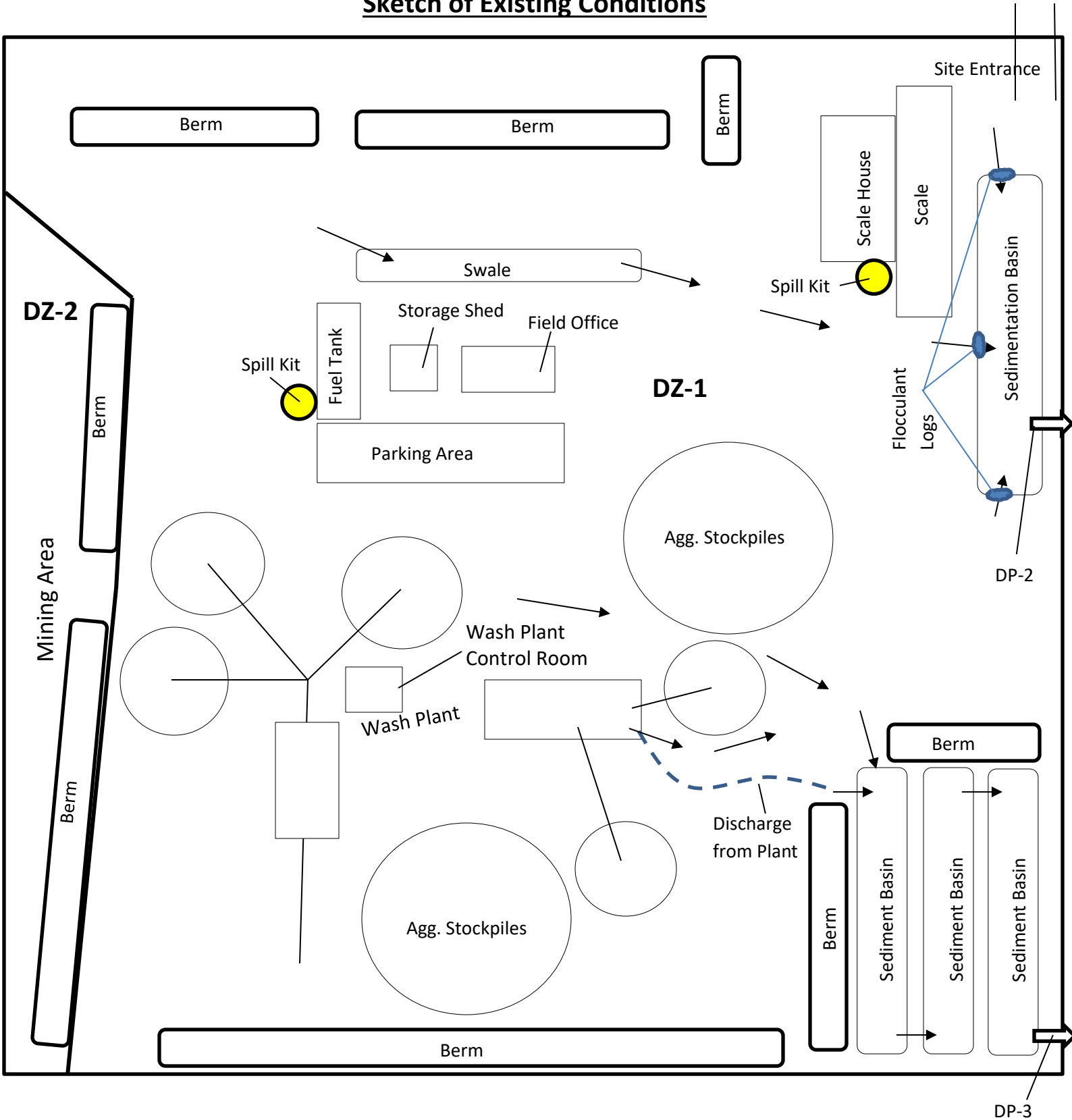


Table 1

EXISTING STORM WATER DRAINAGE AND DISCHARGE POINTS

DRAINAGE ZONE/ DISCHARGE POINTS	STORM WATER DRAINAGE DESCRIPTION	POTENTIAL POLLUTION	POTENTIAL PROBLEMS
<i>Facility Drainage</i>	Site grading, berms, and swales direct drainage throughout the site. Large sedimentation basins collect and treat all run off and process water on-site. The Stormwater Sedimentation Basin (adjacent to scale house) uses Flocculant logs placed at the inlets to control sediment.	Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Sediment	Diesel fuel and other fluids may leak from trucks and/or equipment. Improper loading may result in sediment discharge.
<i>DZ-1</i>	Grading and berms direct water to the top of the 3-tier sedimentation basin system which flows to Outfall 003.	Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Sediment	Diesel fuel and other fluids may leak from trucks and/or equipment. Improper loading may result in sediment discharge.
<i>DZ-2</i>	Grading and mining operations direct all water into the mining area. Water pumped from the mining area is used by the wash plant.	Diesel Fuel, Hydraulic Oil/Fluids.	Diesel fuel and other fluids may leak from mining equipment.
<i>Outfall 002</i>	Located adjacent to the truck scale, this large sedimentation basin collects run off from the scale house and along the perimeter berms.	Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Sediment	Diesel fuel and other fluids may leak from trucks and/or equipment by the fueling and loading areas. Improper loading may result in sediment discharge.
<i>Outfall 003</i>	Located in the southwest corner of the site. The 3-tiered sedimentation basins treat discharge from the wash plant and stormwater from the yard, agg piles, and wash plant.	Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Sediment	Fluids may leak from plant equipment. Washed material could have an excessive clay content and cause excessive sediment to end up in the discharge.

**Table 2**

**MATERIAL INVENTORY**

TRADE NAME MATERIAL	PHYSICAL DESCRIPTION	STORM WATER POLLUTANTS
<i>Sand, Gravel</i>	Solid particles	Silicon, suspended solids, turbidity, sediment
<i>Hydraulic oil/fluids</i>	Brown oily petroleum hydrocarbon	Mineral oil
<i>Gasoline</i>	Colorless, pale brown or pink petroleum hydrocarbon	Benzene, ethyl benzene, toluene, xylene, MTBE
<i>Diesel Fuel</i>	Clear, blue-green to yellow liquid	Petroleum distillate, oil & grease, naphthalene, xylenes
<i>Antifreeze/coolant</i>	Clear green/yellow liquid	Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc)
<p><i>Note: All fluid containers are kept in the storage shed, labeled, and sealed. Fuel tanks will be double walled or have the appropriate spill containment structures in place before use.</i></p>		

**TABLE 3**  
**SWPPP IMPLEMENTATION SCHEDULE**

SWPPP FEATURE	TARGET IMPLEMENTATION DATE
<i>Quarterly facility inspections</i>	Started in January of 2016
<i>Implementation of SWM Control Measure</i>	See <b>TABLE 4</b>
<i>Employee Training Program</i>	Date of environmental seminar: January 2016, and annually thereafter General employee instruction: January 2016, and annually thereafter
<i>Environmental Education Program Evaluation</i>	Performed annually in November / December
<i>Annual Compliance Assessment</i>	Performed annually in November / December

**TABLE 4****SWM CONTROL MEASURES IMPLEMENTATION SCHEDULE**

FACILITY SITUATION	SWM CONTROL MEASURE	TARGET IMPLEMENTATION DATE
<i>Fueling Station</i>	Check for complete spill kit at fueling station	Visually Inspect Quarterly
	Inspect fuel tanks and containment areas for cracks & leaks.	Visually Inspect Quarterly
<i>Sedimentation Basins</i>	Inspect basins for effectiveness. Inspect for sediment build up at outfalls 002 and 003. Dredging will be done a minimum of once per month or more if needed based on plant operations. Flocculent logs will be visually inspected during quarterly inspections for flocculant depletion.	Visually Inspect Quarterly Dredge Monthly Flocculant Logs Replaced as Needed
<i>Equipment Inspections</i>	On-site vehicles and equipment will be thoroughly inspected for fluid leaks and other potential pollutants.	Daily
	Preventative maintenance will be performed on a regular schedule.	As Needed
<i>General Housekeeping</i>	Good housekeeping measures will be implemented.	Daily



**APPENDIX A**  
**EMERGENCY CONTACT INFORMATION**

**IN THE EVENT OF A SPILL CONDUCT THE  
FOLLOWING STEPS:**

1. LOCATE SPILL KIT
2. CONTAIN SPILL
3. CONTACT CHANEY SAFTEY DIRECTOR

**Chris McCoy**  
**(240) 299-7172**

4. CONTACT THESE AGENCIES

**NATIONAL SPILL RESPONSE CENTER**  
**(800) 424-8802**

# CHANNEY

ENTERPRISES

## Appendix B

### I. General Information

CEEIP Inspection Form

Facility:		Permit #:	
Date:	Time:	Weather:	Phone:
Facility Address:			Site Manager:
Inspector:			

### II. Site Conditions

SWPPP On Site: Yes No      DMR's On Site: Yes No

E & S Controls	BMP's	Discharge	Roadways
Berms:	Fuel Station:	Color:	Entrance:
Traps:	Chemical Storage:	Clarity:	Haul Roads:
Basins:	Agg Storage:	Solids:	Yard:
Gutters:	House Keeping:	Odor:	Msc:
Curbs:	Msc:	Oil Sheen:	

**Additional Comments on Site Conditions:**

**Site Corrections:**

### III. pH Treatment System

	Questions	Answer
Washout/Settling Ponds	Have washout basins/ponds been cleaned recently?	
	What is the pH in the settling area w/handheld probe?	
	What is the pH on the pH System display?	
pH Probe	Is probe covered in residue and dirty?	
	Was probe cleaned with cleaning solution?	
	What are readings before/after calibration with solution 7.0?	
	What are readings before/after calibration with solution 10.0?	
Piping	Is intake piping functional?	
	Is discharge piping functional?	

**Due Date:**

**Days**   **1wk**   **2wk**   **3wk**  
        

**Sign:** \_\_\_\_\_

**Comments on pH System Conditions:**

### Inspector

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

*POURING OUR HEART & SOUL INTO EVERY JOB*

2410 Evergreen Road | Suite 201 | Gambrills, Maryland 21054

Storm Water Pollution Prevention Plan  
Moss Neck Sand and Gravel Operation

ChanneyEnterprises.com PHONE 888-424-2639

May 2021

## APPENDIX C

### SWPPP MODIFICATIONS

Date	Comments	Signature
July 2020	Wash plant sediment pond dredging log added, see Appendix F	VJV
May 2021	Appendix C, SWPPP Mods, added to SWPPP. Flocculant added to Scale House sedimentation basin inlets.	VJV



## APPENDIX E

### SWPPP COMPLIANCE ASSESSMENT

SWPPP Feature	Y/N	Comments
Have quarterly inspections been conducted and have form been completed and filed?		
Have BMP's been implemented and has the implementation schedule been adhered to?		
Has employee training been implemented?		
Has the Environmental Education Program been evaluated and forms filed?		
Have all changes to site function been addressed in the SWPPP?		
<div style="display: flex; justify-content: space-between;"> <span>Name: _____</span> <span>Date: _____</span> </div> <div style="margin-top: 10px;"> <span>Signature: _____</span> </div> <div style="margin-top: 10px;"> <span>Title: _____</span> </div>		

# Appendix F

## Sediment Basin Maintenance Log

Year:												
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week 1												
Week 2												
Week 3												
Week 4												
Year:												
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week 1												
Week 2												
Week 3												
Week 4												