

***Stony Creek II Charles City Sand and Gravel Operation
8704 John Tyler Hwy, Charles City, VA 23030***

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

In compliance with:

***Virginia Pollution Discharge Elimination System (VPDES)
VAG840156***

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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 Stony Creek II Sand and Gravel Operation [herein known as Charles City 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 will be 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. SWPP 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

Charles City is located at 8704 John Tyler Hwy, Charles City, VA 23030. **Figure 1** contains a general vicinity map of the area.

b. Site Description

The Charles City entrance is located on John Tyler Hwy. The site is bordered by existing forest stands and farmland. There is a sand and gravel wash plant, truck scale, scale office, fuel station, and a shed 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

Charles City 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 five 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, grading, and pumps. Water in the current mining area on the eastern portion of the site is pumped to the former mining area in the western portion of the site. There are two (2) discharge points. Outfall 001 located in the southeastern corner of the site in the drainage ditch. Outfall 002 is located northwest of the wash plant, and discharges into the ditch that feeds outfall 001. Outfall 002 is fed by a pipe and flow is controlled by a valve that is opened to control the water level in the wash plant supply pond. **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 located adjacent to the scale office. 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 will be 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: 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 a shed adjacent to the scale office. 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. Berms are used to direct water to former mining areas, contain the aggregate stockpiles, and provide a safety buffer around mining areas.
- Site Grading: The site is graded to direct water to the mining areas and contain any material within the appropriate boundaries.
- Berms: Vegetated and non-vegetated berms are used to contain run off on-site and direct it to the proper holding areas. 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 will be implement at the Stony Creek I 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 will be stored in a shed adjacent to the scale office. Any partially used, bagged material will be transferred to a sealable container and properly labeled. Items such as brooms, dust pans, plastic gloves, kitty litter and extra sealable containers will be on-site always.
- Stockpiles: All stockpiles will be consolidated, and employees will ensure that there is no sediment, sand, or aggregate leaving the appropriate holding areas. These areas will be inspected daily and maintained as needed.
- Equipment Inspections: Vehicles and equipment will be 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 will be implemented into a routine schedule to promote compliance.
- Air Pollution: Water will be used on haul roads and in the yard to minimizing air pollution that could originate from the site. A speed limit on-site will be enforced to reduce dust generated from site traffic.

V. Facility Monitoring Plan

a. Routine Inspections

Routine inspections will be conducted throughout the site to decrease the likelihood of potential pollution. Visual inspections and site evaluations will be conducted no less than one time each quarter. Inspection forms will be completed, signed by the SWPPP Coordinator, and be accessible digitally via the company webpage. A sample inspection form can be found in **Appendix B**.

b. SWPPP Updates and Amendments

Any changes to operating conditions of Charles City that require modification of existing BMPs or implementation of new BMPs will be recorded in **Appendix E** and submitted with the annual compliance assessment (discussed in Section VII. Part 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 Charles City 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 will be 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 SWPP 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:

- | | | |
|---------------|-------------------------------|--------------|
| • Lee Lamb | Aggregates Production Manager | 443-871-3440 |
| • Kyle Murray | Land General Manager | 301-932-5335 |
| • Chris McCoy | EHS Manager | 240-299-7172 |

VII. Compliance Requirements

a. On-site Record Retention

A copy of the most recently updated version of this SWPPP will be accessible online at Chaneyenterprises.com/locations. Copies of completed inspection forms will also be kept in the online database accessible through the Chaney website. Additionally, all employee training records and certifications shall be made readily available.

b. Employee Training

An annual environmental education seminar will be incorporated into ongoing employee training protocol to educate employees about the pollution prevention issues relating to this SWPPP. Employees will be introduced to the requirements of the SWPPP and will be instructed on how to monitor the implemented BMPs for maximum effectiveness. Training will be done virtually, and records will be kept digitally with this SWPPP.

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 will be modified if there is any change to the sequence or expected completion dates and updated schedules will be 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 will be inspected, adherence to the implementation schedule will be verified and a confirmation of an active employee training program will be made. An assessment report will be completed, and a copy of the assessment will be kept on record. A sample assessment form can be found in **Appendix D**.

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 Environmental Project Manager
Name/Title

7/26/21
Date


Signature

FIGURE 1
GENERAL VINICTY MAP

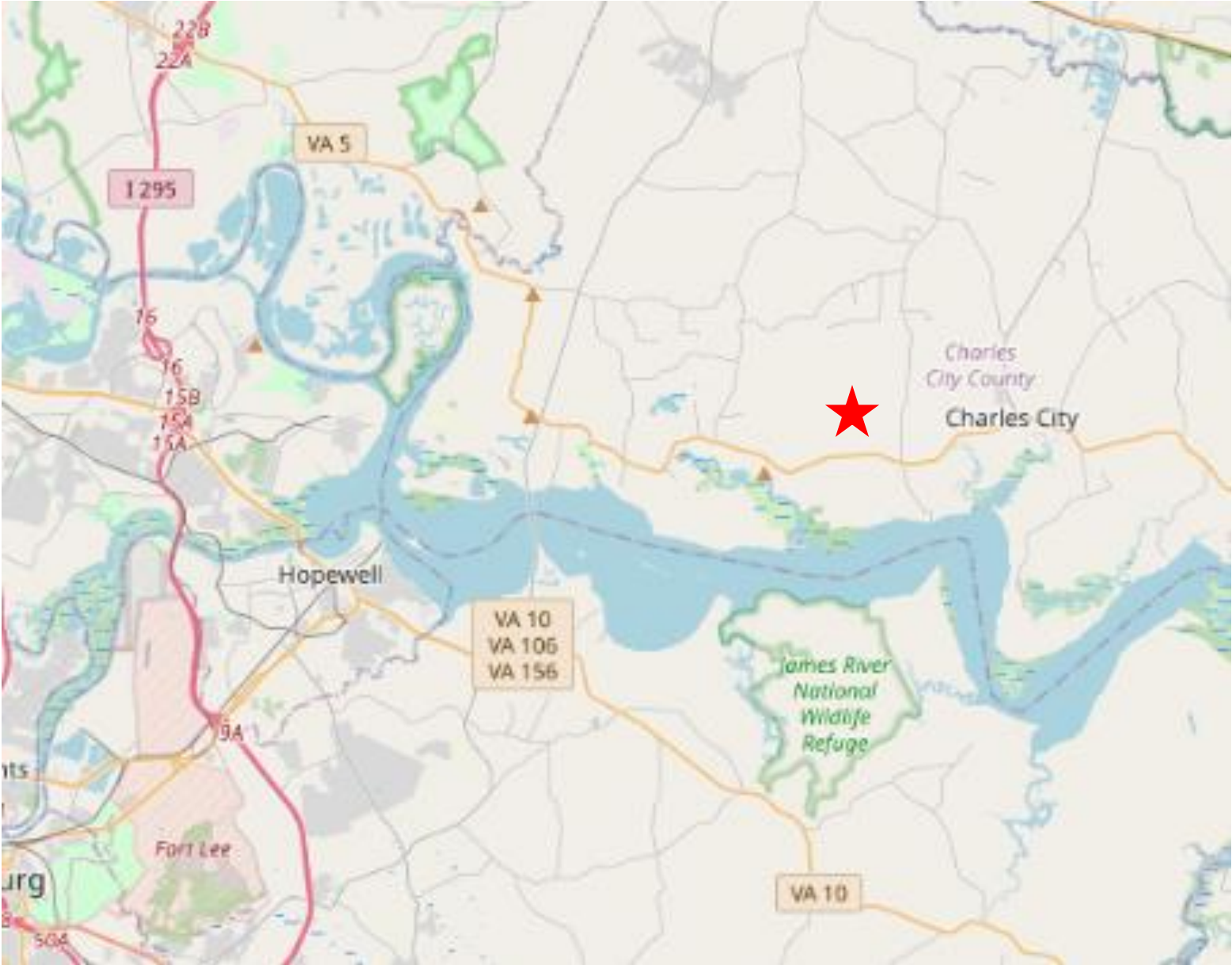


FIGURE 2
Topographical Map

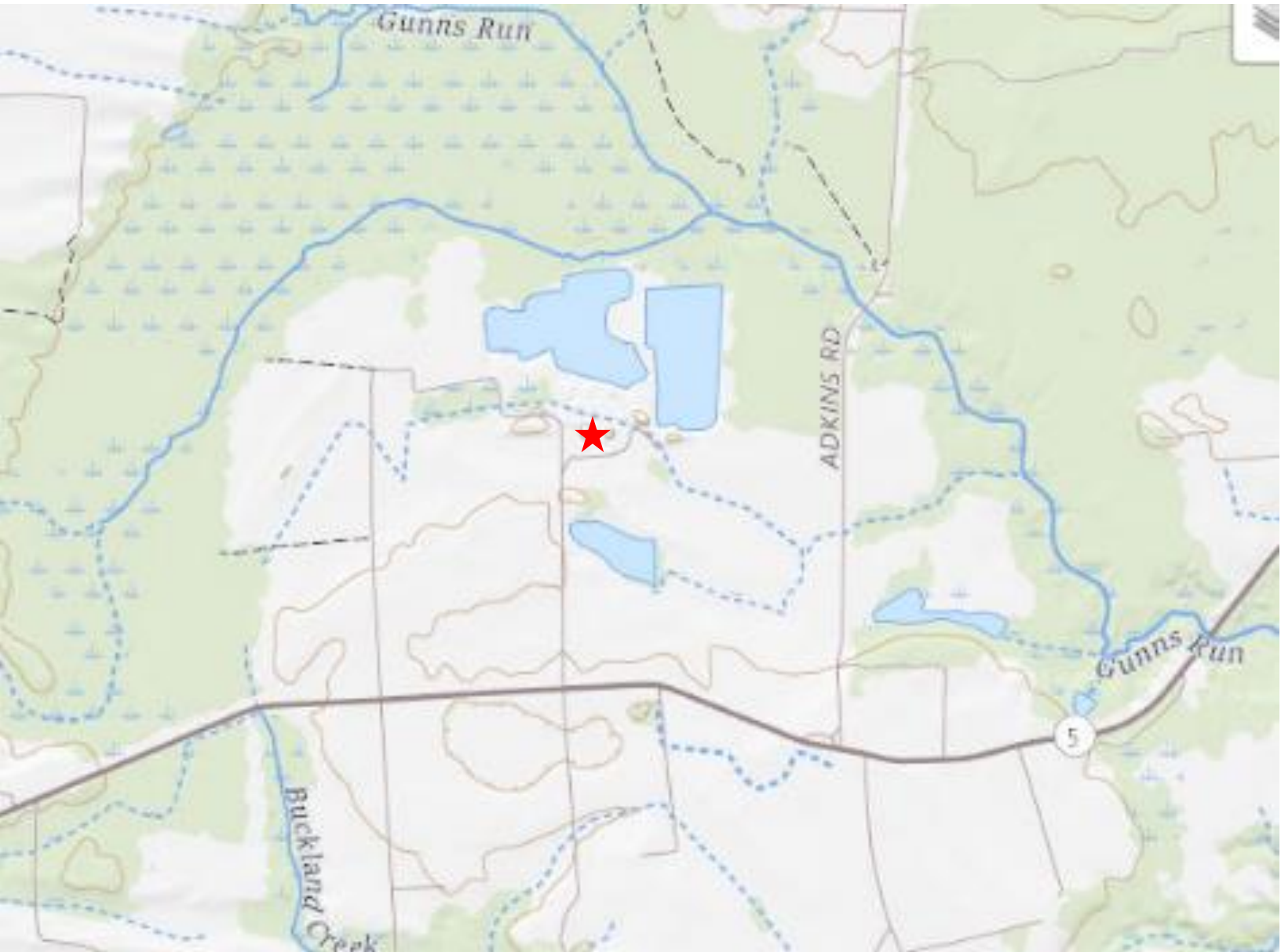


Figure 3

Legend







-  Outfalls
-  Storage Shed
-  Scale and Scale Office
-  Fuel Tank
-  Drainage Zone Boundary
-  Aggregate Wash Plant/Stockpiles



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, swales, and pumps direct drainage throughout the site. As the site is mined 2 large a large ponds will remain, water is collected in previously mined areas.	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>	Mining operations, grading, swales, and berms direct water to the current mining area. A dredge and pumps move water from DZ 1 to DZ 2 when needed.	Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Sediment	Diesel fuel and other fluids may leak from mining equipment.
<i>DZ-2</i>	Grading and berms direct all water into the former mining area. Water is pumped to Outfall 002 when needed. DZ-2 is the source of plant wash water and irrigation water for nearby agricultural fields.	Diesel Fuel, Hydraulic Oil/Fluids.	Diesel fuel and other fluids may leak from trucks and/or equipment. Improper loading may result in sediment discharge.
<i>Outfall 001</i>	Located on the southeastern corner of the site, this outfall is fed by a drainage ditch that drains the surrounding agricultural fields and divides the site north to south.	Sediment	Stormwater has the potential to wash sediments from the surrounding agricultural fields into the ditch that feeds this outfall.
<i>Outfall 002</i>	Located west of the wash plant, this outfall is fed by a pump. Water from DZ-2 is pumped to this outfall as needed to control the water level. Water from Outfall 002 flows into the drainage ditch that feeds outfall 001.	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.

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)

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.

TABLE 3
SWPPP IMPLEMENTATION SCHEDULE

SWPPP FEATURE	TARGET IMPLEMENTATION DATE
<i>Facility Inspections</i>	Quarterly
<i>Implementation of SWM Control Measure</i>	See TABLE 4
<i>Employee Training Program</i>	Annually
<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 tank, equipment, hoses, and nozzles for cracks & leaks.	Visually Inspect Quarterly
<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 SAFETY 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
 Stony Creek II Sand and Gravel Operation

www.ChaneyEnterprises.com **PHONE** 888-424-2639

July 2021

QUARTERLY VISUAL EVALUATIONS

Instructions: The quarterly visual examinations shall be made at least once in each of the following three-month periods each year of permit coverage: January through March, April through June, July through September, and October through December. The visual examination shall be made during normal working hours, where practicable, and when considerations for safety and feasibility allow. If no storm event resulted in runoff from the facility during a monitoring quarter, the permittee is excused from visual monitoring for that quarter provided that documentation is included with the monitoring records indicating that no runoff occurred. A representative sample of storm water should be collected at each outfall in a clean, clear jar and examined in a well-lit area. Samples shall be collected in accordance with the Permit. Sample examination shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution. The visual examination of the sample shall be conducted in a well-lit area.

<input type="checkbox"/> 1 st Qtr		<input type="checkbox"/> 2 nd Qtr		<input type="checkbox"/> 3 rd Qtr		<input type="checkbox"/> 4 th Qtr		Calendar year: _____	
Facility Name:							Outfall number:		
Monitoring date and time:									
Name of individual conducting visual monitoring:									
Was the sample collected during the first 30 minutes of discharge? Yes or No									
Describe the storm event (e.g. light rain, heavy rain, snow, ice melt):									
Color			<input type="checkbox"/> None <input type="checkbox"/> Light tan <input type="checkbox"/> Light brown <input type="checkbox"/> Brown <input type="checkbox"/> Other (Describe) _____						
Clarity			<input type="checkbox"/> Clear <input type="checkbox"/> Slightly cloudy <input type="checkbox"/> Cloudy <input type="checkbox"/> Very cloudy <input type="checkbox"/> Other (Describe) _____						
Odor			<input type="checkbox"/> None <input type="checkbox"/> Earthy <input type="checkbox"/> Gas/oil <input type="checkbox"/> Chemical <input type="checkbox"/> Other (Describe) _____						
Floating solids	Settled solids	Suspended solids	Foam	Odor	Oil sheen				
<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Description & source:	Description & source:	Description & source:	Description & source:	Description & source:	Description & source:	Description & source:			
Were any other indicators of stormwater pollution observed (if so, describe)?									
<i>I certify under penalty of law that this document and all attachments were properly under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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.</i>									
Inspector's Name - Printed			Signature of Responsible Official				Date		

APPENDIX D

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;"> Name: _____ Date: _____ </div> <div style="margin-top: 10px;"> Signature: _____ </div> <div style="margin-top: 10px;"> Title: _____ </div>		

