Loveville Sand and Gravel Operation 27000 MD Rt 5, Loveville, MD

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

In compliance with:

General Permit No. 10MM9813

National Pollution Discharge Elimination System (NPDES)

Prepared By:
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I. Introduction

a. SWPPP Purpose

This Storm Water Pollution Prevention Plan (SWPPP) has been developed as requirement of the National Pollution Discharge Elimination System (NPDES) program for regulating storm water discharge from mineral mines. Development, proper implementation, and dedicated monitoring of the SWPPP will allow the Loveville Sand and Gravel Operation [herein known as the Loveville Site 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

The Loveville Site is located on the east side of MD Rt 5 (27600 Blk) in Loveville, Maryland and is within the St. Mary's County boundaries. A general vicinity map illustrating thus location is included as **Figure 1**.

b. Site Description

The Loveville Site shares a driveway with several other privately owned residential properties. The site is bordered by existing forest stands and agricultural fields on all sides. A new aggregate wash plant, scale house, and truck fueling station were built in late 2015. **Figure 2** is a facility sketch of existing conditions illustrating pertinent structures on-site, as well as existing zones and typical drainage patterns.

c. Site Activities

The Loveville Site 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 7:00 a.m. to 6:00 p.m. and there is an average of four (4) full-time employees on schedule.

d. Existing Drainage and Discharge Conditions

The site can be divided into three core Drainage Zones. **Figure 2** includes approximate zone locations and patterns of storm water drainage. Additional detailed information about each drainage zone can be found in **Table 1**. Storm water drainage from Drainage Zones One (DZ-1) and Two (DZ-2) drain to three large holding ponds in the southeast corner of the site. The water from these ponds is used to supply the wash plant. All the water in Drainage Zone Three (DZ-3) flows into the mining pit and is then pumped into the first holding pond.

III. Potential Storm Water Contaminants

a. Material Inventory

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:

- <u>Truck Loading Area</u>: Contamination may occur through leaking trucks and equipment or spills from overloaded trucks.
- <u>Fueling Station:</u> Contamination may occur in this area through improper fueling or leaking trucks and equipment.
- <u>Stockpile Materials:</u> Several mounds of stockpile material (sand, stone, etc.) are located around the wash plant. Contamination may occur in these areas through sediment runoff.

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

d. Emergency Contact Information

In the event of an emergency spill, the Maryland Department of the Environment 24 hr Emergency Spill Hotline (410-974-3551) 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 B). This procedure and emergency contact information will be visible and readily available in the site office

IV. Best Management Practices [BMPs]

This section will detail existing Storm Water Management (SWM) control measures and proposed controls 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 2** is a facility sketch of proposed control measures depicting approximate locations of implementation.

a. Existing BMPs

The following is a list of effective control measures that are currently in place at the Loveville Site:

- Holding Ponds: Three large ponds adjacent to the wash plant are the primary collection
 area on site, drainage from DZ-1 and DZ-2 is directed to these ponds. Dewatering of the
 mine pit in DZ-3 is pumped into Holding Pond One. Water for the Wash Plant is pulled
 from Holding Pond Two and Pond Two is refilled by Pond One when needed. Holding
 Pond Three is the source for DP-1 and rarely discharges, even during rain events.
- Material Storage: Any fluid canisters (truck oil, grease) housed in on-site box trailers will be kept out of contact with storm water and will remain covered when not in use. There will be no open containers or bags or materials kept on site. Any partially used, bagged material will be transferred to a sealable container and properly labeled.
- <u>Earthen Berms:</u> These are utilized throughout the site to direct water into the Holding Ponds or into the mine pit. They contain any material within the appropriate boundary.
- Equipment Inspections: Equipment used on-site is routinely inspected for fluid leaks and any other potential pollutants to storm water. All equipment receives regular preventative maintenance to reduce the chance of fluid leakage. Any potential problems will be addressed as necessary.

V. Chaney Enterprises Environmental Inspection Program [CEEIP]

a. Routine Inspections

Routine inspections will be conducted throughout the site to decrease the likelihood of a potential pollution situation. The holding ponds, stock pile areas, fueling station, storage areas, and all other pollution prevention implementations will be inspected for effectiveness. As directed by the SWPPP Coordinator, an Environmental Evaluation team has been assigned to conduct visual observations no less than one time each month (in some months twice). Inspection forms will be completed, signed, and kept in the on-site file. A sample inspection form can be found in **Appendix A**.

b. SWPPP Updates and Amendments

Any changes to operating conditions of the Loveville Site that require modification of existing BMPs or implementation of new BMPs will be recorded in the on-site file 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 NPDES Permit and any other applicable regulatory guidelines. In the event that the Maryland Department of the Environment (MDE) notifies the SWPPP Coordinator that the SWPPP does not meet one or more of the provisions of the NPDES Permit or any other applicable regulatory guidelines, changes will be made within a timeframe approved by the MDE.

VI. SWPPP Implementation Task Force

a. SWPPP Coordinator

The SWPPP Coordinator for the Loveville Site is Victor Vilece 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
- 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:

•	Wayne Hardesty	Site Manager	410-804-4215
•	Chris McCoy	Safety Director	240-299-7172
•	Amanda Page	Safety Assistant	301-932-5412
•	Nayeli Rios	Safety Assistant	301-932-5055

VII. Compliance Requirements

a. On-site Record Retention

A copy of the most recently updated version of this SWPPP will be 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 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. A site walk through will be conducted to illustrate proper good-housekeeping measures in action and to identify what employees should look for to reduce pollution potential. Hands-on demonstrations will be 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 will be used at the seminar to record attendees. Prior to the seminar, the SWPPP Coordinator (or designated SWPPP team member) will evaluate the environmental education program to verify its effectiveness, implement any appropriate changes and complete an evaluation form. A sample evaluation form can be found in Appendix E.

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 F.

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."

Name

Project Mangar

5/16/16

FIGURE 1

GENERAL VICINTY MAP

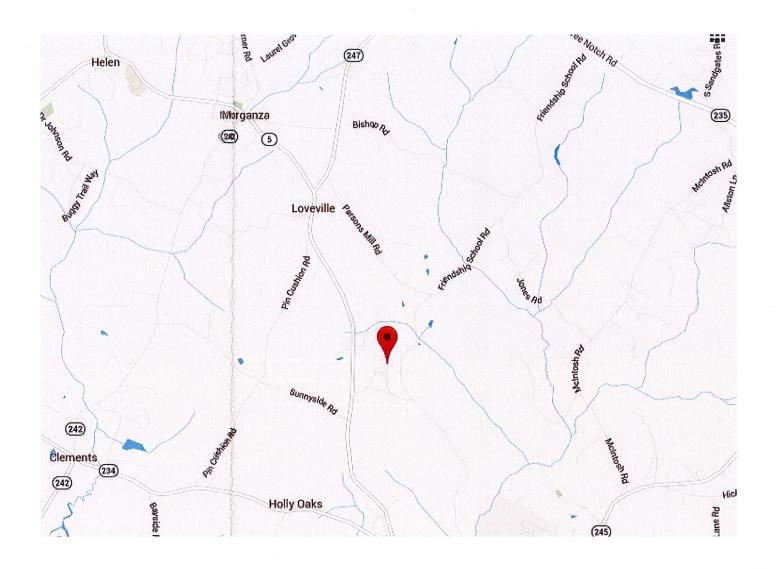


FIGURE 2 FACILITY SKETCH OF EXISTING CONDITIONS



Table 1

<u>EXISITING STORM WATER DRAINAGE AND DISCHARGE POINTS</u>

DRAINAGE ZONE/ DISCHARGE POINTS	STORM WATER DRAINAGE DESCRIPTION	POTENTIAL POLLUTION	POTENTIAL PROBLEMS
DISCHARGE FOINTS			Di
=	Drainage is directed to Holding	Diesel Fuel,	Diesel fuel/fluids may leak from
DZ-1	Ponds One and Two via natural	Hydraulic	trucks and equipment. Improper
,	topography.	Oil/Fluids,	loading may result in sediment
		Sediment	discharge.
	Drainage is directed to Holding Pond	Diesel Fuel,	Diesel fuel/fluid may leak from
	Three via natural topography.	Hydraulic	trucks and equipment. Improper
DZ-2	,	Oil/Fluids,	loading may result in sediment
DZ-Z		Sediment	discharge. Runoff from bulk
	#		material areas may result in
		9	excess sediment buildup.
, *	Drainage is directed into the mining	Diesel Fuel,	Diesel fuel/fluid may leak from
	pit where it is then pumped across	Hydraulic	trucks and equipment. Improper
DZ-3	the site into Holding Pond One to	Oil/Fluids,	loading may result in sediment
DZ-3	supply the Wash Plant.	Sediment	discharge. Runoff from bulk
*			material areas may result in
4			excess sediment buildup.
	The lone discharge point is located	Diesel Fuel,	Diesel fuel/fluid may leak from
DP-1	on the south end of Holding Pond	Hydraulic	trucks and equipment. Runoff
DF-1	Three.	Oil/Fluids,	from bulk material areas may
		Sediment	result in excess sediment buildup.

Table 2

MATERIAL INVENTORY

TRADE NAME MATERIAL	PHYSICAL DESCRIPTION	STORM WATER POLLUTANTS
Sand, Gravel	Solid particles	Silicon, suspended solids, turbidity, sediment
Hydraulic oil/fluids	Brown oily petroleum hydrocarbon	Mineral oil
Diesel Fuel	Clear, blue-green to yellow liquid	Petroleum distillate, oil & grease, naphthalene, xylenes
Antifreeze/coolant	Clear green/yellow liquid	Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc)

TABLE 3

SWPPP IMPLEMENTATION SCHEDULE

SWPPP FEATURE	TARGET IMPLEMENTATION DATE
Monthly facility inspections	Ongoing
Implementation of SWM Control Measure	See TABLE 4
Employee Training Program	Date of environmental seminar: Winter/Annually General employee instruction: Ongoing
Environmental Education Program Evaluation	Annually
Annual Compliance Assessment	Annually

TABLE 4

SWM CONTROL MEASURES IMPLEMENTATION SCHEDULE

FACILITY SITUATION	SWM CONTROL MEASURE	TARGET IMPLEMENTATION DATE
Fueling Station	Check for complete spill kit at fueling	Ongoing, Checked on a daily basis.
Tuening Station	station	
,	Inspect fuel/propane tanks and	Ongoing, checked on a daily basis.
	containment areas for cracks & leaks.	
	On-site vehicles and equipment will be	Ongoing, checked on a daily basis.
Equipment Inspections	thoroughly inspected for fluid leaks and	
	other potential pollutants.	
	Preventative maintenance will be	Ongoing, maintenance performed on a
	performed on a regular schedule.	monthly basis or as needed.
Holding Ponds	Water level is checked, water is checked for	
Troiding Forids	sediments.	
	Aggressive enforcement of good	Ongoing, enforced on a daily basis.
General Housekeeping	housekeeping measures will be	
	implemented.	

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Appendix A

I. General Information ENTERPRISES

CEEIP Inspection Form

Facility:						Permit #:	T	
Date:	Т	Time:		Weather:		Phone:		
Facility		,,,,,,,			Site		I	
Address:						Manager:		
Inspector:								
II. Site Conditions	5	SV	VPPP Or	Site: Ye	s 🗆 No 🗆	DMR's On	Site: Yes	No 🗆
* -		Conditio	n Range			Comm	ents/Correc	tions Needed
	Great							
E & S Control								
On-Site Storage					,		0	
Equipment/ Vehicles					5			
Roadways	2					-	v	
Air Pollution								
Discharge Monitoring	Discharg	Discharging: Y / N pH:						
Additional Com	ments on S	ite Cond	litions:					
III. pH Treatment	System							
III. pH Treatment	System			Questic	ons		Answer	Sita Carrections:
III. pH Treatment Washout/Settlii		vashout b	asins/poi		ons cleaned rece	ntly?	Answer	Site Corrections:
	ng Have w			nds been			Answer	Site Corrections:
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APPENDIX B

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

MDE 24 HR EMERGENCY SPILL HOTLINE (410) 974-3551

NATIONAL SPILL RESPONSE CENTER (800) 424-8802

APPENDIX C

ENVIRONTMENTAL EDUCATION SEMINAR SIGN-IN SHEET

Date	Employee Name	Employee Signature

APPENDIX D

ENVIRONTMENTAL EDUCATION SEMINAR EVALUATION FORM

Program Feature	Applicable? (Y/N)	Comments
Has a date been established for the annual seminar?		
Will all state and federal regulations be addressed?		
Will employees be informed of any changes to the SWPPP?		
Will there be any outside sources involved in the training program?		
Did the facility staff appear more informed after last year's program?		
Have there been any employee comments/suggestions?		
Name:	-	Date:
Signature:		
Title:		

APPENDIX E

SWPPP COMPLIANCE ASSESSMENT

SWPPP Feature	Y/N	Comments
Have bi-weekly inspections been conducted and have form been completed and filed?		
Have daily pH readings been taken and have logs been completed and submitted to the Environmental Manager?		
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?		
Name:		Date:
Signature:		