Upper Marlboro Ready Mix Concrete Facility
5200 Chrysler Drive, Upper Marlboro, MD 20772

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

In compliance with:
General Permit 15MM9873
National Pollution Discharge Elimination System (NPDES)

Prepared for:
Chaney Enterprises
2410 Evergreen Road
Gambrills, MD 21054
Phone: 301-932-5087
Email: vvilece@chaneyenterprises.com

March 2023

TABLE OF CONTENTS

List of Figures

List of Tables

List of Appendices

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 form industrial facilities. Development, proper implementation, and dedicated monitoring of the SWPPP will allow the Upper Marlboro Ready Mix Concrete Facility [herein known as The Facility 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 Facility is located at 5200 Chrysler Drive, Upper Marlboro, Maryland and is within Prince George's County boundaries. The facility operates on a small section of land within an industrial area off Route 301. **Figure 1** contains a general vicinity map of the area.

b. Site Description

The Facility is a 1.6-acre site bordered by Chrysler Drive to the north and west. Depot Pond is located across Chrysler Drive, west of the site. A tree line separates the site from a car dealership to the east. A business park area/police station is located to the south. On-site structures include a main office building, a storage/maintenance garage, small storage sheds, batch plant equipment, truck wash area, storage bins and a fueling area. 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 Facility 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 approximately 7am to 4pm and there is an average of 20 full-time employees on schedule with approximately 16 trucks operating out of this facility on a regular basis.

d. Existing Drainage and Discharge Conditions

On-site drainage is controlled through a series of catch drains, collections basins and pH water treatment systems. Process water is recycled and used for future batching or used for washing applications. Natural topography directs drainage from the southeaster portion of the property downslope towards the site entrances. There are two discharge points [DP] from this facility. DP-1 is located at the northern site entrance along Chrysler Drive. DP-2 is located at the western site entrance along Chrysler Drive. **Figure 2** is a facility sketch of existing conditions that includes zone locations, patterns of storm water drainage and locations of any discharge. These are approximate locations based on a review of site conditions and an evaluation of mapper and aerial photos.

Drainage from the northern and eastern portions of the site is directed to DP-1 by way of curb and gutter and a catch drain that runs across the driveways. Runoff from the office area, material stockpiles, the hopper area and the site exit are directed here. The catch drain ties into a concrete collection tank that feeds a three tiered concrete settling basin. Process water collected here is treated for pH by a Fortrans Model 5000b Water Treatment System. The treated water is then discharged from the site on the curbside gutter along Chrysler Drive.

Drainage from the central area of the facility is directed to a series of reclaim basins used as part of a recycling system. Runoff from the truck washing and drum washout areas is the main source of water for the reclaim basins and recycling system. Water is treated by a Hydro-Innovations Hydrocarbonic Purification System before being recycled into the batch plant.

Drainage from the western portion of the site is directed to DP-2 by way of a catch basin and gutter drain that runs across the main driveway strip along the western site entrance. Runoff from the office area, and truck loading area is directed here. Water from the reclaim basins is pumped to the gutter drains as needed. The gutter drains ties into a three-tiered concrete settling basin where process water is treated by a Fortrans Model 5000b Water Treatment System. The treated water is then discharged onto Chrysler Drive.

Figure 2 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. In addition, the following table is included with typical quantities of cement, sand, aggregate and diesel fuel:

Materials	Quantity
Cement	200 Tons
Aggregate	600 Tons
Sand	350 Tons
Diesel	6,000 Gallons

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. All spills and leaks will be recorded and documented. Appropriate response actions should be conducted as well.

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 includes a loading system (hopper and conveyor) located adjacent to the facility office. Contamination may occur through leaking trucks and equipment or spills from overloaded trucks.
- Truck Washout Area: Contamination may occur in this area through an increase of pH in collected waters and potential for increased sediment build-up.
- Fueling Station: This area includes a fueling station in the western portion of the property. Contamination may occur in this area through improper fueling or leaking trucks and equipment.
- Reclaim Basins: This area is in the central region of the site and may cause overflow contamination if not properly maintained.
- Office/Maintenance Garage: This building serves as a storage area for materials such as admixtures and general site materials. It also contains the site office. Contamination may occur through fluid leaks from stored materials and excess runoff from the adjacent loading area.
- Admixture/Truck Wash Chemical Storage: Several tanks are stored next to the main office building. They contain cleaners, detergents, and concrete admixtures.
- Stockpile Materials: Several mounds of stockpile material (sand, stone, etc.) are located on site. 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

Any chemical or oil spill will be recorded on standard inspection forms (**Appendix A**). 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. Storm Water Management (SWM) Control Measures

This section will detail existing 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 State 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. Site Evaluation of Existing Control Measures

The following is a list of effective control measures that are currently in place at the Upper Marlboro Facility.

- Recycling/Reclaim basins: A recycling/reclaim system is on-site to collect any material and water that can be reused.
- Curb & Gutters/Catch Drains: A series of curb and gutters and three drain strips along the site entrances direct drainage to appropriate treatment areas.
- Fortrans Model 5000b Water Treatment System: These water treatment systems monitor the pH level of collected water and utilize non-hazardous Carbon Dioxide to lower the high pH of collected water. There are two functioning systems on-site that treat water at DP-1 & DP-2 prior to discharge.
- Hydro-Innovations Hydrocarbonic Purification System: This system uses Carbon Dioxide to regulate pH and a series of filters to eliminate solids from process water. This allows the treated water to be recycled into the batch plant for use in batching concrete.

b. Implementation of Proposed SWM Control Measures

The following is a list of appropriate control measures that will be implement at the Upper Marlboro Facility:

- Fueling Station: The fueling station will be inspected for potential leak hazards and any changes will be implemented immediately. A spill kit has been installed for use in the event of a spill situation.
- Recycling/Reclaim Basins: The existing recycling and reclaim basins will be thoroughly inspected for potential problems and appropriate measures will be taken to ensure they are functioning as designed.
- Collection Tanks & Settling Basins: The concrete collection tanks and sediment basins at each site entrance will be inspected and sediment build-up that may be detrimental to the proper functioning of the water treatment system will be removed. These tanks will be monitored for sediment build-up and cleaned out on a regular basis.

- Fortrans Model 5000b Water Treatment System: There are two functioning systems on site. Components of each system will be inspected on a regular basis to ensure proper functioning.
- Hydro-Innovations Hydrocarbonic Purification System: This system uses CO2 injection and filters to treat process water collected in the holding basins for use in the batch plant.
- Material Storage: Any fluid canisters (truck oil, grease) housed on-site will be kept of out contact with storm water and will remain covered when not in use. 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 always on-site.
- Stockpiles: 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 twice a day and re consolidated when needed.
- Equipment Inspections: Vehicles and equipment will be 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.
- General Housekeeping: General good housekeeping measures will be 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.

V. Facility Monitoring Plan

a. Routine Inspections

Routine inspections will be conducted throughout the site to decrease the likelihood of a potential pollution situation. The recycling and reclaim basins, the curb & gutter network, the catch drains, the Fortrans Model 5000b Water Treatment System, the fueling station, storage areas and all other pollution prevention implementations will be inspected for effectiveness. As directed by the SWPPP Coordinator, and Environmental Evaluation team has been assigned to conduct visual observations no less than one time each month (in some months twice). A sample inspection form can be found in **Appendix A.**

b. Fortrans Model 5000b Water Treatment System and Hydro-Innovations Hydrocarbonic Purification System Monitoring

Water Treatment Systems will be inspected daily. The Plant manager or approved on-site personnel will ensure that the unit is turned on and is functioning correctly. The digital pH reading that is displayed will be recorded in the dispatch software. Carbon Dioxide tanks are filled weekly or as needed based on weather and process water volume. Filters will be backwashed on a regular schedule to prevent clogging.

c. SWPPP Updates and Amendments

Any changes to operating conditions of The Facility that require modification of existing BMPs or implementation of new BMPs will be recorded in this document (**Appendix 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. If 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

Victor Vilece is the Environmental Project Manager and SWPPP Coordinator.

b. SWPPP Coordinator Responsibilities

The SWPPP Coordinator will be responsible for the following:

- Manage the SWPPP team in the implementation of the SWPPP plan,
- Oversee employee training,
- Ensure regulatory compliance of site activities,
- Measure overall effectiveness of SWPPP implementation and
- Addressing 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
- Fernando Rodriguez, Area Production Manager, Operations 443-771-0957
- Kadrae Tongue, Plant Manager 240-581-4951
- Gus Buttar, Safety Director, Human Resources 240-299-7172

VII. Compliance Requirements

a. On-site Record Retention

This plan and all accompanying records will be retained for review on-site and at the corporate office, located at 2410 Evergreen Rd Suite 201, Gambrills, MD 21054, in a digital format. Upon request it shall be made available. Any requests for a current copy or updates will be honored within two weeks of formal receipt of the request.

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. Completion records are kept digitally and can be provided upon request.

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. 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

9/14/23
Date

Environmental Project Manager
Title

Victor John Vilece Jr
Signature

Digitally signed by Victor John Vilece Jr
DN: cn=Victor John Vilece Jr, o=Chaney Enterprises, ou, email=vvilece@chaneyenterprises.com, c=US
Date: 2023.09.14 15:52:13 -04'00'

Figure 1

Facility Map

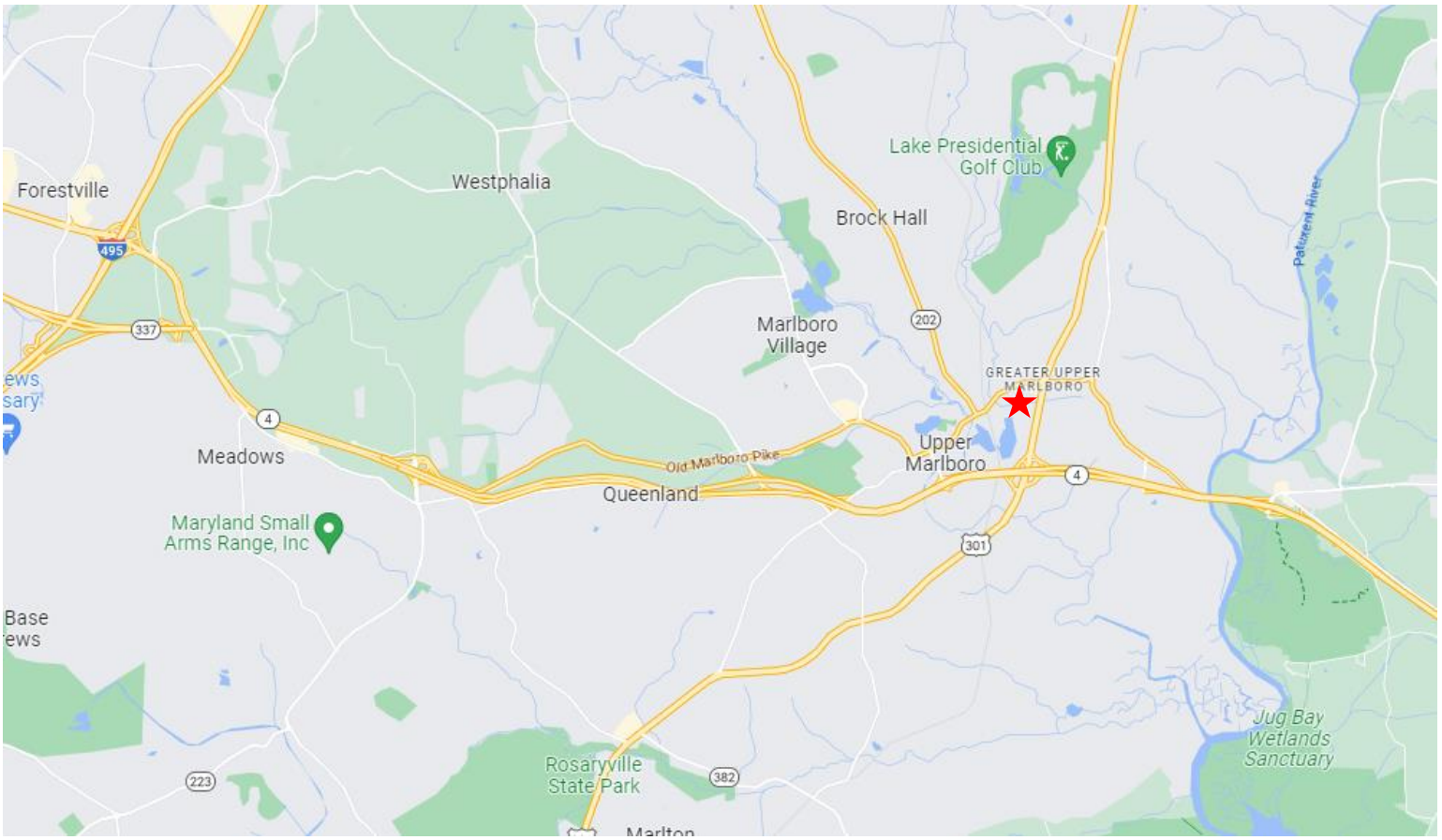

Figure 1

General Facility Map

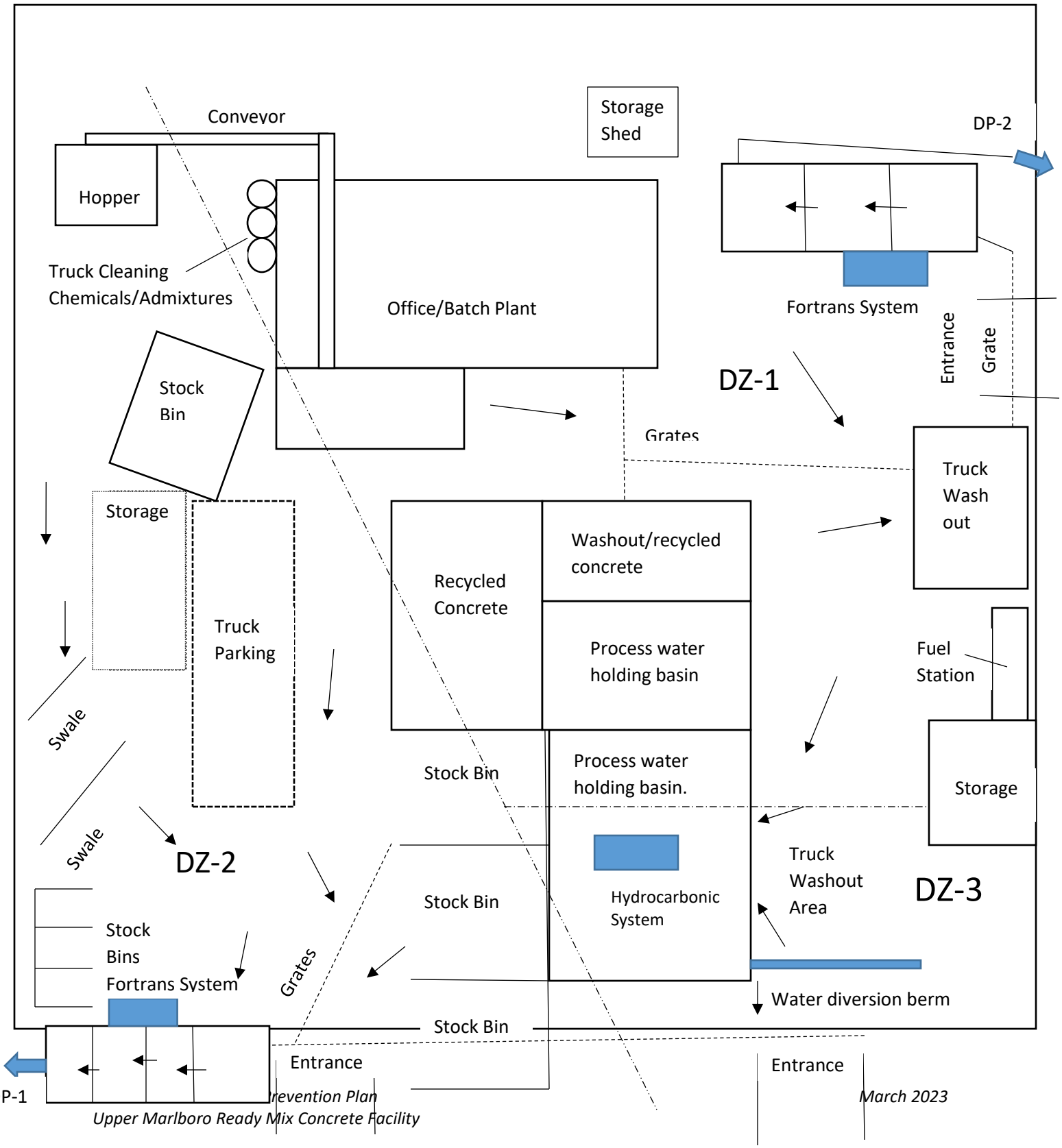

Table 1

EXISITING STORM WATER DRAINAGE AND DISCHARGE POINTS

DRAINAGE ZONE/ DISCHARGE POINTS	STORM WATER DRAINAGE DESCRIPTION	POTENTIAL POLLUTION	POTENTIAL PROBLEMS
Facility Drainage	Natural Topography and a network of curbs & gutters direct drainage throughout the site. Catch drains direct water to concrete collection tanks where it is treated by Fortrans Model 5000b Water Treatment Systems prior to discharge.	Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Sediment	Diesel fuel/fluids may leak from trucks and equipment. High pH water may be discharged without being treated. Improper loading may result in sediment discharge. Overflow from collection basin may result.
DP-1	This discharge point is adjacent to the northern site entrance. Water is treated by a Fortrans Model 5000b Water Treatment System and then discharged to a curbside gutter along Chrysler Drive. This ties into a storm drain inlet that feeds Depot Pond.	Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Propane, Sediment, High pH Water	Discharge water with high pH is the main concern in this area. Diesel fuel/fluid may leak from trucks and equipment along the entrance way and near the site office. Improper loading may result in sediment discharge. Runoff from bulk material areas may result in excess sediment buildup.
DP-2	This discharge point is adjacent to the western site entrance. Water is treated by a Fortrans Model 5000b Water Treatment System and then discharged to a curbside gutter along Chrysler Drive. This ties into a storm drain inlet that feeds Depot Pond.	Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Propane, Sediment, High pH Water	Discharge water with high pH is the main concern in this area. Overflow from the loading area may cause release of excess sediment. Trucks release washout water that could potentially be discharged before being treated.

Table 2

MATERIAL INVENTORY

TRADE NAME MATERIAL	PHYSICAL DESCRIPTION	STORM WATER POLLUTANTS
Cleaning Solvents	Colorless, blue, or yellow-green liquid	Perchloroethylene, methylene, chloride, trichloroethylene, petroleum distillates
Waste Water	Clear or gray	Oil, grease, concrete
Concrete	White or gray solids	Limestone, sand
Sand, Gravel	Solid particles	Silicon, suspended solids, turbidity, sediment
Hydraulic oil/fluids	Brown oily petroleum hydrocarbon	Mineral oil
Gasoline	Colorless, plae brown pr pink petroleum hydrocarbon	Benzene, ethyl benzene, toluene, xylene, MTBE
Diesel Fuel	Clear, blue-green to yellow liquid	Petroleum distillate, oil & grease, naphthalene, xylenes
Kerosene	Pale yellow liquid petroleum hydrocarbon	Coal oil, petroleum distillates
Antifreeze/coolant	Clear green/yellow liquid	Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc)
Polarset	Light green, clear liquid	Calcium Bromide, Calcium Nitrate, Diethyle Gycol, Methyldiethanolamine, Calcium Nitrite
Daracel		Naphthalenesulfonic acid, polymer with formaldehyde

TABLE 3

SWPPP IMPLEMENTATION SCHEDULE

SWPPP FEATURE	TARGET IMPLEMENTATION DATE
Monthly facility inspections	Ongoing since February 2004
Implementation of SWM Control Measure	See **TABLE 4**
Employee Training Program	Date of environmental seminar: Annually in Fall. General employee instruction: Ongoing since February 2004
Environmental Education Program Evaluation	Ongoing since February 2004
Annual Compliance Assessment	February 2005 and annually thereafter

TABLE 4

SWM CONTROL MEASURES IMPLEMENTATION SCHEDULE

FACILITY SITUATION	SWM CONTROL MEASURE	TARGET IMPLEMENTATION DATE
Fueling Station	Check for complete spill kit at fueling station	Ongoing, Checked on a daily basis.
	Inspect fuel/propane tanks and containment areas for cracks & leaks.	Ongoing, checked on a daily basis.
Recycling/Reclaim Basins	Inspect basins for effectiveness & make any necessary changes.	Ongoing, checked on a weekly basis.
Collection Basins	Inspect concrete basins at DP-1 & DP-2 for effectiveness. Clean out if needed.	Ongoing, checked on a weekly basis.
Fortrans Model 5000b Water Treatment System	Inspect that system is functioning properly.	Ongoing, checked on a daily basis.
	Check CO2 levels	Ongoing, checked on a daily basis.
	Clean pH probes	Ongoing, checked on a monthly basis.
Equipment Inspections	On-site vehicles and equipment will be thoroughly inspected for fluid leaks and other potential pollutants.	Ongoing, checked on a daily basis.
	Preventative maintenance will be performed on a regular schedule.	Ongoing, maintenance performed on a monthly basis or as needed.
General Housekeeping	Enforcement of good housekeeping measures will be implemented.	Ongoing, enforced on a daily basis.

CHANEY
ENTERPRISES

Appendix A

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 ☐

	Condition Range				Comments/Corrections Needed
	Great	Good	Fair	Poor	
E & S Control					
On-Site Storage					
Equipment/ Vehicles					
Roadways					
Air Pollution					
Discharge Monitoring	Discharging: Y / N pH:				

Additional Comments on Site Conditions:

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?	
pH Controller	What is the pH reading upon arrival?	
	What is the Hi limit reading?	
	What is the Lo limit reading?	
Mixing	How much CO2/Sodium bisulfate is in the tank?	
	Does additional chemical need to be added/ tank filled?	
	Were site personal informed?	
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?	

Site Corrections:

Due Date:

Days	1wk	2wk	3wk
☐	☐	☐	☐

Sign: _____

Comments on pH System Conditions:

Inspector

Name: _____ Signature: _____ Date: _____

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

   Gus Butter
   (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

SWPPP COMPLIANCE ASSESSMENT

SWPPP Feature	Y/N	Comments
Have monthly 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?		
Have all changes to site function been addressed in the SWPPP?		
Name:_____ Date:_____ Signature:_____ Title:_____		
Comments:		

APPENDIX D

SWPPP MODIFICATIONS

Date	Comments	Signature
9/14/23	Added Hydrocarbonic system to SWPPP.	VJV