### Forestville Ready Mix Concrete Facility 3709 Forestville Rd. Forestville, MD 20747

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

In compliance with: General Permit No. National Pollution Discharge Elimination System (NPDES)

Prepared By: Victor Vilece Chaney Enterprises, LP P.O. Box 2000 Gambrills, MD 21054 Phone: 301-932-5087 Email: vvilece@chaneyenterprises.com

### March 2024

### TABLE OF CONTENTS

- I. Introduction
  - a. SWPPP Purpose
  - b. SWPPP Content

### II. Facility Description

- a. Facility Location
- b. Site Description
- c. Site Activates
- d. Existing Drainage and Discharge Conditions

#### III. Potential Storm Water Contaminations

- a. Material Inventory
- b. Spill and Leak History
- c. Potential Areas of Storm Water Contamination
- d. Emergency Contact Information

### *IV.* Storm Water Management (SWM) Control Measures

- a. Site Evaluation of Control Measures
- b. Implementation of Proposed SWM Control Measures

#### V. Facility Monitoring Plan

- a. Routine Inspections
- b. pH Reduction System Monitoring
- c. SWPPP Updates and Amendments

#### VI. SWPPP Implementation Task Force

- a. SWPPP Coordinator
- b. SWPPP Coordinator Responsibilities
- c. SWPPP Implementation Task Force Team Members

#### VII. Compliance Requirements

- a. On-Site Record Retention
- b. Employee Training
  - i. Annual Environmental Education Seminar
  - ii. pH Reduction System Training
- c. Implementation Schedule
- d. Annual SWPPP Compliance Assessment
- e. Corporate Certification

### List of Figures

Figure 1: General Vicinity Map Figure 2: Facility Sketch of Existing Conditions

### List of Tables

Table 1: Storm Water Drainage and Discharge Points Table 2: Material Inventory Table 3: SWPPP Implementation Schedule

### List of Appendices

Appendix A: Site Inspection Form

Appendix B: Emergency Contact Information

Appendix C: pH Log

Appendix D: Environmental Education Seminar Sign-In Sheet

Appendix E: SWPPP Compliance Assessment Form

#### 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 Forestville Ready Mix Concrete Facility [herein known as the Forestville 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 Forestville facility is located at 3709 Forestville Road, Forestville, Maryland and is within Prince George's County boundaries. **Figure 1** is a general vicinity map of the area.

b. Site Description

The Forestville facility operates on a portion of land adjacent to Forestville Road between Suitland Parkway and Rt. 4 Pennsylvania Ave inside the Capital Beltway. On-site structures include a garage, batch plant, batch plant office, batch equipment, a water tank, a propane tank and a fueling area.

#### c. Site Activities

The Forestville 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 7am to 4pm and there is an average of fifteen full-time employees on schedule with approximately ten to twelve trucks operating out of this facility on a regular basis.

#### d. Existing Drainage and Discharge Conditions

The site consists of four (4) drainage zones, DZ-1, DZ-2, DZ-3, and DZ-4. All water is directed to the Forebay Treatment Area and the Discharge Point (DP-1) in the southeast corner of the site.

DZ-1 covers the northwest corner of the site. This includes a portion of the batch plant, aggregate stock piles, waste concrete bin, and a drainage swale. Water outside of the batch plant is directed west to the drainage swale where it is ultimately directed to the Forebay Treatment Area in DZ-4.

DZ-2 covers the southwest corner of the site. This zone includes the garage, aggregate storage piles, and a drainage swale. Water in this zone is directed west and south to the drainage swale where it is ultimately directed to the Forebay Treatment Area in DZ-4.

DZ-3 covers the northeast corner of the site. This includes the site entrance, a portion of the batch plant, the covered truck wash and employee parking area. Water inside the covered truck wash is piped underground to the Forebay Treatment Area in DZ-4. Water outside of the batch plant/truck wash structure flows south and east. Curbing and grading direct water to a trench grate at the site entrance. From the trench grate, water flows by underground pipe to the Forebay Treatment Area in DZ-4.

DZ-4 covers the southeast corner of the site. This includes truck parking areas, a drainage swale, the Forebay Treatment Area, and the Discharge Point (DP-1). All site water is directed to this zone for final pH treatment and settling before being allowed to discharge. Water is directed via underground pipes and a drainage swale to the Forebay Treatment Area. DP-1 is located in the northeast corner of the Forebay Treatment Area.

**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 Inventory

**Table 2** identifies materials that are used, stored or produced on-site that may contribute tostorm water pollution. A physical description and the probable storm water pollutants areincluded. 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>: This includes a loading system (hopper, conveyor and mixer) and is located inside the batch plant building. Contamination may occur through leaking trucks and equipment or spills from overloaded trucks.
- <u>Covered Drum Washout Area</u>: The washout basin is also located inside the batch plant building. Contamination may occur in this area through an increase of pH in collected waters and potential for increased sediment build-up.
- <u>Fueling Station</u>: This area includes a vehicle fueling station. Contamination may occur in this area through improper fueling or leaking trucks and equipment.
- <u>Storage/Maintenance Garage:</u> This building serves as a storage area for materials such as admixtures and general site materials. Contamination may occur through fluid leaks from stored materials and excess runoff from the adjacent loading area.
- <u>Propane Tank</u>: Contamination may occur in this area through improper loading, or leaking trucks and equipment.
- <u>Stockpile Materials</u>: Several mounds of stockpiled material and aggregates (sand, stone, etc.) are located on the western side of the 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 the SWM control 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 2** is a facility sketch of proposed control measures depicting approximate locations of implementation.

a. Site Evaluation of Control Measures

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

• <u>Covered Drum Washout Basin</u>: Basins are located under cover in the batch plant building, these basins are for truck washout and cleaning.

- <u>Curbing:</u> Curbing prevents water from leaving the site and directs it to the Forebay Treatment Area for settling.
- <u>Forebay Treatment Area:</u> All water is directed to this basin. pH is treated by carbon dioxide injection system. Water is given time for solids to settle out before reaching the discharge point.
- <u>Treatment System</u>: This water treatment system constantly monitors the pH level of collected water and utilizes Carbon Dioxide to neutralize pH and filters to clean solids out so it can be recycled for concrete batching and mixer truck washing.
- <u>Drainage Swales:</u> Swales on the western and southern borders of the site direct drainage to the Forebay Treatment Area.
- <u>Trench Grate:</u> Located at the site entrance, this grate will prevent water from leaving through the site entrance, and collect water from DZ-3 and direct it to DZ-4.
- b. Implementation of Proposed SWM Control Measures

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

- <u>Fueling Station:</u> The fueling station and will be inspected for potential leak hazards and any changes will be implemented immediately. A spill kit will be located at the fuel station and trucks that use the fueling station are also equipped with spill kits in the event of a spill.
- <u>Covered Drum Washout Basins:</u> The existing washout basins will be thoroughly inspected for potential problems and appropriate measures will be taken to ensure they are functioning as designed. Solids will be removed from these basins on a regular basis.
- <u>pH Treatment System</u>: Components of the system will be inspected on a regular basis and replacement parts or system modifications will be made accordingly.
- <u>Material Storage:</u> 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 on-site at all times.
- <u>Stock Piles:</u> All stock piles 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.
- <u>Equipment Inspections</u>: 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.
- <u>General Housekeeping:</u> General good housekeeping measures will be implemented into a routine schedule to promote site compliance.
- <u>Air Pollution:</u> Dust suppression methods such as regular sweeping, the use of gray water will aid in minimizing air pollution that could originate from the site. The batch plant will be equipped with a bag house system to capture dust from batching and truck loading.

### 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 washout basins, Forebay Treatment Area, the pH Treatment System, the 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 by the plant manager and kept in the on-site file. A sample inspection form can be found in **Appendix A**.

#### b. Treatment System Monitoring

The Water Treatment System located on site 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 a daily pH log. Carbon Dioxide tank refills will be scheduled as needed. A sample pH log can be found in **Appendix C**.

c. SWPPP Updates and Amendments

Any changes to operating conditions of the Forestville facility 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 Forestville facility is the Environmental 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
- 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:

•	George Priftis	VP/GM of RMC Mid-Atlantic	540-422-1671
•	Bill Tate	Regional APM	571-340-1453
•	Gus Buttar	EH&S Director	301-932-3011

#### 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. **Appendix D** contains a copy of the sign-in sheet that will be 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 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 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

Signature

Environmental Manager

Title

4/1/24

Date

### FIGURE 1

## **GENERAL VICINTY MAP**



### FIGURE 2

## FACILITY SKETCH OF EXISTING CONDITIONS



## Table 1

## EXISITING STORM WATER DRAINAGE AND DISCHARGE POINTS

DRAINAGE ZONE/ DISCHARGE POINTS	STORM WATER DRAINAGE DESCRIPTION	POTENTIAL POLLUTION	POTENTIAL PROBLEMS
DZ-1	Includes a part of the batch plant, agg. stock piles, waste concrete bin, and a drainage swale. Water outside of the batch plant is directed west to the drainage swale where it is ultimately directed south and east to the Forebay Treatment Area (FTA) in DZ-4.	Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Sediment, High pH water	Diesel fuel/fluids may leak from trucks and equipment. High pH water could discharge without treatment. Improper loading and sediment from storm events may result in sediment discharge.
DZ-2	Includes the garage, agg. storage piles, and a drainage swale. Water in this zone is directed west and south into the drainage swale where it is ultimately directed east to the FTA in DZ-4.	Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Sediment, High pH Water	Diesel fuel/fluids may leak from trucks and equipment. High pH water could discharge without treatment. Improper loading and sediment from storm events may result in sediment discharge.
DZ-3	Includes the site entrance, part of the batch plant, truck wash, and employee parking area. From the truck wash water is piped underground to the FTA in DZ-4. Water outside of the batch plant/truck wash structure flows south and east. Curbing and grading direct water to a trench grate at the site entrance. From the trench grate, water flows south via underground pipe to the FTA in DZ-4.	Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Sediment, High pH Water	Diesel fuel/fluids may leak from trucks and equipment. High pH water could discharge without treatment. Improper loading and sediment from storm events may result in sediment discharge.
DZ-4	Includes truck parking areas, a drainage swale, the FTA, and the Discharge Point (DP-1). All site water is directed to this DZ for final pH treatment and settling before being allowed to discharge. Water is directed via underground pipes and a drainage swale to the FTA. DP-1 is located in the FTA.	Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Sediment, High pH Water	Diesel fuel/fluids may leak from trucks and equipment. High pH water could discharge without treatment. Improper loading and sediment from storm events may result in sediment discharge.
DP-1	The lone discharge point is located in an underground culvert in the southeast corner of the site, adjacent to Forestville Rd. It is fed by the FTA.	Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Sediment, High pH Water	Diesel fuel/fluids may leak from trucks and equipment. High pH water could discharge without treatment. Improper loading and sediment from storm events may result in sediment discharge.

# 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		
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	Blue liquid with turbidity	Naphthalenesulfonic acid, polymer with formaldehyde		
All Safety Data Sheets can be viewed on the Chaney website: https://www.chaneyenterprises.com/resources/safety-data-sheets				

## TABLE 3

# **SWPPP IMPLEMENTATION SCHEDULE**

SWPPP FEATURE	TARGET IMPLEMENTATION DATE
Environmental compliance inspections	Monthly
Implementation of SWM Control Measure	Daily
Inspection of Water Treatment System	Daily
Employee Environmental Education <b>Appendix D</b>	Annually: December
Annual Compliance Assessment <b>Appendix E</b>	Annually December

# TABLE 4

# SWM CONTROL MEASURES IMPLEMENTATION SCHEDULE

FACILITY SITUATION	SWM CONTROL MEASURE	TARGET IMPLEMENTATION DATE
Tanks	Inspect fuel/propane tanks and containment areas for cracks & leaks.	Daily
Recycling/Reclaim Basins	Inspect basins for effectiveness & make any necessary changes.	Monthly
Forebay Treatment Area	Inspect basin at DP-1 for effectiveness. Clean out if needed.	Monthly
Water Treatment System	Inspect that system is functioning properly.	Daily
	Check CO2 levels	Weekly
	Clean pH probe	Weekly
	Calibrate pH probe	Monthly
Equipment Inspections	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.	Monthly/As Needed
General Housekeeping	Aggressive enforcement of good housekeeping measures will be implemented.	Daily

### Appendix A I. General Information

**On-Site Storage** 

Equipment/ Vehicles Roadways

Air Pollution

Discharge

Monitoring

### **CEEIP Inspection Form**

Facility:						Permit #:			
Date:		Time:			Weather:		Phone:		
Facility						Site			
Address:						Manager:			
Inspector:									
II. Site Conditio	ns	S۱	NPPP Or	n Site: Ye	s 🗌 No 🗌	DMR's On	Site: Yes 🗌 N	lo 🗌	
		Conditio	on Range	9		Comm	ents/Correctio	ons Needed	
	Great	Good	Fair	Poor					
E & S Contro	bl								

### Additional Comments on Site Conditions:

pH:

Discharging: Y / N

#### III. pH Treatment System

	Questions	Answer	Site Corrections:		
Washout/Settling	Have washout basins/ponds been cleaned recently?				
Ponds	What is the pH in the settling area w/handheld probe?				
	What is the pH reading upon arrival?				
pH Controller	What is the Hi limit reading?				
	What is the Lo limit reading?				
	How much CO2/Sodium bisulfate is in the tank?				
Mixing	Does additional chemical need to be added/ tank filled?				
	Were site personal informed?				
	Is probe covered in residue and dirty?		Due Date:		
pH Probe	Was probe cleaned with cleaning solution?		Davs 1wk 2wk 3wk		
	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?		Sign:		
Comments on pH System Conditions:					
Inspector					
Name:	Signature:		Date:		

# APPENDIX B EMERGENCY CONTACT INFORMATION



# APPENDIX C pH LOG

Date	Time	Weather	pH Reading	Comments	Signature

# APPENDIX D ENVIRONTMENTAL EDUCATION SEMINAR SIGN-IN SHEET

Date	Employee Name	Employee Signature

# APPENDIX E 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?		
Has the Environmental Education		
Program been evaluated and		
forms filed?		
Have all changes to site function		
been addressed in the SWPPP?		
Name:		Date:
Signature:		
Title:		