Gambrills Ready Mix Concrete Facility
2641 Brickhead Rd. Gambrills, MD 21054

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

In compliance with:
General Permit No. 15MM8045
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 form industrial facilities. Development, proper implementation and dedicated monitoring of the SWPPP will allow the Gambrills Ready Mix Concrete Facility [herein known as the Gambrills 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 Gambrills facility is located at 2641 Brickhead Road, Gambrills, Maryland and is within Anne Arundel County boundaries. **Figure 1** is a general vicinity map of the area.

b. Site Description

The Gambrills facility operates on a portion of land within another industrial property of the Gambrills area. The multi-acre site is bordered by an existing sand and gravel mining operation to the southeast and existing forest stands and residential areas to the northwest.
On-site structures include a main office building, small storage sheds, batch plant, batch equipment, a water tank, a propane tank and a fueling area. **Figure 2** is a facility sketch of existing conditions, illustrating pertinent on-site structures.

c. Site Activities

The Gambrills 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 eight to ten full-time employees on schedule with approximately eight to ten trucks operating out of this facility on a regular basis.

d. Existing Drainage and Discharge Conditions

The site is considered two (2) drainage zones (DZ-1 and DZ-2). In DZ-1 natural elevations and grading carry site drainage to a series of sediment basins for treatment and settling. The water will then be gravity fed to a small man-made swale before reaching the discharge point (DP-1). In DZ-2 natural elevations and grading carry site drainage from the aggregate storage bins to a small main-made swale before reaching the discharge point (DP-1). **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**. These are approximate locations based on a review of site conditions and an evaluation of mapping and aerial photos.

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:

- Truck Loading Area: This includes a loading system (hopper, conveyor and mixer) and is 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 behind the truck loading area. Contamination may occur in this area through improper fueling or leaking trucks and equipment.
- Fuel Tank: Contamination may occur in this area through improper loading, or leaking trucks and equipment.

- Storage Sheds: Shipping containers serve as storage areas for materials such as admixtures and general site materials. Contamination may occur through fluid leaks from stored materials.
- Stockpile Materials: Several mounds of stockpile material (sand, stone, etc.) are in the northern half 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 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 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 Existing Control Measures

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

- Truck Washout Basin: Effective washout basins are in place in DZ-1 for truck washout and cleaning. Trucks release excess material in a designated area, then wash down drums and release the wash water into a concrete basin where it is treated for sediments and pH, then recycled into the batch plant. The basins are regularly inspected and cleaned out.
- Hydro Innovations Water Treatment System: This water treatment system utilizes carbon dioxide and filters to treat process water for recycling back into the batch plant and other on-site uses.

b. Implementation of Proposed SWM Control Measures

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

- Fueling Station: The fueling station will be inspected for potential leak hazards and any changes will be implemented immediately. All over the road trucks that use the fueling station are equipped with spill kits in the event of a spill.
- Truck Washout Basins: The existing washout and collection basins will be visually inspected for potential problems and appropriate measures will be taken to ensure they

are functioning as designed. The fourth basin will be pumped out by vacuum truck as needed.

- Hydro Innovations Water Treatment System: Daily inspection of the system will confirm that it is operating properly. A third party will maintain the system and will be called in for repairs in the event of non-routine maintenance.
- Material Storage: Any fluid containers (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. A spill kit is located at the fuel station.
- Stockpiles: Stockpiles will be consolidated and employees will ensure that there is no sediment, sand/or aggregate leaving the appropriate holding areas.
- 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 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 washout basins, water treatment system, 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. Inspection forms will be completed and accessible via QR code. A sample inspection form can be found in **Appendix A.**

b. Hydro Innovations Water Treatment System Monitoring

The Hydro Innovations Water Treatment System located on site will be inspected daily to ensure proper operation. The system is maintained by a third-party contractor who performs routine maintenance on a regular basis and can be called in the event of non-routine maintenance. Carbon Dioxide refills will be scheduled as needed.

c. SWPPP Updates and Amendments

Any changes to operating conditions of the Crofton 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**, see **Appendix D** for a list SWPPP updates). 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 SWPPP Coordinator for the Crofton Facility 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:

- Lamont Hopkins Regional Concrete Ops Manager 410-279-9282
- Dustin Hafer Plant Manager 443-871-3444
- Gus Buttar EH&S Director 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. Copies of completed inspection forms will also be kept online. Additionally, all employee training records and certifications shall be made readily available upon 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.

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 C.** The CEEIP inspection conducted in December of each year will provide the visual inspections of BMPs and E&S controls for the annual inspection.

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

Date

Environmental Manager
Title

Victor John Vilece Jr
Digitally signed by Victor John Vilece Jr
DN: cn=Victor John Vilece Jr, o=Chaney Enterprises, ou, email=vvilece@chaneyenterprises.com, c=US
Date: 2024.08.23 13:55:42 -04'00'
Signature

FIGURE 1

GENERAL VICINTY MAP

FIGURE 2

FACILITY SKETCH OF EXISTING CONDITIONS

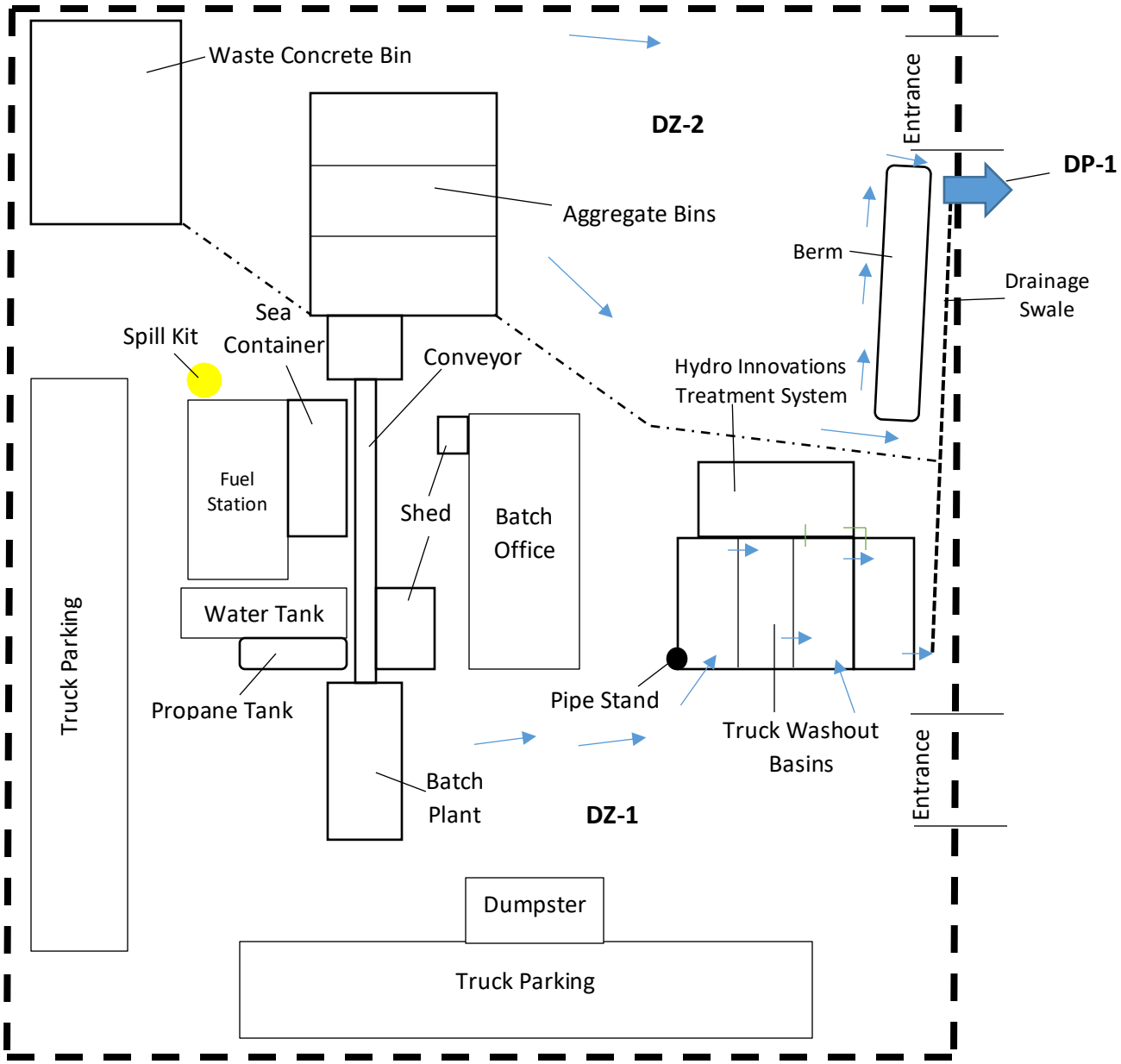

Table 1

EXISITING STORM WATER DRAINAGE AND DISCHARGE POINTS

DRAINAGE ZONE/ DISCHARGE POINTS	STORM WATER DRAINAGE DESCRIPTION	POTENTIAL POLLUTION	POTENTIAL PROBLEMS
DZ-1	Drainage and wash water is directed through a series of basins where it is treated by a Hydro Innovations Water Treatment System prior to being recycled into the batch plant or discharged from the site. Natural topography and grading direct water through the area.	Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Sediment, High pH Water	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.
DZ-2	Sheet flow from dust suppression is directed through grading, a berm, and natural topography to a man-made swale and discharge point 1.	Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Sediment, High pH Water	Diesel fuel/fluids may leak from trucks and equipment. High pH water may be discharged without being treated.
DP-1	The lone discharge point is in the northeastern corner of the site. Water is treated for pH and TSS before flowing through a manmade swale to the discharge point. Water is mainly recycled into the batch plant, but there is potential for discharge from dust control watering.	Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, 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, pale 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	Blue liquid with turbidity	Naphthalenesulfonic acid, polymer with formaldehyde

TABLE 3

SWPPP IMPLEMENTATION SCHEDULE

SWPPP FEATURE	TARGET IMPLEMENTATION DATE
Facility inspections	Monthly
Implementation of SWM Control Measures	See **TABLE 4**
Employee Training Program	Date of environmental seminar: Fall Annually General employee instruction: Ongoing
Annual Compliance Assessment	Q4 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 station	Monthly
	Inspect fuel/propane tanks and containment areas for cracks & leaks.	Monthly
Collection Basins	Inspect concrete basins for sediment buildup. Schedule clean out if needed.	Monthly
	Basin 4 is pumped out annually, as it cannot be cleaned with onsite equipment.	Annually
Water Treatment System	Inspect that system is functioning properly.	Daily
Aggregate Storage Bins	Consolidate material to ensure containment within the basin.	Daily
Equipment Inspections	On-site vehicles and equipment will be thoroughly inspected for fluid leaks and other potential pollutants. This is done as part of the driver pre-trip check.	Daily
General Housekeeping	Enforcement of good housekeeping measures will be implemented.	Daily

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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 Controls					
On-Site Storage					
Equipment/ Vehicles					
Haul Road/Yard					
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?	
	What is the pH on the pH System display?	
pH System General	What is the Hi limit reading?	
	What is the Lo limit reading?	
	How much CO2/Sodium bisulfate is in the tank?	
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 Buttar
   (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 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:_____

Title:_____

APPENDIX D

SWPPP MODIFICATIONS

Date	Comments	Signature
Feb 2017	Fortrans Water Treatment System added to SWPPP Appendix G added to SWPPP Rob Fuller added as Plant Manager	VJV
Sept 2017	Russell Dyrland added as Plant Manager. Changes made to CEEIP inspection forum, Appendix A.	VJV
Oct. 2018	Figure 2 updated to accurately reflect site conditions. 4th basin added to treatment system, spill kit located and labeled on sketch.	VJV
Dec. 2022	SWPPP reviewed and updated. Changes include new Hydro Innovations water treatment system and staff.	VJV
Nov 2023	Hydro Innovations Prototype system replaced with new unit. Updated drainage zones to reflect actual site conditions.	VJV
June 2024	Site name changed to Gambrills. Staffing changes.	VJV