

**Lincoln Ready Mix Concrete Facility
11671 Fleatown Road, Lincoln, DE 19960**

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

In compliance with:

General Permit No.

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 industrial facilities. Development, proper implementation, and dedicated monitoring of the SWPPP will allow the Lincoln Ready Mix Concrete Facility [herein known as the Lincoln 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 Lincoln facility is located at 11671 Fleatown Road, Lincoln, Delaware. **Figure 1** is a general vicinity map of the area.

b. Site Description

The multi-acre site is bordered by agricultural fields to the North and South, and wooded areas to the East and West.

On-site structures include a storage shed, batch plant and batch office, aggregate storage bins, treatment basins, and a large infiltration basin. **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 Lincoln 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).

d. *Existing Drainage and Discharge Conditions*

The site is covered by one drainage zone. Site grading ensures drainage flows from North to South, and all stormwater and process water is directed to the infiltration basin.

Figure 2 is a facility sketch of existing conditions that depicts typical 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 mapping and aerial photos. 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 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 in the middle of the site, under the batch plant. Contamination of stormwater may occur through leaking trucks and equipment or spills from overloaded trucks.
- Truck Wash Down Area: Contamination may occur in this area through an increase of pH in collected waters and potential for increased sediment build-up.
- Storage Shed: This structure will house chemicals and materials needed for batching concrete and maintaining mixer trucks. Contamination of stormwater may occur through improper storage, leaking containers, and spills.
- Stockpile Materials: Several concrete block bins are used to store stockpiled material (sand, stone, etc.). They are in the southwest corner of the site. Contamination of stormwater may occur in these areas through sediment runoff.

Table 1 includes site-specific information about 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 DNERC 24 Hour Release Hotline (800-662-8802) 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 Lincoln Facility:

- Treatment Basins: Tiered basins will handle all process water generated during mixer drum washout. Trucks wash down mixer drums into a 4-tiered basins system that is designed to allow adequate settling time for solids. A pH treatment system is located on the 4th basin to reduce pH of process water.
- pH Reduction System: This water treatment system monitors the pH level of collected water and utilizes Carbon Dioxide to lower pH and help solids settle to the bottom of the basin.
- Infiltration Basin: This large holding area collects all water from the site and allows it to infiltrate into the ground or evaporate.

b. *Implementation of Proposed SWM Control Measures*

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

- Treatment Basins: The basins will be thoroughly inspected for potential problems and appropriate measures will be taken to ensure they are functioning as designed. Basins will be cleaned regularly to maintain effectiveness.
- Infiltration Basin: This area will be inspected to ensure all water is contained on-site. The basin will be evaluated annually and maintained as needed.
- pH Reduction System: Components of the system will be inspected and maintained on a regular basis. Replacement parts or system modifications will be made accordingly.
- 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 on-site at all times.
- 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 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 treatment basins, the pH Reduction System, 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. CEEIP inspection forms will be completed electronically and stored in a database where plant staff can access the pdf copy for review. A sample inspection form can be found in **Appendix A**.

b. pH Reduction System Monitoring

The pH Reduction 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 Stormwater BMP Log, see **Appendix C**. Carbon Dioxide tank refills will be scheduled as needed.

c. SWPPP Updates and Amendments

Any changes to operating conditions of the Lincoln Facility that require modification of existing BMPs or implementation of new BMPs will be recorded in **Appendix F**. 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 Delaware Department of Natural Resources and Environmental Control 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 DNREC.

VI. SWPPP Implementation Task Force

a. SWPPP Coordinator

The SWPPP Coordinator for the Lincoln Facility is the Environmental Project Manager for Chaney Enterprises and can be reached at 301-861-6094.

b. *SWPPP Coordinator Responsibilities*

The SWPPP Coordinator is 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 SWPPP modifications

c. *SWPPP Implementation Task Force Team Members*

The following team members will aid the SWPPP Coordinator in all aspects of the SWPPP implementation:

- | | | |
|--------------|-------------------------|--------------|
| • Rob Fuller | Aera Production Manager | 240-320-6011 |
| • TBD | Plant Manager | |
| • Gus Buttar | 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 retained electronically in an online database and accessible by computer in the batch office. Copies of completed inspection forms will also be kept in the database for reference purposes. 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, trained on proper spill response procedure, and job site chute rise out procedure. Training will be done through the Chaney University online portal, and employee completion of the program will be recorded in the portal. Prior to the seminar, the SWPPP Coordinator (or designated SWPPP team member) will evaluate the environmental education program to verify its effectiveness, implement any changes and complete an evaluation form. A sample evaluation form can be found in **Appendix D**.

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**.

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

5/24/2023

Date

Environmental Project Manager

Title

Signature

FIGURE 1
GENERAL VICINTY MAP



FIGURE 2
Facility Sketch

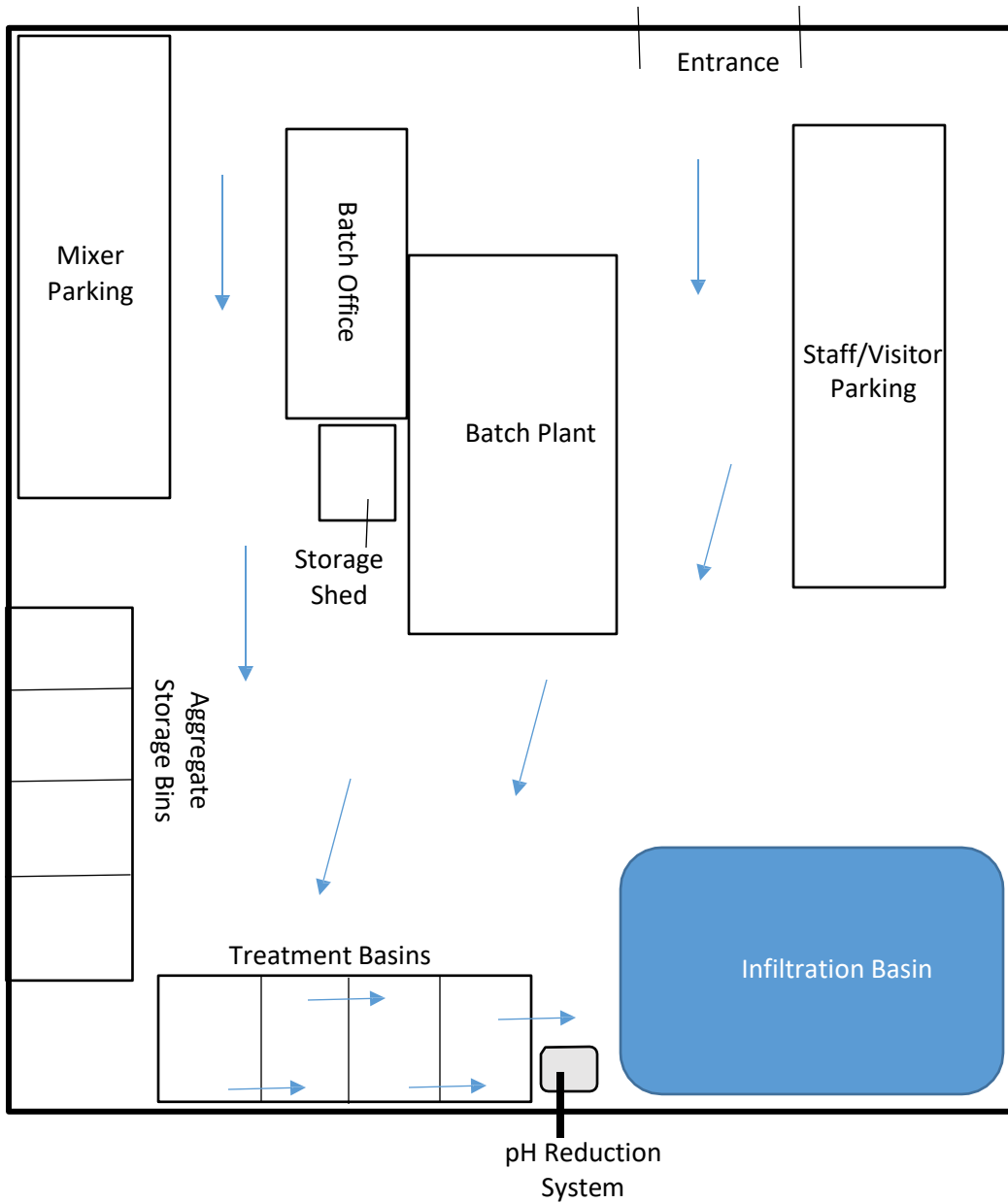


Table 1

EXISTING STORM WATER DRAINAGE AND DISCHARGE POINTS

| DRAINAGE ZONE/ DISCHARGE POINTS | STORM WATER DRAINAGE DESCRIPTION | POTENTIAL POLLUTION | POTENTIAL PROBLEMS |
|------------------------------------|--|--|---|
| <i>DZ-1</i> | Drainage is directed through a series of basins where it is treated by a pH Reduction System prior to discharge to the infiltration basin. | 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. |
| <i>Infiltration Basin</i> | This basin is designed to contain a 100-year storm event. Both treated process water and stormwater are directed to this basin for infiltration and evaporation. | Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Sediment, High pH | 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 |
|--|---|--|
| <i>Cleaning Solvents</i> | Colorless, blue, or yellow-green liquid | Perchloroethylene, methylene, chloride, trichloroethylene, petroleum distillates |
| <i>Process Water</i> | Clear or gray | Oil, grease, concrete |
| <i>Concrete</i> | White or gray solids | Limestone, sand |
| <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>Kerosene</i> | Pale yellow liquid petroleum hydrocarbon | Coal oil, petroleum distillates |
| <i>Antifreeze/coolant</i> | Clear green/yellow liquid | Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc) |
| <i>Polarset</i> | Light green, clear liquid | Calcium Bromide, Calcium Nitrate, Diethylene Glycol, Methyldiethanolamine, Calcium Nitrite |
| <i>Daracel</i> | | 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 |
|---|----------------------------|
| <i>Facility inspections</i> | Quarterly |
| <i>Implementation of SWM Control Measure</i> | See TABLE 4 |
| <i>Employee Training Program</i> | Annually: December |
| <i>Environmental Education Program Evaluation</i> | Annually: December |
| <i>Annual Compliance Assessment</i> | Annually December |

TABLE 4**SWM CONTROL MEASURES IMPLEMENTATION SCHEDULE**

| FACILITY SITUATION | SWM CONTROL MEASURE | TARGET IMPLEMENTATION DATE |
|------------------------------|---|----------------------------|
| <i>Treatment Basin</i> | Inspect basin for effectiveness & make any necessary changes. | Quarterly |
| <i>Collection Basins</i> | Inspect concrete basin for effectiveness. Clean out if needed. | Quarterly |
| <i>pH Reduction System</i> | Inspect that system is functioning properly. | Daily |
| | Check CO2 levels | Weekly |
| | Clean pH probes | As needed |
| | Calibrate pH probe | Monthly |
| <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. | Monthly/As Needed |
| <i>General Housekeeping</i> | Enforcement of good housekeeping measures will be implemented. | Daily |

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? | |
| | 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: _____

POURING OUR HEART & SOUL INTO EVERY JOB

2410 Evergreen Road | Suite 201 | Gambrills, Maryland 21054

WEB ChaneyEnterprises.com PHONE 888-424-2639

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

DNREC 24 HR RELEASE HOTLINE
800-660-8802

NATIONAL SPILL RESPONSE CENTER
(800) 424-8802

APPENDIX D

ENVIRONMENTAL 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? | | |
| <p>Name: _____ Date: _____</p> <p>Signature: _____</p> <p>Title: _____</p> | | |

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? | | |
| <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> | | |

