### Jessup Ready Mix Concrete Facility 7926 Old Jessup Road, Jessup, MD 20794

### STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

In compliance with: General Permit No. 15MM8046 National Pollution Discharge Elimination System (NPDES)

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### September 2024

Storm Water Pollution Prevention Plan Jessup Ready Mix Concrete Facility

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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 Jessup Ready Mix Concrete Facility [herein known as the Jessup 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 Jessup facility is located at 7926 Old Jessup Road, Jessup, Maryland and is within Howard County boundaries. **Figure 1** is a general vicinity map of the area.

b. Site Description

The Jessup facility operates on a portion of land within an industrial section of the Jessup area. The multi-acre site is bordered by route 175 to the west, Old Jessup Road to the east and Dorsey Run Road to the north. To the south are multiple active commercial properties. An on-site storm water management pond is located in the eastern portion of the site.

On-site structures include a main office building, a storage/maintenance garage, small storage sheds, batch plant, batch equipment, a water tank, a propane tank, a fueling area, sediment collection basins, storage bins, and a water treatment system, see **Figure 2**.

#### c. Site Activities

The Jessup 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 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 can be divided into two main drainage zones, DZ-1 and DZ-2, see **Figure 2**. These are approximate locations based on a review of site conditions and an evaluation of mapping and aerial photos. Site drainage is generally southward from DZ-1 and northeastward from DZ-2.

DZ-1 Currently represents the main portion of the property which contains a large storm water management (SWM) pond. All flow is directed to settling basins for treatment before being directed to this pond and ultimately leaving the site via DP-1.

DZ-2 represents northern end of the property where natural elevations direct flow to a small onsite sediment trap for collection, then to the SWM pond via a grated trench across the site entrance.

**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 adjacent to the facility office. Contamination may occur through leaking trucks and equipment or spills from overloaded trucks.

- <u>Truck Washout Area</u>: Trucks washout directly into the first tier of the settling basin. 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 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 stockpile material (sand, stone, etc.) are located in the southernmost area of the site. Contamination may occur in these areas through sediment runoff.

**Table 1** includes site-specific information regarding storm water pollution potential from theseareas.

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 Jessup Facility:

- <u>Tiered Settling Basin:</u> Effective settling basins are in the southwest corner of DZ-1 for truck washout and cleaning. Trucks release excess material in a designated area and then wash down drums and release that into the first tier of the settling basins. The majority of site run off is also directed to these basins for treatment. The basins are regularly inspected and cleaned. pH is treated in the 3<sup>rd</sup> tier by a Hydro Innovations Water Treatment System.
- <u>Hydro Innovations Water Treatment System:</u> This system utilizes carbon dioxide to reduce pH levels and filters to remove cementitious sediments from process water.
- <u>Concrete Curbing</u>: The entire active portion of the site is paved and lined with curbing that directs all flow and sediments to the settling basins preventing sediments from leaving the site. Curbs will be inspected and cleaned as necessary.

- <u>Storm Water Management Pond</u>: The SWM Pond is large enough to allow solids to settle out before reaching the outfall.
- b. Implementation of SWM Control Measures

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

- <u>Fueling Station:</u> The fueling station and propane tank will be inspected for potential leak hazards and any changes will be implemented immediately. All trucks that use the fueling station are equipped with spill kits in the event of a spill.
- <u>Tiered Settling Basins</u>: The existing basins will be thoroughly inspected for potential problems and appropriate measures will be taken to ensure they are functioning as designed.
- <u>Hydro Innovations Water Treatment System:</u> Components of the system will be inspected and cleaned on a regular basis. Replacement parts or system modifications will be made accordingly.
- <u>Storm Water Management Pond</u>: The on-site SWM pond will be inspected monthly, and a third-party contactor will be used to clean sediments out annually.
- <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 at least 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 and regular sweeping will aid in minimizing air pollution that could originate from the site.

#### V. Facility Monitoring Plan

a. Routine inspections

Inspections will be conducted throughout the site to decrease the likelihood of a potential pollution situation. The washout and settling basins, the Hydro Innovations 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, a member of the SWPPP Implementation Task Force Team has been assigned to conduct visual observations no less than one time each month. Inspection forms will be completed, signed by the plant manager and kept on file. A sample inspection form can be found in **Appendix A**.

b. Discharge Sampling

Discharge samples will be collected a minimum of once per month, if there is a discharge within the calendar month. Months without discharge will be marked as 'No Discharge' on the quarterly submitted DMR report. Discharge samples will be collected at Outfall 001 by a member of the SWPPP Implementation Task Force. pH readings will be taken during sample collection at the point which the sample was collected. pH readings will be taken using a handheld pH meter.

Numeric limits for discharge from Outfall 001: pH: Min. 6 su, Max. 9 su Total Suspended Solids: Daily Avg. 30 mg/L Daily Max. 60mg/L Flow: No Limit

c. Water Treatment System Monitoring

The Hydro Innovations Water Treatment System located at the settling basin 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 system will be maintained by Hydro Innovations. A technician will conduct an evaluation of system once per quarter where maintenance and calibrations will be done, and faulty equipment will be replaced. Emergency repairs will be performed as needed.

d. SWPPP Updates and Amendments

Any changes to operating conditions of the Jessup Facility that require modification of existing BMPs or implementation of new BMPs will be recorded in **Appendix C**. This SWPPP will 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 Jessup Facility is Victor Vilece: 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:

Billy Roy
Plant Manager

240-299-1544

•	Lamont Hopkins	Area Production Manager	4
-	Cus Buttor	ELLO C Diversite v	2

Gus Buttar EH&S Director

#### 410-279-9282 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 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 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 BMPs implemented at the facility for maximum effectiveness. Employee completion records will be kept in Paycom where the course will be accessible for all employees, and mandatory for all front-line employees. Records 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. Annual SWPPP Compliance Assessment

A designated SWPPP team member will conduct an Annual SWPPP Compliance Assessment to ensure that the facility is complying with all requirements detailed in this SWPPP. BMPs and E&S controls in place will be visually 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 D**.

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.

Victro Vilece Environmental Manager

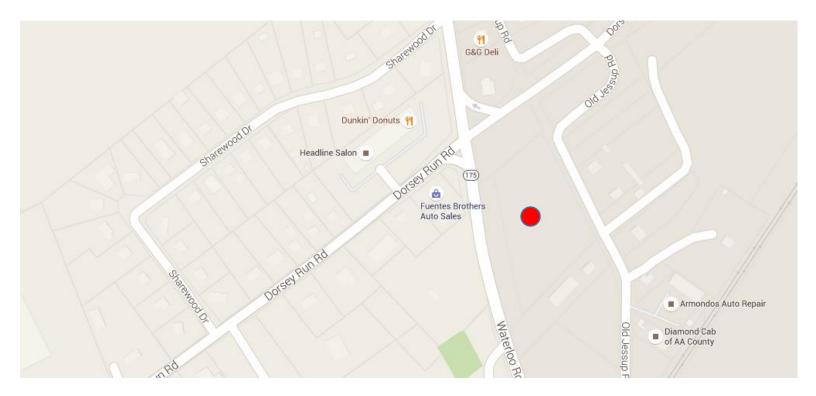
Name / Title

Date

Signature

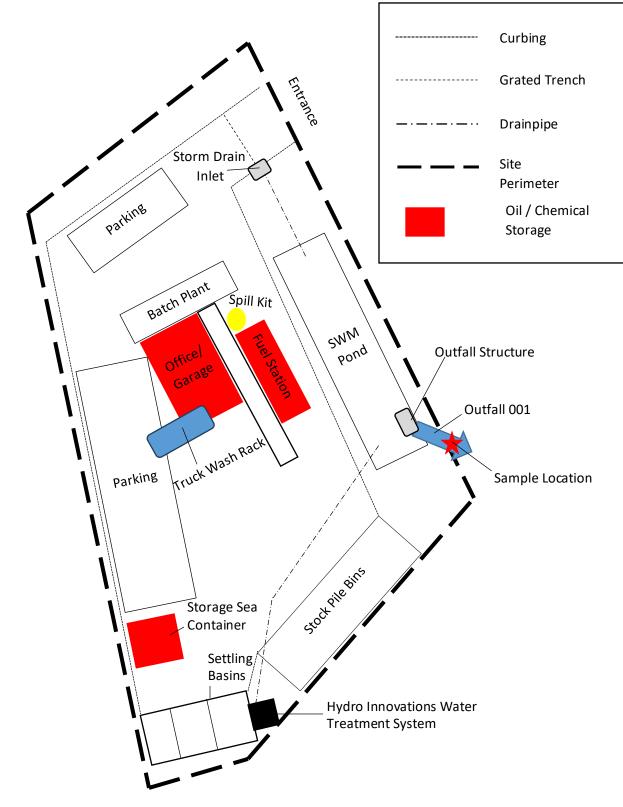
## FIGURE 1

## **GENERAL VICINTY MAP**



### FIGURE 2

### **FACILITY SKETCH**



## Table 1

## EXISITING STORM WATER DRAINAGE AND DISCHARGE POINTS

DRAINAGE ZONE/ DISCHARGE POINTS	STORM WATER DRAINAGE DESCRIPTION	POTENTIAL POLLUTION	POTENTIAL PROBLEMS
DZ-1	Represents the main portion of the property. Water is directed to settling basins in the southwest corner for treatment before a concrete pipe channels treated water into the SWM pond along the eastern side of the property.	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.
Represents the northeastern corner of the property where natural elevations direct flow to a small		Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Sediment	Diesel fuel/fluid may leak from trucks and equipment along the entrance way.
Outfall 001The lone discharge point at the Jessup Facility is located at the southeastern corner of the facility. After water is filtered in the SWM pond it is fed through a concrete tunnel before leaving the property.		Gasoline, Diesel Fuel, Hydraulic Oil/Fluids, Propane, Sediment, High pH Water	Discharge water with high pH is the main concern in this area. 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 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		
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
Facility CEEIP Inspections	Monthly
Implementation of SWM Control Measure	See TABLE 4
Employee Training Program	Date of environmental seminar: Annually in Fourth Quarter General employee instruction: Ongoing
Compliance Assessment	Annually

## TABLE 4

# SWM CONTROL MEASURES IMPLEMENTATION SCHEDULE

FACILITY SITUATION	SWM CONTROL MEASURE	TARGET IMPLEMENTATION DATE
Fueling Station	Check for complete spill kit at fueling	Monthly
	station	
	Inspect fuel/propane tanks and	Monthly
	containment areas for cracks & leaks.	
Cottling Decine	Inspect concrete basins in DZ-1 for	Monthly
Settling Basins	effectiveness. Clean out if needed.	
Hydro Innovations Water Treatment	Inspect that system is functioning properly.	Daily
System		
	Clean pump	Visual Inspection Monthly, cleaned as
		needed based on inspections.
	Clean and Calibrate pH probes	Performed by Hydro Innovations
		technician quarterly.
	On-site vehicles and equipment will be	Daily
Equipment Inspections	thoroughly inspected for fluid leaks and	
	other potential pollutants.	
	Preventative maintenance will be	Maintenance performed monthly or as
	performed on a regular schedule.	needed.
Concernel Ulawashaaning	Enforcement of good housekeeping	Daily
General Housekeeping	measures will be implemented.	



### Appendix A I. General Information

#### **CEEIP Inspection Form**

Facility:							Permit #:		
Date:		-	Time:			Weather:		Phone:	
Facility							Site		
Address:							Manager:		
Inspector:									
II. Site Conditio	ons		S۷	VPPP On	Site: Ye	es 🗌 No 🗌	DMR's On	Site: Yes 🗌 No	ן 🗆
			Conditio	n Range			Comme	ents/Correction	ns Needed
		Great	Good	Fair	Poor				
E & S Contro	bl								
On-Site Stora	ge								
Equipment/ Vehicles	/								
Roadways									
Air Pollutior	n								
Discharge	e Discharging: Y / N								
Monitoring									
Additional Co		onts on	Sita Cand	litions					

#### ditional Comments on Site Conditions:

#### III. pH Treatment System

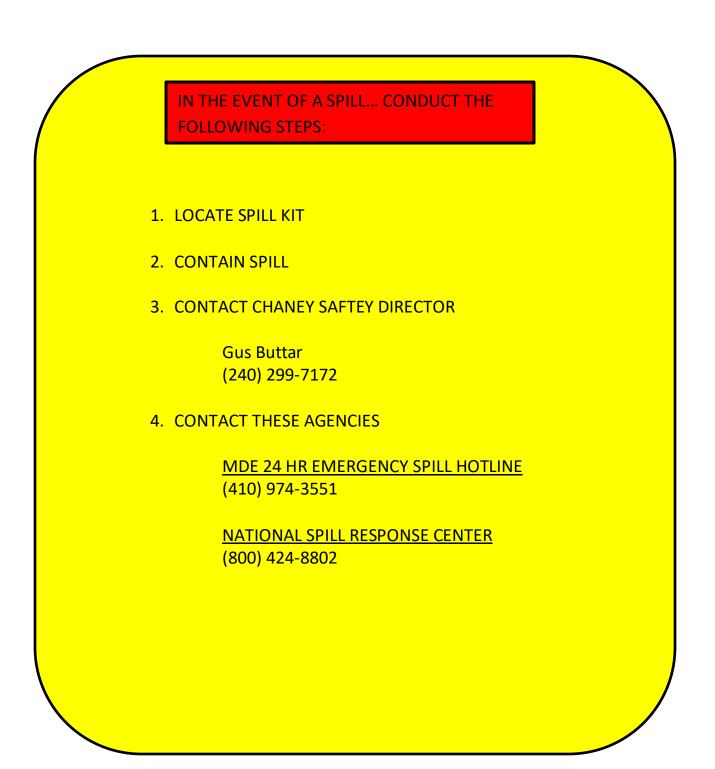
	Questions	Answer	Site Corrections:
Washout/Settling	Have washout basins/ponds been cleaned recently?	Site corrections.	
Ponds	What is the pH in the settling area w/handheld probe?		
	What is the pH reading upon arrival?		
pH Controller	What is the Hi limit reading?		
	What is the Lo limit reading?		
	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: Days 1wk 2wk 3wk	
pH Probe	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?		Sign:
Comments on pH S	System Conditions:	<u>.</u>	
Inspector			
Name:	Signature:		Date:

2410 Evergreen Road | Suite 201 | Gambrills, Maryland 21054

Storm Water Pollution Prevention Plan Jessup Ready Mix Concrete Facility

### **APPENDIX B**

### **EMERGENCY CONTACT INFORMATION**



### APPENDIX C

# SWPPP MODIFICATIONS

Date	Comments	Signature
9/19/24	Fortrans Treatment System replaced with Hydro Innovations System. Updates made to SWPPP Implementation Task Force Members Part VI. c. Appendix C added to SWPPP	VIV

### APPENDIX D

## SWPPP COMPLIANCE ASSESSMENT

SWPPP Feature	Y/N	Comments
Have monthly CEEIP inspections been conducted and have forms been completed and filed?		
Have daily pH readings been taken and have logs been completed and submitted to the Environmental Manager?		
Have BMPs 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:		