

5.0 MONITORING AND RECORD KEEPING

5.1 Annual Inspection

An annual inspection of the storm water drains will be conducted by the Environmental/Safety Engineer. The results of the inspection will be provided to the ADEQ during annual reports. These annual SWPPP reports will include a summary of monitoring, observations, and test results. All annual reports submitted to the ADEQ will be certified by the Environmental/Safety Engineer.

5.2 Monitoring of Storm Water

During the wet season, the Environmental/Safety Engineer will take runoff grab samples from two different storm events during the wet season. Whenever possible, the first storm event of the wet season will be sampled. Reasons for not sampling during this first storm event will be provided in the annual storm water report to the ADEQ. The location of these grab samples will be at the main storm water channel into the evaporation pond. These grab samples will be taken after one hour of continuous rain. The Environmental/Safety Engineer will transport the samples to, have the samples shipped to, or have them picked up by a certified laboratory approved for performing the analyses required in the SWPPP. All samples taken will be maintained under chain-of-custody at all times. Additionally, the samples will be stored properly in accordance with U.S. EPA protocol

Analytical results will be submitted to the Environmental/Safety Engineer and kept on file for a period of five years. Additionally, the analytical results will be included in the annual updated reports to the ADEQ.

The monitoring of storm water will be performed to assure that BMPs are conducted and updated in areas of potential pollution identified in this SWPPP. Potential sources of pollution, the potential pollutants in areas, and the analytes to be tested are summarized in **Table 4**. The analytical test methods, frequency, and sampling protocol for potential pollutants at the plant are provided in **Table 5**.

5.3 Record Keeping

All storm water annual related records and the SWPPP will be held in the Environmental/Safety Engineer office. Annual records must be kept for a period of five years. These annual records will include the following items.

- The date, time, personnel involved, site locations, and other recorded information during the weekly inspections.

Table 4. STORM WATER POLLUTION PREVENTION PLAN

Areas of Potential Sources of Pollution	Potential Pollutants	Analytes to be Tested
Main Plant Area	Acids, Caustics, and Oils.	Total suspended solids (TSS), conductivity, total organic carbon (TOC), oil & grease (O&G), semi-volatile organic compounds (SVOCs), and pH.
Evaporation Ponds	Sediments	Total suspended solids (TSS), conductivity, total organic carbons (TOCs), and pH.

Table 5. STORM WATER SAMPLING AND REPORTING PARAMETERS

Test Constituents	Title 40, CFR, Part 433.14, Storm Water Discharge Permit				SW-846, Sampling Protocol			
	Maximum One Day	Monthly Average Night	Test Method	Frequency	Minimum for Analyses	Preservation Method	Maximum Holding Time	Recommended Container
Total suspended solids (TSS)	60 mg/L	31 mg/L	160.1	2 Storm Events	1 Liter	Cool, 4°C	7 Days	Plastic or Glass
Conductivity	2,500 µmho/cm	-	120.1	2 Storm Events	100 ml	Field Determined	None	Plastic or Glass
Total Organic Carbon (TOC)	52 mg/L	-	415.2	2 Storm Events	Four 15 ml	Cool, 4°C HCl to pH<2	28 Days	Glass Only
Oil & Grease (O&G)	62 mg/L	26 mg/L	413.1	2 Storm Events	100 ml	Cool, 4°C HCl to pH<2	28 Days	Amber Glass Only
Semi-Volatile Organic Compounds (SVOCs)	-	-	624	2 Storm Events	1 Gallon	Cool, 4°C	7 Days	Amber Glass Only
pH	6.0 to 9.0	6.0 to 9.0	150.1	2 Storm Events	25 ml	Field Determined	None	Plastic or Glass
Certification	-	-	Monitoring Program	Annual	-	-	-	-
Non-Compliance Reporting	-	-	Monitoring Program	Annual	-	-	-	-
Annual Site Inspection	-	-	Monitoring Program	Annual	-	-	-	-
Dry Season Observation	-	-	Monitoring Program	Annual	-	-	-	-
Wet Season Observation	-	-	Monitoring Program	1 Storm Event per Month (first hour)	-	-	-	-

- The date, exact place, time, personnel involved, and general physical observations of grab samples taken during monthly storm water events.
- The date, exact place, time, personnel involved, physical observations, and chain-of-custody for the two annual analytical grab samples.
- The analytical results of all annual grab samples.
- The date, exact places inspected, and personnel involved in annual inspections of the storm water drainage system.
- The information on all Storm Water Committee meetings.
- The information on any changes made to the storm water drainage system.
- The reasons and completion date for any SWPPP projects, if additional projects are required.