NPDES Discharge Monitoring – OCS Production

Apache GMG Permit Number: 290388

Responsibilities

- Monthly Discharge Monitoring Report (DMR) – The Person in Charge (PIC) or Lead Operator on board the facility will be responsible for completing the daily observations required on the monthly DMR form and sending the completed DMR to the HSE and Regulatory Department in the Houston office (Fax 713-954-5555 or email to Barbara.Lopez@apachecorp.com) at the end of every Month. He or she will also be responsible for collecting composite grab samples as required by the EPA NPDES General Permit and for reporting permit violations to the Apache Production Foreman, and the Apache HSE and Regulatory Department immediately. (Refer to Section H, Chapter 1, Part A – DMR Report OCS Production)

- Produced water samples will be analyzed by an approved laboratory as per the applicable EPA NPDES permit requirements. The Person in Charge (PIC) or Lead Operator will ensure that sampling and reporting is performed according to approved sampling protocol.

Procedures

**Deck Drainage**

Limitations:

- **Free Oil** – No free oil shall be discharged. Discharge is limited to those times that a visual sheen observation is possible.

Monitoring Requirements:

- **Visual Sheen** – Monitoring shall be performed once per day when discharging, during conditions when an observation of a sheen is possible, and the facility is manned. For all facilities documentation of observations shall be captured on the DMR reports.

In addition, a produced water sample shall be collected, within two (2) hours of when a sheen is observed in the vicinity of the overboard discharge line or within two (2) hours after startup of the system if it is shut down following the sheen, and analyzed for oil and grease by a lab. This shall be a composite sample, which consists of the arithmetic average of the results of grab samples collected at even intervals during a period of 24-hours or less.
Produced Water

Overboard water grab samples will be caught at each overboard water discharge point at the beginning of each month and sent to an approved Lab for analysis. Only sample containers containing the proper preservatives supplied by the Lab will be used.

Limitations:

Oil and Grease - Produced water discharges must meet both a daily maximum of 42 mg/l and monthly average of 29 mg/l limitation for oil and grease content.

A 24-hour composite grab sample(s) or one grab sample may be taken at least once per month. The composite sample may be based on the arithmetic average of four (4) grab samples within the 24-hour period. If only one sample is taken for any one month, it must meet both the daily and monthly limits.

An operator may take a composite grab sample more often than once per month. The purpose of the additional samples is to monitor the oil and grease limitation and average in the additional tests, when necessary. If one composite sample does not comply, additional samples must be taken immediately, thus it is a good idea to take the first sample early in the month so that there is adequate time to take additional samples if necessary. If the first sample for the month complies, additional samples are not required by law but may be taken for monitoring purposes. However, the results of all samples must be reported.

NOTE: The Apache HSE and Regulatory Department shall be notified when the first sample exceeds the limitations so that proper permit procedures can be followed for additional sample collection and testing.

Proper custody transfer documentation must be provided when submitting samples to laboratory for testing.

Toxicity Testing – Produced water discharges shall not be toxic at the critical effluent dilution, as determined for the edge of the mixing zone, as per the requirements of 40 CFR Part 136.

The frequency of toxicity testing will be determined by the reported produced water flow on the annual DMR. Facilities that have not previously recorded produced water flow on the annual DMR shall use the most recent monthly average flow.

0 – 499 bbls/day Once per annual DMR monitoring period
500 – 4,599 bbls/day Once per calendar quarter
4,600 bbls/day and greater Once per month

Samples shall be collected and sent to the laboratory as per the requirements of the NPDES General Permit.
If the permittee has been compliant with this toxicity limit for one full year (12 consecutive months) for a continuous or routine intermittent discharge of chemically treated seawater or freshwater, the required testing frequency shall be reduced to **once per annual DMR monitoring period** for that discharge.

**Miscellaneous Discharge**

For miscellaneous discharges please contact the Apache HSE and Regulatory Department.

**Produced Sand**

The discharge of produced sand is prohibited.

**Priority Pollutants**

Limitations:

The discharge of priority pollutants is prohibited except in trace amounts. The permittee is required to record the specific chemical composition of any additives containing priority pollutants.

Monitoring Requirements:

This discharge is considered produced water waste for monitoring purposes when commingled with produced water.

**Sanitary Waste (Facilities continuously manned by 10 or more persons)**

Prohibition:

**Solids** – No floating solids may be discharged.

Monitoring Requirements:

Observations must be made once per day, during daylight in the vicinity of sanitary waste outfalls, following either the morning or midday meals and at the time during maximum estimated discharge.

Total residual chlorine is a surrogate parameter for fecal coliform. Discharge of residual chlorine must meet a minimum of 1 mg/l and shall be maintained as close to this concentration as possible. A grab sample must be taken once per month and the concentration recorded.

**Exception:** Any facility which properly operates and maintains a marine sanitation device (MSD) that complies with pollution control standards and regulations under
section 312 of the Act shall be deemed in compliance with permit limitations for sanitary waste.

The MSD must be tested yearly for proper operation and the test results maintained at the facility to be exempt from total residual chlorine testing requirements.

**Sanitary Waste (Facilities continuously manned by 9 or fewer persons)**

Prohibition:

**Solids** – No floating solids may be discharged.

Monitoring Requirements:

Observations must be made once per day, during daylight in the vicinity of sanitary waste outfalls, following either the morning or midday meals and at the time during maximum estimated discharge.

**Exception**: Any facility which properly operates and maintains a marine sanitation device (MSD) that complies with pollution control standards and regulations under section 312 of the Act shall be deemed in compliance with permit limitations for sanitary waste.

The MSD shall be tested yearly for proper operation and the test results maintained at the facility.

**Domestic Waste**

Prohibition:

**Solids** – No floating solids may be discharged.

Monitoring Requirements:

Observations must be made once per day, during daylight in the vicinity of domestic waste outfalls, following the morning and midday meals and at the time during maximum estimated discharge.

**NOTE**: U.S. Coast Guard/MARPOL 73/78 state that food waste, comminuted or not, may not be discharged within 12 nautical miles from nearest land.

Comminuted food waste which can pass through a 25 mm mesh screen (approximately 1 inch) may be discharged 12 or more nautical miles from nearest land.