

Closure Plan for Closed Loop Drilling System

1. METHODS OF HANDLING WASTE MATERIALS

- a. Drill cuttings shall be disposed of in steel cuttings bins (catch tanks) on the drilling pad (behind the steel mud tanks). The bin and cuttings shall be hauled to a division approved facility by an approved transporter. At the facility, the cuttings shall be removed from the bin and the bin shall be returned to the drilling site for reuse, moved to the next drilling site or returned to the provider.
- b. Remaining drilling fluids shall be hauled off by approved transports to a division approved disposal facility. Water produced during completion shall be put in storage tanks and disposed of at a division approved facility. Oil and condensate produced shall be put in a storage tank and sold or put in a sales pipeline.

2. RECLAMATION

- a. Within 120 days after the drilling and completion of the well, the location area shall be reduced as determined by operator to the minimum area necessary to safely and effectively operate the well. The reclaimed location area shall be restored to the condition that existed prior to oil and gas operations.

OPERATING AND MAINTENANCE PLAN – CLOSED LOOP SYSTEM

19.15.17.12 OPERATIONAL REQUIREMENTS:

A. General specifications. An operator shall maintain and operate a pit, closed-loop system, below-grade tank or sump in accordance with the following requirements.

(1) The operator shall operate and maintain a pit, closed-loop system, below-grade tank or sump to contain liquids and solids and maintain the integrity of the liner, liner system or secondary containment system, prevent contamination of fresh water and protect public health and the environment.

Operator shall operate and maintain a closed loop system.

(2) The operator shall recycle, reuse or reclaim all drilling fluids in a manner that prevents the contamination of fresh water and protects public health and the environment.

Operator shall recycle, reuse or reclaim all drilling fluids used. Excess or unused fluid shall be disposed of at division approved facilities.

(3) The operator shall not discharge into or store any hazardous waste in a pit, closed-loop system, below-grade tank or sump.

Operator shall not knowingly discharge hazardous waste into the closed loop system.

(4) If the integrity of the pit liner is compromised, or if any penetration of the liner occurs above the liquid's surface, then the operator shall notify the appropriate division district office within 48 hours of the discovery and repair the damage or replace the liner.

No Pit liner. Closed loop system.

(5) If a lined pit develops a leak, or if any penetration of the liner occurs below the liquid's surface, then the operator shall remove all liquid above the damage or leak line from the pit within 48 hours and repair the damage or replace the liner.

No Pit liner. Closed loop system. If a leak develops in any of the closed loop tanks, all liquid shall be removed from the effected tank within 48 hours and any damage shall be repaired prior to putting the tank back in service.

OPERATING AND MAINTENANCE PLAN – CLOSED LOOP SYSTEM

(6) The operator shall install a level measuring device in a lined pit containing fluids to monitor the level of the fluid surface, so that the operator may recognize unanticipated change in volume of fluids.

No pit. Closed loop system. Excess fluid shall be removed appropriately from the catch tanks.

(7) The injection or withdrawal of liquids from a lined pit shall be accomplished through a header, diverter or other hardware that prevents damage to the liner by erosion, fluid jets or impact from installation and removal of hoses or pipes.

No pit. Closed loop system. Excess fluid shall be removed appropriately from the catch tanks using a re-circulating pump or vacuum trucks.

(8) The operator shall operate and install a pit, below-grade tank or sump to prevent the collection of surface water run-on.

Operator shall berm or collect surface water run- on and dispose of at a division approved facility.

(9) The operator shall install, or maintain on site, an oil absorbent boom or other device to contain and remove oil from a pit's surface.

Operator shall install a skimmer system on catch tanks, circulating tanks and over-flow tanks as needed to collect oil.

EXHIBIT 4
Sand Tank 17 Fed Com 5H

