District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Dr.

Form C-144 CLEZ July 21, 2008

For closed-loop systems that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, submit to the appropriate NMOCD District Office.

Closed-Loop System Permit or Closure Plan Application

Santa Fe, NM 87505

(that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

Type of action: X Permit Closure

Instructions: Please submit one application (Form C-144 CLEZ) per individual closed-loop system request. For any application request other than for a

closed-loop system that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, please submit a Form C-144. Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances. Operator: Chesapeake Operating, Inc. OGRID #: 147179 Address: P.O. Box 18496 Oklahoma City, OK 73154-0496 Facility or well name: PLU Big Sinks 11 Federal # 1H API Number: 30-015-37147 OCD Permit Number: 0208577 U/L or Qtr/Qtr M Section 11 Township 24 South Range 30 East County: Eddy Center of Proposed Design: Latitude 32.141909 Longitude -103.51327 NAD: X 1927 1983 Surface Owner: X Federal State Private Tribal Trust or Indian Allotment X Closed-loop System: Subsection H of 19.15.17.11 NMAC Operation: 🗵 Drilling a new well 🗌 Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) 🔲 P&A ☐ Above Ground Steel Tanks or X Haul-off Bins Signs: Subsection C of 19.15.17.11 NMAC 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers X Signed in compliance with 19.15.3.103 NMAC Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Box 5) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC Previously Approved Design (attach copy of design) API Number: Previously Approved Operating and Maintenance Plan API Number: Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC) Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required. Disposal Facility Name: Controlled Recovery, Incorporated Disposal Facility Permit Number: NM-01-0006 Disposal Facility Name: Sundance Disposal Disposal Facility Permit Number: NM-01-0003 Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and operations? \square Yes (If yes, please provide the information below) \boxtimes No Required for impacted areas which will not be used for future service and operations: Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC Amended for change in drilling rig **Operator Application Certification:** I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief. Name (Print): Bryan Arrant Title: Senior Regulatory Compl. Sp. Signature: Date: <u>04/12/2010</u>

e-mail address: bryan.arrant@chk.com

Telephone: <u>(405)935-3782</u>

OCD Approval: Permit Application (including closure plan) Closure Plan (only)	
OCD Representative Signature:	Approval Date: 04/14/2010
Title: DIST If Supervisor	OCD Permit Number: 208577
8 Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed. Closure Completion Date:	
9. Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.	
Disposal Facility Name:	Disposal Facility Permit Number:
Disposal Facility Name:	Disposal Facility Permit Number:
Were the closed-loop system operations and associated activities performed on or Yes (If yes, please demonstrate compliance to the items below) No	r in areas that will not be used for future service and operations?
Required for impacted areas which will not be used for future service and operat Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	IONS
Operator Closure Certification: I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.	
Name (Print):	Title:
Signature:	Date:
e-mail address:	Telephone:

Chesapeake Operating, Inc.'s Closed Loop System PLU Big Sinks 11 Federal # 1H Unit M, Sec. 11, T-24-S R-30-E 350' FNL & 350' FWL Eddy Co., NM API # 015-37147

Equipment & Design:

Chesapeake Operating, Inc. is to use a closed loop system with roll-off steel pits.

- (2) NOV DLMS-285 P linear motion shale shakers
- (1) Sweco 8-cone/5" Desilter
- (1) 500 bbl "frac" tank" for fresh water
- (1) 500 bbl "frac" tank" for brine water

Detailed mud system for drilling operations is attached.

Operations & Maintenance:

During each and every tour, the rig's drilling crew will inspect and monitor closely the drilling fluids contained within the steel pits and visually monitor any spill which may occur.

Within 48 hours should a spill, release or leak occur, the NMOCD District II office in Artesia (575-1283) will be notified. Please note that notifications may be made earlier to the district office should a greater release occur.

Closure:

During and after drilling operations, liquids (which apply), all drill cuttings and drilling fluids will be hauled and disposed to the Controlled Recovery, Inc.'s location.

The permit number for the CRI is: NM-01-0006 Should this facility not be available, Sundance Disposal is the alternative site. The permit # for this facility is: NM-01-0003.



RIGNIOS RECIFICATIONS



HOISTING & ROTATING EQUIPMENT

Drawworks National 610-ME rated @ 750 hp driven by (1) GE 752 HT DC traction

motor rated @ 1130 hp

Auxiliary Brake Eaton 236WCBD friction brake cooled by NOV BCE-304032815-19B

brake cooling package

Rotary Table Traveling Block National C-275 (27-1/2") chain-driven by drawworks

National 540-G-250 (250 ton)

Hook

National G-250 (250 ton), unitized with traveling block

Swivel National P-300 (300 ton)

Pipe-Handling Varco ST-80 "Iron Roughneck" powered by Aberdeen Dynamics

18114-2 hydraulic power unit rated @ 60 hp

MAST & SUBSTRUCTURE

Mast Design

Pyramid Cantilever

Height 146'

Capacity 57

571k Static Hook Load (10 lines)

Substructure Design Floor Height Veristic Technologies Box-on-Box

Floor Height Clear Height

20' 16'

Clear Height
Capacities

600k Casing / 400k Setback

TRANSPORT

Estimated Loads

32 (less tubulars)

POWER PACKAGE

Engines Generators (3) Cat D398 rated @ 915 hp

(3

(3) Kato 6P6-2400 rated @ 902 kW / 1288 kVA / 0.7 pf

SCR System

Ross Hill w/ (4) generator bays, (4) SCR bays and (12) sections

GE MCC

BOP EQUIPMENT

Annular

Control Flow 11" 5M GK

Single Ram

None

Double Ram Accumulator Control Flow 11" 5M Type DRH Koomey 6-station / 160 gallon

Choke Manifold

Cameron 4-1/16" 5M

STORAGE CAPACITIES

Drilling Water

430 bbl

Diesel

10,000 gallons

MUD SYSTEM

Mud Pumps (2) Nati

(2) National 10-P-130 triplex rated @ 1300 hp, each driven by (1) GE 752 HT DC traction motor rated @ 1130 hp

Charging Pumps
Process Pit

(2) 6x5x14 @ 60 hp / 1200 rpm

(456 bbl) four-compartment w/ (3) 10 hp mud agitators

Suction Pit

Trip Tank

(338 bbl) two-compartment w/ (3) 10 hp mud agitators

(108 bbl) one-compartment w/ (1) 10 hp mud agitator

Trip Tank Pump Shale Shakers 4x3x13 @ 30 hp / 1200 rpm (2) NOV DLMS-285P

linear-motion

Degasser Double Life DAD-DP atmospheric

Desander

Sweco 2-cone / 10"

Desander Pump

6x5x14 @ 75 hp / 1200 rpm

Desilter

Sweco 8-cone / 5"

Desilter Pump

6x5x14 @ 75 hp / 1200 rpm

Mud Mixing Pumps

(2) 6x5x14 @ 75 hp / 1200 rpm

TUBULARS

Drill Pipe

4-1/2" 16.60# G-105 4-1/2" 16.60# S-135

Drill Collars

As needed for normal

drilling operations