District I State of New Mexico 1625 N. French Dr., Hobbs, NM Energy Minerals and Natural Resources

State of New Mexico Department

Form C-144 CLEZ July 21, 2008

District II 1301 W. Grand Avenue, Artesia, NM 88210 <u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 2 9 2010

1220 S St. Francis Dr., Santa Fe, NMAOBBSOCD

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

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

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

Type of action: 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.

est 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 c	omply with any other applicable governmental authority's rules, regulations or ordinances.	
Operator: Torch Energy Services, Inc.	OGRID #: 241401	
API Number: 30-041-20942	OCD Permit Number: P1-D217D	
	SRange 30ECounty: Roosevelt	
Center of Proposed Design: Latitude _33.963947' N Longitude _103.790952' W NAD: ☑1927 ☐ 1983		
Surface Owner: Federal State Private Tribal Trust or Indian Allotment		
2. □ 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 ☑ 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		
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 attached. □ 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: _CRI Halfway Facility	Disposal Facility Permit Number: _NM-01-0006	
Disposal Facility Name:	Disposal Facility Permit Number:	
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that <i>will not</i> be used for future service and operations? Yes (If yes, please provide the information below) 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		
6. 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): Angela Lightner	Tid D 14 C 14	
Signature: Ungelow highling	Date: 6/25/2010	
e-mail address: angela@rkford.com	Telephone: 432-682-0440	

OCD Approval: Permit Application (including closure plan) Closure Plan (only)		
OCD Representative Signature:	Approval Date: 06 / 30 / 10	
Title:Geologist	OCD Permit Number: P1-D1 17D	
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 in areas that will not be used for future service and operations? Yes (If yes, please demonstrate compliance to the items below) No		
Required for impacted areas which will not be used for future service and operations: Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique		
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:	

Torch Energy Services, Inc.

Closed Loop Mud System

Design

Drilling mud will circulate through a closed system of steel pits on the surface, mud pumps, piping on the surface to the rotating head, and return piping from the bell nipple back to the steel pits. Solids will be removed from the mud in the steel pits using the following equipment:

- 1) 2 shale shakers will be installed with 110-250 mesh screens. These shale shakers sould remove solids down to 65 micron diameter. All return drilling mud will flow across the shale shakers.
- 2) A mud cleaner will be installed to remove solids to 25-40 microns. Drilling mud will be circulated through the mud cleaner using a Monel pump. This pump will generate optimal pressure for the mud cleaner cones to process solids.
- 3) A high speed centrifuge will process under flows from the mud cleaner. The centrifuge is capable of cleaning to 10 micron level.
- 4) A dewatering unit will add polymer to the feed tube of the centrifuge to flocculate the solids. Flocculation increases the effective particle size of the solids, enhancing the performance of the centrifuge to remove solids down to the micron level.
- 5) Roll-off bins (20 cubic yards per bin) and rails will be installed next to the steel pits so that the solids removed from the shale shakers, mud cleaners, and centrifuge fall directly into a bin. Once a bin is full, it is picked up by a truck and hauled to disposal. An empty bin is moved under the solids control equipment along the rail so that the solids control equipment can operate continuously.

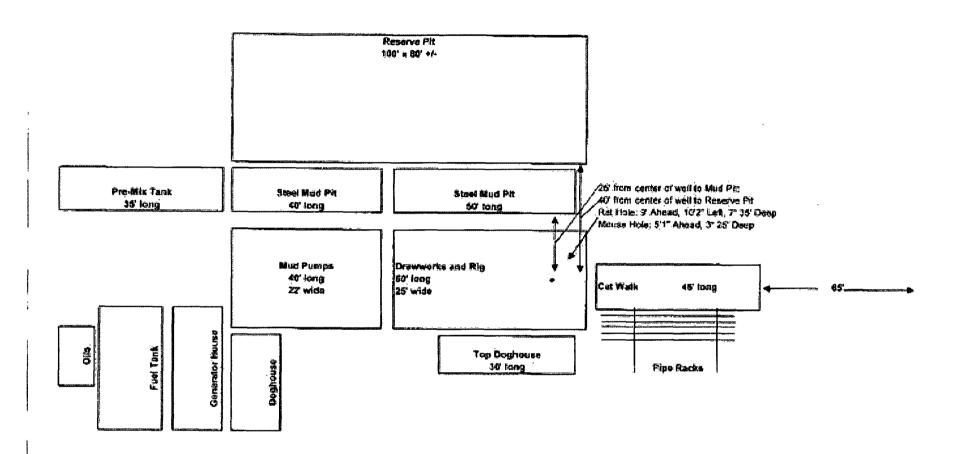
Operation and Maintenance

Personnel dedicated exclusively to operating and maintaining the solids control equipment will be on site 24 hours a day while drilling. The solids control personnel will monitor the shale shakers, mud cleaner, centrifuge, dewatering unit, and all associated pumps and piping to make sure the equipment is functioning correctly. If equipment problems are identified, the solids control personnel will coordinate repair or replacement of the equipment. The solids control personnel will also monitor the level of solids in the roll-off bins and arrange for trucks to pick up the bins when they are filled.

Closure Plan

Cuttings and other solids will be hauled off to a permitted landfill according to OCD guidelines. Liquids will be re-used to the extent possible, but if liquids need to be disposed of, they will also be hauled to a permitted disposal facility. Liquids to be temporarily stored on site will be placed in 500 bbl "frac" tanks.

For the San Juan Mesa State 16 #1 well, both solids and liquid waste will be taken to the CRI "Halfway Facility" NM-01-0006 between Carlsbad and Hobbs.



UNITED DRALLING, INC. RIG NO. 41