

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
Geology Minerals and Natural Resources
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

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 NMOC 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.

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.

1. Operator: McElvain Energy, Inc. OGRID #: 22044
Address: 1050 - 17th Street, Suite 2500 Denver, Colorado 80265
Facility or well name: South Ironhouse 32 State # 2H
API Number: 30-025-40747 OCD Permit Number: P1-05159
U/L or Qtr/Qtr SWNW (Unit E) Section 32 Township 18S Range 35E County: Lea County, New Mexico
Center of Proposed Design: Latitude N 32° 42' 23.61" Longitude W 103° 29' 14.87" 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

3. **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

4. **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: _____

5. **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 identify 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: Sundance Services, Inc. Disposal Facility Permit Number: NM-0003
Disposal Facility Name: Controlled Recovery, Inc. Disposal Facility Permit Number: NM-0006
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?
☐ 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): E. Reed Fischer Title: Operations Manager
Signature: E. Reed Fischer Date: September 5, 2012
e-mail address: reedf@mcelvain.com Telephone: (303) 893-0933 xtn 330

7. **OCD Approval:** ☐ Permit Application (including closure plan) ☐ Closure Plan (only)

OCD Representative Signature: _____

Approval Date: _____

Title: Petroleum Engineer

OCD Permit Number: P1-05159

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 identify 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: Sundance Services, Inc.

Disposal Facility Permit Number: NM-0003

Disposal Facility Name: Controlled Recovery, Inc.

Disposal Facility Permit Number: NM-0006

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

10.

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: _____

Closed Loop Mud System

Drilling fluids will circulate through a "closed system" consisting of above ground steel tanks, mud pumps, a chemical injection and flocculation system and various pieces of solids control equipment located in series and above ground along the "drilling fluid returns" side of the mud circulation system. Solids will be removed from the returns and temporarily stored in steel roll-off bins prior to haul-off to an approved NMOCD facility. This closed loop system will consist of steel piping and various pieces of equipment as follows:

1. Conventional shale shakers with graduated screens will handle the initial removal of drill cuttings from the mud return stream.
2. A conventional mud cleaner will then remove still finer solid particles.
3. One or more centrifuges may be utilized to receive effluent downstream of the mud cleaner and remove additional cuttings and drill particles.
4. Flocculants may be added via a chemical injection system (which includes a settling tank) in order to flocculate and settle additional solid particles.
5. Roll off bins will be utilized to store the solids removed by the shale shaker, mud cleaner, centrifuge(s) and flocculation settling tank. These waste solids will either drop directly into the bins or be transferred immediately upon cleanout of any settling or catch tank. Once a bin is full it will be hauled to, emptied and cleaned out at an NMOCD approved disposal site.

Operation and Maintenance

Personnel with appropriate training and experience will be on-site 24 hours per day to operate and maintain the solids control equipment. If equipment problems occur the repairs or parts replacement will be done by qualified personnel. Personnel will monitor the solids levels in the roll off bins. Trucking companies will be notified to pick up the full bins and move the new bins into place.

Closure Plan

Cuttings and solids will be disposed of at an OCD permitted facility according to OCD guidelines. **Where possible, fluids will be recycled.** If unable to use the fluids the fluids will be hauled to an approved disposal facility. Fluids will be temporarily stored in tanks of sufficient volume to maintain the liquids on-site. Following drilling and completion operations all stored fluids necessary for or a waste product of drilling and completion operations will be removed from location and hauled to an approved disposal facility before releasing and removing the temporary storage tanks.