District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., 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. Santa Fe, NM 87505

Form C-144 CLEZ Revised August 1, 2011

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 tha 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 Fo | rm 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 environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations | | | | |
| I. Operator: ENCANA OIL & GAS (USA) INC OGRID #: 282327 | | | | |
| Address: <u>370 17TH STREET, SUITE 1700 DENVER, CO 80202</u> | | | | |
| Facility or well name: LYBROOK M31-2306 02H | | | | |
| API Number: 30-043-21146 OCD Permit Number: | | | | |
| U/L or Qtr/Qtr SWNW Section 31 Township 23N Range 06W County: SANDOVAL | | | | |
| Center of Proposed Design: Latitude <u>36.17910 ° N</u> Longitude <u>107.51617 ° W</u> NAD: [19] | 927 🛛 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. RCVD MAR 25 | 10 | | | |
| Signs: Subsection C of 19.15.17.11 NMAC DIL CONS. DI | 1. q. f. A | | | |
| ■ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers DIST, 3 | · • | | | |
| Signed in compliance with 19.15.16.8 NMAC | | | | |
| 4. <u>Closed-loop Systems Permit Application Attachment Checklist</u> : 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: PLEASE SEE PAGE 2 Disposal Facility Permit Number: | | | | |
| 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 Yes (If yes, please provide the information below) No | l operations? | | | |
| 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): KATIE WEGNER Title: REGULATORY ANALYST | | | | |
| Signature TAUN MCC Date: 3/20/13 | | | | |
| e-mail address: KATIE.WEGNER@ENCANA.COM Telephone: 720-876-3533 | | | | |

Form C-144 CLEZ

Oil Conservation Division

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| OCD Approval: X Permit Application (including closure plan) Cosure Plan (only) | | | | |
|---|---|--|--|--|
| | Approval Date: <u>4/02/2013</u> | | | |
| Title: <u>Complique Office</u> | OCD Permit Number: | | | |
| 8. <u>Closure Report (required within 60 days of closure completion)</u> : 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. <u>Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:</u> 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) X No | 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: | | | |
| 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. | | | | |
| benet. T also certify that the closure complies with an appreable closure requirements and conditions specified in the approved closure plan. | | | | |
| Name (Print): | Title: | | | |
| Signature: | Date: | | | |
| e-mail address: | Telephone: | | | |
| | | | | |

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CONTINUED FROM PAGE 1

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: | Basin Disposal, Inc. | Disposal Facility Permit Number: | NM-01-005 |
|---------------------------|---------------------------|----------------------------------|-------------|
| Disposal Facility Name: I | Envirotech, Inc. | Disposal Facility Permit Number: | NM-01-0011 |
| Disposal Facility Name: 1 | ndustrial Ecosystem, Inc. | Disposal Facility Permit Number: | NM-01-0010B |

LYBROOK M31-2306 02H CLOSED-LOOP SYSTEM PLANS



CLOSED-LOOP SYSTEM DESIGN PLAN

The closed-loop system will consist of a series of temporary above-ground storage tanks and/or haul-off bins suitable for holding the cuttings and fluids from drilling operations. The closed-loop system will not entail temporary pits, below-grade storage tanks, below-grade sumps, or drying pads.

Design considerations include:

- 1. The closed-loop system will be signed in accordance with 19.15.17.11 NMAC.
- 2. The closed-loop system storage tanks will be of adequate volume to ensure confinement of all fluids and provide sufficient freeboard to prevent uncontrolled releases.
- 3. Topsoil will be salvaged and stored for use in reclamation activities.
- 4. The closed-loop system storage tanks will be placed in bermed secondary containment sized to contain a minimum of 110 percent of the volume of the largest storage tank.

CLOSED-LOOP SYSTEM OPERATING & MAINTENANCE PLAN

The closed-loop system will be operated and maintained to contain liquids and solids; minimize the amount of drilling fluids and cuttings that require disposal; maximize the amount of drilling fluid recycled and reused in the drilling process; isolate drilling wastes from the environment; prevent contamination of fresh water; and protect public health and the environment.

Operation and maintenance considerations include:

- 1. Fluid levels will be maintained to provide sufficient freeboard to prevent over-topping.
- 2. Visual inspections will be conducted on a daily basis to identify any potential leaks and to ensure that the closed-loop system storage tanks have sufficient freeboard to prevent over-topping.
- 3. Only drilling fluids or cuttings intrinsic to, used by, or generated from, drilling operations will be stored in the closed-loop system storage tanks. Hazardous waste, miscellaneous solid waste, and/or debris will not be stored in the storage tanks.
- 4. The OCD District Office will be notified within 48 hours of discovery of a leak in the closed-loop drilling system. If a leak is discovered, all liquid will be removed within 48 hours and the damage repaired.

CLOSED-LOOP SYSTEM CLOSURE PLAN

The closed-loop system will be closed in accordance with 19.15.17.13 NMAC.

Closure considerations include:

- 1. Drilling fluids will be recycled and transferred to other permitted closed-loop systems or returned to the vendor for reuse, as practical.
- 2. Residual fluids will be pulled from the storage tanks, mixed with saw dust or similar absorbent material, and disposed of at Industrial Ecosystem, Inc. waste disposal facilities.
- 3. Remaining cuttings or sludges will be vacuumed from the storage tanks and disposed of at the Envirotech, Inc and/or Industrial Ecosystem, Inc. waste disposal facilities.
- 4. Storage tanks will be removed from the well location during the rig move.
- 5. The well pad will be reclaimed and seeded in accordance with subsections G, H and I of 19.15.17.13 NMAC.



March 20, 2013

Charlie Perrin EMNRD—Oil and Gas Division Aztec Field Office, District III 1000 Rio Brazos Road Aztec, NM 87410

Re: Closed-Loop System Permit Applications Lybrook M31-2306 02H

Mr. Perrin:

Enclosed with this letter is a closed-loop system permit application for the Encana Oil & Gas (USA) Inc. (Encana) proposed Lybrook M31-2306 02H well.

The closed-loop permit application includes the Form C-144 CLEZ and associated closed-loop system design, operating and maintenance, and closure plans.

This proposed well is located on Federal surface with State minerals.

Please feel free to contact me directly at 720-876-3533 with any questions or concerns.

Encana Oil & Gas (USA) Inc.

Katie Wegner Regulatory Analyst

Enc.

RCVD MAR 25'13 OIL CONS. DIV. DIST. 3