## State of New Mexico Energy Minerals and Natural Resources

Form C-144 July 21, 2008

District II 1301 W Grand Ave , Artesia, NM 88210 District III 1000 Rio Brazos Rd, Aztec, NM 87410

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

For temporary pits, closed-loop sytems, and below-grade tanks, submit to the appropriate NMOCD District Office.

For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office

District	ΙV		
1220 S	St	Francis Dr., Santa Fe, NM	87505
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1220 S St. Francis Dt., Sama Fe, NW 8/3003
Proposed Alternative Method Pormit or Closure Plan Application
Proposed Alternative Method Permit or Closure Plan Application
Type of action: [X] Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
Modification to an existing permit
Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method
Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request
Please be advised that approval of this request does not relieve the operator of hability 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: Burlington Resources Oil & Gas Company, LP OGRID#: 14538
Address: PO Box 4289, Farmington, NM 87499
Facility or well name: Sammons 100
API Number:         30-045-30454         OCD Permit Number
U/L or Qtr/Qtr: G(SW/NE) Section: 32 Township: 30N Range: 12W County: San Juan
Center of Proposed Design: Latitude: 36.77116 °N Longitude: 108.11777 °W NAD: X 1927 1983
Surface Owner: Federal State X Private Tribal Trust or Indian Allotment
Pit: Subsection F or G of 19 15 17 11 NMAC  Temporary Drilling Workover  Permanent Emergency Cavitation P&A Lined Unlined Liner type Thickness mil LLDPE HDPE PVC Other DIST. 3  String-Reinforced Liner Scams Welded Factory Other Volume bbl Dimensions L x W x D   3  X Closed-loop System: Subsection H of 19.15 17 11 NMAC  Type of Operation X P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)  Drying Pad X Above Ground Steel Tanks Haul-off Bins Other  Liner Seams Welded Factory Other  Liner Seams Welded Factory Other
Below-grade tank: Subsection I of 19 15 17 11 NMAC  Volume
Alternative Method:  Submittal of an exception request is required Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval

Fencing: Subsection D of 19 15 17 11 NMAC (Applies to permanent pit, temporary pits, and below-grade tanks)  Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate Please specify						
Netting: Subsection E of 19 15 17 11 NMAC (Applies to permanent pits and permanent open top tanks)  Screen Netting Other  Monthly inspections (If netting or screening is not physically feasible)						
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						
Administrative Approvals and Exceptions:  Justifications and/or demonstrations of equivalency are required Please refer to 19 15 17 NMAC for guidance  Please check a box if one or more of the following is requested, if not leave blank:  Administrative approval(s) Requests must be submitted to the appropriate division district of the Santa Fe Environmental Bureau office for consideration of approval  Exception(s) Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval	nderation of ap	pproval				
Siting Criteria (regarding permitting) 19 15 17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau Office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above grade-tanks associated with a closed-loop system.						
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.  - NM Office of the State Engineer - IWATERS database search; USGS; Data obtained from nearby wells	Yes	No				
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map, Visual inspection (certification) of the proposed site	Yes	□No				
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	Yes	No				
(Applies to temporary, emergency, or cavitation pits and below-grade tanks)  - Visual inspection (certification) of the proposed site, Aerial photo; Satellite image	□NA					
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  (Applied to permanent pits)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	Yes NA	No				
Within 500 horizonal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.	Yes	No				
- NM Office of the State Engineer - iWATERS database search, Visual inspection (certification) of the proposed site.						
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	Yes	No				
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map, Topographic map; Visual inspection (certification) of the proposed site	Yes	No				
Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division	Yes	No				
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources, USGS, NM Geological Society, Topographic map	Yes	□ No				
Within a 100-year floodplain	Yes	No				

Temporary Pits, Emergency Pits and Below-grade Tanks 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.						
Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15 17.9 NMAC  Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9						
Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17 10 NMAC						
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 Boxes 14 through 18, if applicable) - 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  or Permit						
Closed-loop Systems Permit Application Attachment Checklist:  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.  Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19 15.17.9						
Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC						
X Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC						
X Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17 12 NMAC						
X Closure Plan (Please complete Boxes 14 through 18, if applicable) - 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						
Previously Approved Operating and Maintenance Plan API						
Permanent Pits Permit Application 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.    Hydrogeologic Report - based upon the requirements of Paragraph (I) of Subsection B of 19.15.17.9 NMAC   Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC   Climatological Factors Assessment   Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC   Dike Protection and Structural Integrity Design. based upon the appropriate requirements of 19.15.17.11 NMAC   Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC   Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC   Quality Control/Quality Assurance Construction and Installation Plan   Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.11 NMAC   Treeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC   Emergency Response Plan   Oil Field Waste Stream Characterization   Monitoring and Inspection Plan						
Erosion Control Plan						
Closure Plan - based upon the appropriate requirements of Subsection C of 19 15.17 9 NMAC and 19.15.17 13 NMAC						
Proposed Closure: 19 15.17.13 NMAC  Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.  Type Drilling Workover Emergency Cavitation Removal Permanent Pit Below-grade Tank Closed-loop System Alternative  Proposed Closure Method Waste Excavation and Removal  Waste Removal (Closed-loop systems only)  On-site Closure Method (only for temporary pits and closed-loop systems)  In-place Burial On-site Trench  Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)						
15						
Waste Excavation and Removal Closure Plan Checklist: (19.15 17 13 NMAC) Instructions: Each of the following items must be attached to the closure plan.						
Please indicate, by a check mark in the box, that the documents are attached.						
Protocols and Procedures - based upon the appropriate requirements of 19 15.17.13 NMAC						
Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17 13 NMAC						
Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)  Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19 15 17 13 NMAC						
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						

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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						
	al Facility Permit # NM-01-0011 / NM-01-0010B					
Disposal Facility Name Basin Disposal Facility Disposal Facility Permit # NM-01-005						
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  Yes (If yes, please provide the information No						
Required for impacted areas which will not be used for future service and operations:  Soil Backfill and Cover Design Specification - 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						
17 Siting Criteria (Regarding on-site closure methods only: 19.15 17 10 NMAC						
Instructions—Each siting criteria requires a demonstration of compliance in the closure plan—Recommendations of acceptable source material are provided below—Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval—Justifications and/or demonstrations of equivalency are required—Please refer to 19 15 17 10 NMAC for guidance						
Ground water is less than 50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search, USGS Data obtained fro	om nearby wells					
Ground water is between 50 and 100 feet below the bottom of the buried waste	Yes No					
- NM Office of the State Engineer - (WATERS database search, USGS, Data obtained from	m nearby wells N/A					
Ground water is more than 100 feet below the bottom of the buried waste	Yes No					
- NM Office of the State Engineer - (WATERS database search, USGS, Data obtained from	m nearby wells					
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant water (measured from the ordinary high-water mark)	ercourse or lakebed, sinkhole, or playa lake Yes No					
- Topographic map, Visual inspection (certification) of the proposed site						
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence - Visual inspection (certification) of the proposed site, Aerial photo, satellite image						
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five he purposes, or within 1000 horizontal fee of any other fresh water well or spring, in existence at the NM Office of the State Engineer - twATERS database, Visual inspection (certification) or	he time of the initial application					
Within incorporated municipal boundaries or within a defined municipal fresh water well field consumant to NMSA 1978, Section 3-27-3, as amended	covered under a municipal ordinance adopted Yes No					
- Written confirmation or verification from the municipality, Written approval obtained from						
Within 500 feet of a wetland - US Fish and Wildlife Wetland Identification map, Topographic map, Visual inspection (c						
Within the area overlying a subsurface mine - Written confirantion or verification or map from the NM EMNRD-Mining and Mineral D	Yes No					
Within an unstable area	Yes No					
- Engineering measures incorporated into the design, NM Bureau of Geology & Mineral Re Topographic map						
Within a 100-year floodplain - FEMA map	Yes No					
On-Site Closure Plan Checklist: (19 15 17 13 NMAC) Instructions: Each of the following items must bee attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.						
Siting Criteria Compliance Demonstrations - based upon the appropriate requir	ements of 19 15 17 10 NMAC					
Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19 15 17 13 NMAC						
Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19 15.17.11 NMAC						
Construction/Design Plan of Temporary Pit (for in place burial of a drying pad)	- based upon the appropriate requirements of 19 15 17 11 NMAC					
Protocols and Procedures - based upon the appropriate requirements of 19 15 17.13 NMAC						
Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17 13 NMAC						
Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19 15 17 13 NMAC						
Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)						
Soil Cover Design - based upon the appropriate requirements of Subsection H of 19 15 17 13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection 1 of 19 15 17 13 NMAC						
Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15 17.13 NMAC						

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19 Operator Application Certification:					
I hereby certify that the information submitted with this application is true, accurate and co	omplete to the best of my knowledge and belief				
Name (Print). Dolfte L. Busse T	itle: Staff Regulatory Technician				
Signature Milia Touse D	ate <u>5/21/12</u>				
e-mail address dollie busse@conocophillips.com Tel	ephone. 505-324-6104				
20 OCD Approval: Permit Application (including closure plan) Closs	re Plan (only) OCD Conditions (see attachment)				
OCD Representative Signature:	Approval Date: 5/22/2012				
	Approval Date:				
Title: Complance Office	OCD Permit Number:				
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:					
Closure Method:  Waste Excavation and Removal On-site Closure Method Alter If different from approved plan, please explain	rnative Closure Method Waste Removal (Closed-loop systems only)				
23					
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Un Instructions: Please identify the facility or facilities for where the liquids, drilling fluids					
were utilized.	Control Freedo, Donna March				
	ısposal Facılıty Permit Numberisposal Facılıty Permit Number				
Were the closed-loop system operations and associated activities performed on or in an	·				
Yes (If yes, please demonstrate compliance to the items below)					
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					
24 <u>Closure Report Attachment Checklist:</u> Instructions: Each of the following iten the box, that the documents are attached.	ns must be attached to the closure report. Please indicate, by a check mark in				
Proof of Closure Notice (surface owner and division)					
Proof of Deed Notice (required for on-site closure)					
Plot Plan (for on-site closures and temporary pits)					
Confirmation Sampling Analytical Results (if applicable)					
Waste Material Sampling Analytical Results (if applicable)					
Disposal Facility Name and Permit Number					
Soil Backfilling and Cover Installation  Re-vegetation Application Rates and Seeding Technique					
Site Reclamation (Photo Documentation)					
	gitude NAD 1927 1983				
25					
Operator Closure Certification:  I hereby certify that the information and attachments submitted with this closure report is ture, 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 To	elephone				

# Burlington Resources Oil & Gas Company, LP Closed-loop Plans

### Closed-loop Design Plan

BR's closed loop system will not entail a drying pad, temporary pit, below grade tank or sump. It will include an above ground tank suitable for holding the cuttings and fluids for rig operations. The tank will be sufficient volume to maintain a safe free board between disposal of the liquids and solids from rig operations.

- 1. Fencing is not required for an above ground closed-loop system
- 2. It will be signed in compliance with 19.15.3.103 NMAC
- 3. A frac tank will be on location to store fresh water

#### **Closed-loop Operating and Maintenance Plan**

BR's closed-loop tank will be operated and maintained to contain liquids and solids in order to prevent contamination of fresh water sources, in order to protect public health and the environment. To ensure the operation is maintained the following steps will be followed:

- 1. The liquids will be vacuumed out and disposed of at the Basin Disposal facility (Permit # NM-01-005) or JFJ Landfarm % Industrial Ecosystem Inc. (Permit # NM-01-0010B). Solids in the closed-loop tank will be vacuumed out and disposed of at Envirotech (Permit # NM-01-0011) or JFJ Landfarm % Industrial Ecosystem Inc. (Permit # NM-01-0010B) on a periodic basis to prevent over topping.
- 2. No hazardous waste, miscellaneous solid waste or debris will be discharged into or stored in the tank. Only fluids or cutting used or generated by rig operations will be placed or stored in the tank.
- 3. The division district office will be notified within 48 hours of the discovery of compromised integrity of the closed-loop tank. Upon the discovery of the compromised tank, repairs will be enacted immediately

#### Closed-loop Closure Plan

The closed-loop tank will be closed in accordance with 19.15.17.13. This will be done by transporting cuttings and all remaining sludges to Envirotech (Permit # NM-01-0011) or JFJ Landfarm % Industrial Ecosystem Inc. (Permit # NM-01-0010B) immediately following rig operations. All remaining liquids will be transported and disposed of in the Basin Disposal facility (Permit # NM-01-005) or JFJ Landfarm % Industrial Ecosystem Inc. (Permit # NM-01-0010B). The tanks will be removed from the location as part of the rig move. At time of well abandonment, the site will be reclaimed and re-vegetated to pre-existing conditions when possible.