District I

1625 N French Dr., Hobbs, NM 88240

District II

1301 W Grand Ave , Artesia, NM 88210

District III

1000 Rio Brazos Rd, Aztec, NM 87410

District IV

State of New Mexico **Energy Minerals and Natural Resources** 

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

July 21, 2008 For temporary pits, closed-loop sytems, and below-grade

Form C-144

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

#### 1220 S St Francis Dr , Santa Fe, NM 87505 Pit, Closed-Loop System, Below-Grade Tank, or 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 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: Burlington Resources Oil & Gas Company, LP OGRID#: 14538 Address: PO Box 4289, Farmington, NM 87499 Facility or well name: Murphy E 5 API Number: 30-045-26476 OCD Permit Number U/L or Qtr/Qtr: I(NE/SE) Section: Township: 30N Range: 11W County: San Juan **W** NAD: **X** 1927 1983 Center of Proposed Design: Latitude: 36.7658 ٥N Longitude: 107.99023 Private Tribal Trust or Indian Allotment Surface Owner: X Federal State Pit: Subsection F or G of 19.15 17 11 NMAC RCVD SEP 12'12 Temporary Drilling Workover OIL CONS. DIV. Permanent Emergency Cavitation P&A DIST. 3 Thickness mil LLDPE HDPE PVC Other Lined Unlined Liner type String-Reinforced Welded Factory Subsection H of 19 15 17 11 NMAC X Closed-loop System: X P&A Type of Operation Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) X Above Ground Steel Tanks Haul-off Bins Other Drying Pad Unlined Thickness LLDPE HDPE PVD Other Lined mıl Liner type Liner Seams Welded Factory Other Below-grade tank: Subsection I of 19.15 17 11 NMAC Volume bbl Type of fluid Tank Construction material Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off Visible sidewalls and liner Visible sidewalls only Other Liner Type HDPE PVC Other Thickness mil

Form C-144

Alternative Method:

Oil Conservation Division

Submittal of an exception request is required Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval

Page 1 of 5

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  9 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  (Fencing/BGT Liner)  Exception(s) Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval					
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.  (Applies to temporary, emergency, or cavitation pits and below-grade tanks)	Yes	No			
- Visual inspection (certification) of the proposed site, Aerial photo, Satellite image					
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  (Applied to permanent pits)	Yes NA	No			
<ul> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> <li>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.</li> </ul>	Yes	□No			
<ul> <li>NM Office of the State Engineer - iWATERS database search, Visual inspection (certification) of the proposed site</li> <li>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</li> <li>Written confirmation or verification from the municipality, Written approval obtained from the municipality</li> </ul>	Yes	□No			
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map, Topographic map; Visual inspection (certification) of the proposed site Within the area overlying a subsurface mine.	☐Yes ☐Yes	□No			
<ul> <li>Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division</li> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design, NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological</li> </ul>	Yes	No			
Society, Topographic map  Within a 100-year floodplain  - FEMA map	Yes	No			

Temporary Pits, Emergency Pits and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19 15.17 9 NMAC					
Instructions Lach 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  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					
12					
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.  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 19.15.17.12 NMAC					
Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19 15.17 11 NMAC					
Nuisance or Hazardous Odors, including H2S, Prevention Plan					
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 XP&A Permanent Pit Below-grade Tank X Closed-loop System					
Alternative					
Proposed Closure Method					
X 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)					
West Francisco and Borrows Clause Black Charlette (1915 1712) PM (C) Interesting Francisco Francisco (1916 1712)					
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					
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					

Form C-144 Oil Conservation Division Page 3 of 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	Down and English Romans #	NB4 01 0011 / NB4 01 00	MAD		
Disposal Facility Name Envirotech / JFJ Landfarm / IEI	Disposal Facility Permit #		OTOB_		
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 stung 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			Yes	No	
- NM Office of the State Engineer - iWATERS database search, USGS Data ob	stained from nearby wells		∐N/A		
Ground water is between 50 and 100 feet below the bottom of the buried wast	te		Yes	No	
- NM Office of the State Engineer - IWATERS database search, USGS, Data obt	tained from 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 - IWATERS database search, USGS, Data obt	tained from nearby wells	}	□N/A		
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significances (measured from the ordinary high-water mark)	icant watercourse or lakebed, su	nkhole, or playa lake	Yes	No	
- Topographic map, Visual inspection (certification) of the proposed site			Пv	□ v.	
Within 300 feet from a permanent residence, school, hospital, institution, or church in  - Visual inspection (certification) of the proposed site, Aerial photo, satellite imag		oplication	∐Yes	∐No	
Within 500 horizontal feet of a private, domestic fresh water well or spring that less the purposes, or within 1000 horizontal fee of any other fresh water well or spring, in exist.  - NM Office of the State Engineer - iWATERS database, Visual inspection (certified Within incorporated municipal boundaries or within a defined municipal fresh water within to NMSA 1978, Section 3-27-3, as amended	stence at the time of the initial ap fication) of the proposed site	plication	∐Yes	∐No	
Written confirmation or verification from the municipality, Written approval obt Within 500 feet of a wetland	tained from the municipality		Yes	No	
- US Fish and Wildlife Wetland Identification map, Topographic map, Visual ins	pection (certification) of the pro	posed site	_		
Within the area overlying a subsurface mine	Managal Durguan		∐Yes	No	
- Written confirantion or verification or map from the NM EMNRD-Mining and I Within an unstable area			Yes	□No	
<ul> <li>Engineering measures incorporated into the design, NM Bureau of Geology &amp; N Topographic map</li> </ul>	Ameral Resources, USGS, NM	Geological Society,			
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 requirements 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					
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 I of 19 15 17 13 NMAC					
Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19 15 17.13 NMAC					

19 Operator Application Contifications					
Operator Application Certification:  Thereby certify that the information submitted with this application is true, accurate and complete to the best.	of my knowledge and belief				
Name (Print) Dollie L Busse 7 Title.	Staff Regulatory Technician				
Signature Allier Curre Date. 9	1/12/12				
e-mail address dollie! busse@corlocophillips.com Telephone	505-324-6104				
20 OCD Approval: Permit Application (including source plan) Clasure Plan (only)	OCD Conditions (see attachment)				
	$\bigcap (\alpha) = \alpha$				
OCD Representative Signature:	Approval Date:				
Title: Compliance Stace 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 of					
report is required to be submitted to the division within 60 days of the completion of the closure activities P approved closure plan has been obtained and the closure activities have been completed	lease do not complete this section of the form until an				
	ompletion Date:				
Consumer					
22 Closure Method:					
Waste Excavation and Removal On-site Closure Method Alternative Closure Method	thod Waste Removal (Closed-loop systems only)				
If different from approved plan, please explain					
23 Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Groun	nd Steel Tanks or Haul-off Bins Only:				
Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings					
were utilized.	met Newsbor				
Disposal Facility Name Disposal Facility Per Disposal Facility Per					
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 compliane 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 Closure Report Attachment Checklist: Instructions: Each of the following items must be attache	ed to the clasure report. Please indicate, by a check mark in				
the box, that the documents are attached.	a to the closure report. I lease maleate, 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)					
On-site Closure Location LatitudeLongitude	NAD 1927 1983				
25					
Operator Closure Certification:	Committee to the keet of my boundaries and I to C. I. I. and C. C.				
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					
c-mail address Telephone					

# 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.