District I

1625 N French Dr , Hobbs. NM 88240

District II

1301 W Grand Ave , Artesia, NM 88210

District III

1000 Rio Biazos Rd, 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

July 21, 2008 For temporary pits, closed-loop sytems, and below-grade tanks, submit to the appropriate NMOCD District Office

Form C-144

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

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# Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Closure of a pit, closed-loop system  Modification to an existing permit  Closure plan only submitted for a below-grade tank, or proposed all   Instructions: Please submit one application (Form C-144) per individual  Please be advised that approval of this request does not relieve the operator of habit	the existing permitted or non-permitted pit, closed-loop system, sternative method and pit, closed-loop system, below-grade tank or alternative request this should operations result in pollution of surface water, ground water or the
environment Nor does approval relieve the operator of its responsibility to comply wi  Operator: Burlington Resources Oil & Gas Company, LP	
Address: PO Box 4289, Farmington, NM 87499	OGRID#: 14538
Facility or well name: Randlemon 100S	
	OCD Permit Number.
U/L or Qtr/Qtr: G(SW/NE) Section: 26 Township: 31N	Range: 11W County: San Juan
Center of Proposed Design: Latitude: 36.87273 °N	Longitude: <b>107.95677</b> °W NAD: 1927 X 1983
Surface Owner: Federal State X Private Tri	bal 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  String-Reinforced  Liner Seams. Welded Factory Other	LLDPE HDPE PVC Other  Volume. bbl Dimensions L x W x D
Subsection H of 19.15.17.11 NMAC   Type of Operation: P&A   Drilling a new well   Workover or notice of inter   Workover or notice   Workover or	Drilling (Applies to activities which require prior approval of a permit or nt)  Other  X LLDPE HDPE PVD Other  RECEIVED
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,  Visible sidewalls and liner Visible sidewalls only Oth  Liner Type: Thickness mil HDPE PVC	6-inch lift and automatic overflow shut-off

**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 helow-grade tanks)		
Chair link six fact in height two strongs of harbed with a trop (Pagerred of Located within 1000 fact of a narrogenet residence, wheel howested with	did on an chinab	
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, insti-  Four foot height, four strands of barbed wire evenly spaced between one and four feet	union or enurch)	
Alternate. Please specify		
7		
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)		
8	_	
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 cons	ideration of approval	
(Fencing/BGT Liner)	• •	
Exception(s). Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.		
10		
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 - 1WATERS 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	Yes No	
lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site		
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial	│ □Yes □No	
application.		
(Applies to temporary, emergency, or cavitation pits and below-grade tanks)	□NA	
- 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.	Yes No	
(Applied to permanent pits)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	□NA	
Within 500 horizonal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering	Yes No	
purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.		
- 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	Yes No	
adopted pursuant to NMSA 1978, Section 3-27-3, as amended  - Written confirmation or verification from the municipality; Written approval obtained from the municipality		
Within 500 feet of a wetland.	Yes No	
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site		
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.	Yes No	
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map		
Within a 100-year floodplain	Yes No	
- FEMA map		

Form C-144 Oil Conservation Division Page 2 of 5

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 NMAC				
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: 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				
Oıl 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				
14 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 P&A Permanent Pit Below-grade Tank X 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)				
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 Conscivation Division Page 3 of 5

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Instructions Please identify the facility or facilities for the disposal of liquids, drilling fluore required	Fanks or Haul-off Bins Only ads and drill cuttings. Use at	: (19 15.17.13 D NMAC) tachment if more than two fac	cilities	
Disposal Facility Name Envirotech	Disposal Facility Permit #.	NM-01-0011		
Disposal Facility Name Basin Disposal Facility I	Disposal Facility Permit #	NM-01-005		
Will any of the proposed closed-loop system operations and associated activities of Yes (If yes, please provide the information No	occur on or in areas that wil	ll not be used for future ser	rvice and oper	ations?
Required for impacted areas which will not be used for future service and operations:  Soil Backfill and Cover Design Specification - based upon the appropriate Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Plan - based upon the appropriate Plan -	on I of 19.15.17.13 NMAC			
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. Receptain siting criteria may require administrative approval from the appropriate district office or for consideration of approval Justifications and/or demonstrations of equivalency are required	may be considered an exception	which must be submitted to the S		-
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 obtain	ed from nearby wells		∐N/A	
Ground water is between 50 and 100 feet below the bottom of the buried waste			Yes	No
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained	ed 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 obtained	ed from nearby wells		∏N/A	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significan (measured from the ordinary high-water mark).	nt watercourse or lakebed, sink	khole, 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 ex - Visual inspection (certification) of the proposed site; Aerial photo; satellite image	stence at the time of initial ap	plication	Yes	No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than purposes, or within 1000 horizontal fee of any other fresh water well or spring, in existen - NM Office of the State Engineer - iWATERS database; Visual inspection (certificat	ce at the time of the initial app	_	Yes	No
Within incorporated municipal boundaries or within a defined municipal fresh water well pursuant to NMSA 1978, Section 3-27-3, as amended.		pal ordinance adopted	Yes	No
<ul> <li>Written confirmation or verification from the municipality; Written approval obtain</li> <li>Within 500 feet of a wetland</li> </ul>	led from the municipality		Yes	No
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspec	tion (certification) of the prop-	osed site		
Within the area overlying a subsurface mine.			Yes	∐No
<ul> <li>Written confirantion or verification or map from the NM EMNRD-Mining and Mit Within an unstable area.</li> </ul>	neral Division		Yes	
<ul> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mine Topographic map</li> </ul>	eral Resources; USGS; NM Ge	eological Society;		
Within a 100-year floodplain FEMA map			Yes	No
18 On-Site Closure Plan Checklist: (19.15.17 13 NMAC) Instructions: Each of	the following items must i	hee attached to the closure	nlan Please	indicate
by a check mark in the box, that the documents are attached.	,		•	,
Siting Criteria Compliance Demonstrations - based upon the appropriate requirements	<del>-</del>			
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				
			115 17 11 NIM	IAC
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			not be achieve	ed)
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 Subsecti				
Site Reclamation Plan - based upon the appropriate requirements of Subse	ection G of 10 15 17 12 NIM	IAC		

Form C-144

19	C. C.			
Operator Application  I hereby certify that the in	Certification:  formation submitted with this application is true, acc	urate and complete to the l	best of my knowledge and belief	
Name (Print)	Tamra Sessions	Title:	Staff Regulatory Technician	
Signature:	Jamosessia	Date:	5-6-09	-
e-mail address.	sessitd@conocophillips.com	Telephone.	505-326-9834	
	Permit Application (including closure plan)	Closure Plan (only)	OCD Conditions (see attachment)	
OCD Representative S		·	Approval Date: 5	20-09
Title:	Ensin/spec	OCD Perm	it Number:	
Instructions. Operators a report is required to be si	ired within 60 days of closure completion): Sub re required to obtain an approved closure plan prior ibmitted to the division within 60 days of the completi s been obtained and the closure activities have been o	to implementing any closu on of the closure activities completed.	re activities and submitting the closure repo	
22				
Closure Method:  Waste Excavation	a and Removal On-site Closure Method approved plan, please explain.	Alternative Closure	Method Waste Removal (Closed-loc	op systems only)
Instructions: Please iden were utilized.  Disposal Facility Nam Disposal Facility Nam Were the closed-loop of Yes (If yes, please Required for impacted Site Reclamation Soil Backfilling a		Disposal Facility Disposal Facility Disposal Facility on or in areas that will no	ngs were disposed. Use attachment if more Permit Number: Permit Number:	
the box, that the docu Proof of Closure Proof of Deed N Plot Plan (for on Confirmation Sa Waste Material Disposal Facility Soil Backfilling Re-vegetation A	e Notice (surface owner and division) fotice (required for on-site closure) r-site closures and temporary pits) sumpling Analytical Results (if applicable) Sampling Analytical Results (if applicable) y Name and Permit Number and Cover Installation pplication Rates and Seeding Technique in (Photo Documentation)	Longitude:	ched to the closure report. Please indicate	, by a check mark in  . 1983
25	<del></del>			
	tification: Iformation and attachments submitted with this closur all applicable closure requirements and conditions s			nd belief I also certify that
Name (Print)		Title:		
Signature		Date		
e-mail address		Telephone:		

## Burlington Resources Oil & Gas Company, LP

### **Closed Loop Design:**

The closed loop design will not incorporate a temporary pit or below grade tank. The plan will utilize an above grade tank suitable for holding the cuttings and fluids generated during drilling operations. The volume of the tank shall be of a sufficient volume to maintain an adequate free board for periodic removal and disposal of cuttings and fluids.

Burlington Resources Oil & Gas Company, LP may incorporate the use of a 20 mil, string reinforced, LLDPE liner with factory welded seams to line the drying pad in order to minimize the volume of fluids to be disposed of. The drying pad will be designed to prevent contamination of fresh water, protect public health and the environment, and have sumps to facilitate the collection of liquids derived from drilling cuttings, as specified per subsection H of 19.15.17.11. The cuttings pad will be constructed above grade and containment will be through the use of earthen berms of sufficient height to contain the cuttings and prevent run-off of surface water or fluids. The drying pad area will replace the area of the drill site previously designated for the reserve pit. It will be signed in compliance with 19.15.3.103.NMAC. Frac tanks will be utilized on site for fresh water storage.

### **Closed Loop Operations and Maintenance:**

The closed loop system will be operated and maintained for solids and liquid containment to prevent ground water contamination as follows:

- Any free liquids will be recovered and reused or disposed of at the Basin Disposal Facility (Permit # NM-01-005). Reuse may include the relocating of liquids to be used in other permitted drilling operations.
- 2. Drill solids will be recovered from location and hauled to a Envirotech (Permit #NM-01-0011) periodically as required to maintain a safe free board in the cuttings tank. No onsite trench burial of cuttings will occur.
- 3. In the event a drying pad is utilized, the cuttings will be picked up and transported to Basin Disposal Facility (Permit #NM-01-005). The liner will be disposed of at the San Juan County Landfill located on CR 3100. The drying pad will be closed within 6 months from the date that the drilling rig is released. Berms constructed from native materials will be bladed on site to the location's contour.
- 4. Any drilling materials or trash will be stored and disposed of appropriately.
- 5. The NMOCD will be notified within 48 hours of the discovery of compromised integrity of the closed loop containment. Any required repairs will commence immediately.

#### **Closed Loop Closure Plan:**

- Upon completion of the drilling operations, all solids and liquids will be removed and disposed of to Envirotech (Permit #NM-01-0011) and Basin Disposal Facility (Permit # NM-01-005). Equipment shall also be removed from location. In the event a drying pad is utilized, the solids contained on the pad shall remain on site to allow sufficient drying and will then be transported to Envirotech (Permit # NM-01-0011) within 6 months from the date that the drilling rig is released.
- 2. After the drying pad is removed the surface below will be visually inspected for any contamination. If contamination is discovered a five point composite sample will be taken of the drying pad area using sampling tools and all samples tested per Subsection B of 19.15.17.13(B)(1)(b). In the event that the criteria are not met, all contents will be handled per Subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13 i.e., Dig and haul.

Components	Tests Method	Limit (mg/Kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	2500
GRO/DRO	EPA SW-846 8015M	500
Chlorides	EPA 300.1	500

- 3. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be place in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.
- 4. Notification will be sent to OCD when the reclaimed area is seeded.
- 5. BR shall seed the disturbed areas the first growing season after the operator closes the drying pad. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service stipulated seed mixes will used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.

Туре	Variety or Cultivator	PLS/A
Western wheatgrass	Arriba	3.0
Indian ricegrass	Paloma or Rimrock	3.0
Slender wheatgrass	San Luis	2.0
Crested wheatgrass	Hy-crest	3.0
Bottlebrush Squirreltail	Unknown	2.0
Four-wing Saltbrush	Delar	.25

Species shall be planted in pounds of pure live seed per acre: Present Pure Live Seed (PLS) = Purity X Germination/100 Two lots of seed can be compared on the basis of PLS as follows:

Source No. One (poor quality)

Purity

Source No. two (better quality)

Source No. two (better quality)

Purity

Source No. two (better quality)

Source No. two (better quality)

5 lb. bulk seed required to make 2 lb. bulk seed required to make

1 lb. PLS 1 lb. PLS