Distr<u>J</u>

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

1220 S. St. Francis Dr. Santa Fo. NM. 875

State of New Mexico Energy Minerals and Natural Resources

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

 $\label{eq:July 21, 2008} \mbox{ July 21, 2008}$ For temporary pits, closed-loop sytems, and below-grade

Form C-144

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.

1220 S. St. Francis Dr., Santa Fe, NM 87505		appropriate NMOCD Distr	et Office.
AU U 1	Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application		
Instructions: Please submit one appl Please be advised that approval of the	Closure of a pit, closed-loop syste Modification to an existing permit Closure plan only submitted for an below-grade tank, or proposed alto ication (Form C-144) per individuals s request does not relieve the operator of hability	n existing permitted or non-permitted pit ernative method al pit, closed-loop system, below-grade to ty should operations result in pollution of surface water	ank or alternative request
Operator: Burlington Resources Oil & PO Box 4289, Farmington, I	Gas Company, LP	o any other applicable governmental authority's rules, OGRID#: 14538	egulations or ordinances
Facility or well name: Calloway 1M			
API Number: 3	0-045- 34818 0	CD Permit Number:	
U/L or Qtr/Qtr: J(NWSE) Section: Center of Proposed Design: Latitude: Surface Owner: Federal		Range: 11W County: San Longitude: 107.97807' W al Trust or Indian Allotment	Juan NAD: ☐ 1927 X 1983
Pit: Subsection F or G of 19.15.17.11 Temporary: Drilling Workov Permanent Emergency Cavi Lined Unlined Liner String-Reinforced Liner Seams: Welded Factor	tation P&A type: Thickness mil	LLDPE HDPE PVC Ou Volume: bbl Dimensions L	
	notice of intent Steel Tanks Haul-off Bins pe: Thickness 20 mil	Orilling (Applies to activities which require protect) Other MLLDPE HDPE PVD Other	
Below-grade tank: Subsection I of Volume:bbl Tank Construction material: Secondary containment with leak detec Visible sidewalls and liner Liner Type: Thickness	Type of fluid:	6-inch lift and automatic overflow shut-off ir Other	
Submittal of an exception request is requir	ed. Exceptions must be submitted to th	ne 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			
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)			
Holiday inspections (if neuting of 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			
<u> </u>			
9 Administrative Approvals and Eventions			
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:			
Theuse theek a box y one or more of the johowing is requested, y not teare outlik.			
Administrative approval(s): Requests must be submitted to the appropriate division district of the Santa Fe Environmental Bureau office for cons	uderation of an	proval	
	raciation of ap	provar	
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.	l		
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.	Yes	□No	
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells		_	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa	□ _{Ves}	\square_{N_0}	
lake (measured from the ordinary high-water mark).	🗀 😘	□'''	
- Topographic map; Visual inspection (certification) of the proposed site	1		
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)	$ \bigsqcup^{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	🗀		
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	
purposes, or within 1999 northern teet of any other reason weer well of spring, in existence at the time of initial appreciation.			
- 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		□No	
adopted pursuant to NMSA 1978, Section 3-27-3, as amended	∐Yes		
- 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.	Yes	□No	
- Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division		_	
Within an unstable area.	Yes	No	
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological	-	<u> </u>	
Society; Topographic map	1		
Within a 100-year floodplain	Yes	No	
- FEMA map		_	

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 Penort (Relow grade Tanks) - based upon the requirements of Paragraph (A) of Subsection B of 19.15.17.9 NMAC			
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: 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			
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			
Situng 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			
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			
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)			
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			

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16 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 f			culties	
are required.		,		
	Disposal Facility Permit #			
	Disposal Facility Permit #			
Will any of the proposed closed-loop system operations and associated activities Yes (If yes, please provide the information No	occur on or in areas that wi	ll not be used for future se	rvice and operations?	
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 Recertain siting criteria may require administrative approval from the appropriate district office of for consideration of approval Justifications and/or demonstrations of equivalency are required.	ecommendations of acceptable soi r may be considered an exception	which must be submitted to the		
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 obtain	ned from nearby wells		Yes No	
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 obtain	ned 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 - (WATERS database search; USGS; Data obtain	ned from nearby wells		N/A	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other signification (measured from the ordinary high-water mark).	ant watercourse or lakebed, sin	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 e - Visual inspection (certification) of the proposed site, Aerial photo, satellite image	xistence at the time of initial ap	pplication.	Yes No	
Within 500 horizontal 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 fee of any other fresh water well or spring, in existence at the time of the initial application - NM Office of the State Engineer - iWATERS database; 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				
Within 500 feet of a wetland - US Fish and Wildlife Wetland Identification map; Topographic map, Visual inspe		posed site	Yes No	
Within the area overlying a subsurface mine.			Yes No	
- Written confiramtion or verification or map from the NM EMNRD-Mining and M	ineral Division			
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mil Topographic map	neral Resources; USGS, NM G	eological Society,	∐Yes ∐No	
Within a 100-year floodplain FEMA map			Yes No	
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of by a check mark in the box, that the documents are attached.	of the following items must	bee attached to the closure	e plan. Please indicate,	
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			
, ,	nformation submitted with this application is true, acc		
Name (Print)	Crystal Tafoya	Title	Regulatory Technician
Signature [.]	Constal Taleya	Date:	10/21/2008
e-mail address:	crystal.tafoya@conocophillips.com	Telephone:	505-326-9837
20	(n	larnı	
OCD Approval: X	Permit Application (including closure plan)	Closure Plan (only)	OCD Conditions (see attachment)
OCD Representative			Approval Date: 11-3-08
	wiro/sper		
Title:	wiro 15per	OCD Pern	nit Number:
21 Cl D	. 1		
	tired within 60 days of closure completion): Sul		re activities and submitting the closure report. The closure
			s Please do not complete this section of the form until an
approved closure plan h	as been obtained and the closure activities have been	completed.	
		Closure	e Completion Date:
Closure Method:			
Waste Excavatio	n and Removal On-site Closure Method	Alternative Closure	Method Waste Removal (Closed-loop systems only)
		Anternative Crosure	Waste Kemovai (Closed-100p systems omy)
I different from	approved plan, please explain.		
23			
	ing Waste Removal Closure For Closed-loop System		
Instructions: Please idei were utilized.	nlify the facility or facilities for where the liquids, dri	illing fluids and drill cutti	ngs were disposed. Use attachment if more than two facilities
Disposal Facility Nan	ne	Disposal Facility	Permit Number:
Disposal Facility Nan			Permit Number
	system operations and associated activities performed	•	
l — '	se demonstrate complilane to the items below)	No	
Required for impacte	d areas which will not be used for future service and c	onerations:	
-	n (Photo Documentation)	oporaniona.	
Soil Backfilling	and Cover Installation		
Re-vegetation Ap	oplication Rates and Seeding Technique		
24			
	tachment Checklist: Instructions: Each of the fol	llowing items must be atto	sched to the closure report. Please indicate, by a check mark in
the box, that the doci		g	, , , , , , , , , , , , , , , , , , , ,
Proof of Closur	e Notice (surface owner and division)		
Proof of Deed !	Notice (required for on-site closure)		
Plot Plan (for or	n-site closures and temporary pits)		
Confirmation S	ampling Analytical Results (if applicable)		
Waste Material	Sampling Analytical Results (if applicable)		
Disposal Facilit	y Name and Permit Number		
Soil Backfilling	and Cover Installation		
= '	Application Rates and Seeding Technique		
= -	on (Photo Documentation)		
On-site Closure		Longitude.	NAD 1927 1983
25			
Operator Closure Ce	rtification:		
	· · · · · · · · · · · · · · · · · · ·	re report is ture, accurate	and complete to the best of my knowledge and beltef I also certify that
	h all applicable closure requirements and conditions s	-	
Name (Print):		Title	
rame (Fint):		Title.	
Signature:		Date:	1
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.
- 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:

- 1. 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)

5 lb. bulk seed required to make 2 lb. bulk seed required to make 1 lb. PLS 1 lb. PLS