District I 1625 N French Dr., Hobbs, NM 88240

State of New Mexico Energy Minerals and Natural Resources Form C-144 July 21, 2008

District II

Department

For temporary pits, closed-loop sytems, and below-grade

1301 W Grand Ave , Artesia, NM 88210 District III 1000 Rio Brazos Rd , Aztec, NM 87410 District IV 1220 S. St. Francis Dr , Santa Fe, NM 87505	Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505	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
_ 1 - 1 - 1 - 1	Closed-Loop System, Below-Gra Alternative Method Permit or Clo	
Cle Cle Cle bel Instructions: Please submit one application Please be advised that approval of this requirements.	est does not relieve the operator of liability should operations	tank, or proposed alternative method tted or non-permitted pit, closed-loop system, op system, below-grade tank or alternative request result in pollution of surface water, ground water or the
Operator: Burlington Resources Oil & Gas		OGRID#: 14538
Address: PO Box 4298, Farmington, NM 8 Facility or well name: San Juan 28-6 Unit 2		
API Number: 30-039-3		per:
U/L or Qtr/Qtr: K(NE/SW) Section: Center of Proposed Design: Latitude:	11 Township: 27N Range: 36.586709°N Longitude: State X Private Tribal Trust or Indi	6W County: Rio Arriba 107.438938°W NAD: 1927 X 1983 an Allotment
Pit: Subsection F or G of 19.15.17.11 NM. Temporary Drilling Workover Permanent Emergency Cavitation Lined Unlined Liner type. String-Reinforced Liner Seams. Welded Factory	n □P&A	HDPE PVC Other
	notice of intent)	
4 Below-grade tank: Subsection I of 19.15 Volume. bbl Tank Construction material:	5.17.11 NMAC Type of fluid:	OIL CONS. DIV. DIST.
Secondary containment with leak detection Visible sidewalls and liner V Liner Type: Thickness mil	Visible sidewalls, liner, 6-inch lift and au isible sidewalls only Other HDPE PVC Other	tomatic overflow shut-off
5 Alternative Method: Submuttal of an exception request is required. Ex	xceptions must be submitted to the Santa Fe Enviro	nmental Bureau office for consideration of approval

6'			
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 bailed wife at top (Required if located within 1000 feet of a permanent reside	ence, school, hospital, instit	ution or chur	ch)
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)			
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 Environmen (Fencing/BGT Liner)	tai Bureau office for consid	ieration of ap	provai.
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.			
10 Siting Critoria (regarding normitting), 10.15.17.10 NIMAC			
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendate	ions of accentable		
source material are provided below. Requests regarding changes to certain siting criteria may require administrative appr			
appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bur	** -		
consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance does not apply to drying pads or above grade-tanks associated with a closed-loop system.	e. Siting criteria		
aves not apply to all fing place of above grade tames 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 to	ank.	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, sink	thole, 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 tim	e 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 a	pplication.	Yes	No
(Applied to permanent pits)		NA	
- 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 domest	tic 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 applic	eation.		
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the propo	acad site		
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a munici adopted pursuant to NMSA 1978, Section 3-27-3, as amended	ipal ordinance	Yes	∐No
- Written confirmation or verification from the municipality; Written approval obtained from the municipalit	y		
Within 500 feet of a wetland.		Yes	∏No
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the	e 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		
Society; Topographic map		□ v	
Within a 100-year floodplain - FEMA map		Yes	∐No

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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: 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 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 P&A 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		
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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16 Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Stee				
Instructions: Please identify the facility or facilities for the disposal of liquids, drilling are required.	fluids and drill cuttings Use a	ttachment if more than two fa	cilities	
Disposal Facility Name: Envirotech	Disposal Facility Permit #	NM-01-0011		
Disposal Facility Name: Basın Disposal Facility	Disposal Facility Permit #	NM-01-005		
Will any of the proposed closed-loop system operations and associated activitie Yes (If yes, please provide the information No	s 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 Re-vegetation Plan - based upon the appropriate requirements of Subsection Street Reclamation Plan - based upon the appropriate requirements of Subsection Plan - based upon the appropriate Plan - based upon the	tion I of 19 15 17 13 NMAC			
Siting Criteria (Regarding on-site closure methods only: 19 15.17.10 NMAC Instructions Each string criteria requires a demonstration of compliance in the closure plan. It certain siting criteria may require administrative approval from the appropriate district office of for consideration of approval Justifications and/or demonstrations of equivalency are required.	Recommendations of acceptable so or may be considered an exception	which must be submitted to the S		fue
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 obta	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 obta			□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 obta.	ned from nearby wells		∏ _{N/A}	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other signific (measured from the ordinary high-water mark).	cant 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 a Visual inspection (certification) of the proposed site; Aerial photo; satellite image		pplication.	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 (certific	ence at the time of the initial ap cation) of the proposed site	plication		
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 insp		oosed site	Yes No	
Within the area overlying a subsurface mine.			Yes No	
- Written confirantion or verification or map from the NM EMNRD-Mining and M	Ameral Division			
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & M Topographic map	ineral Resources; USGS; NM G	eological Society,	YesNo	
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	e 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				
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 Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC				

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Operator Application Certification:		
I hereby cértify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief		
Name (Print): Ethel Tallly Title: Staff Regulatory Technician		
Signature: The Tally Date 1-7-09		
e-mail address <u>ethel.tally@conocophillips.com</u> Telephone: 505-599-4027		
20 OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)	İ	
OCD Representative Signature: Syrand 78-01 Approval Date: 1-15-09	9	
Title: Envirolspee OCD Permit Number:		
21		
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:		
22		
Closure Method:		
Waste Excavation and Removal On-site Closure Method Alternative Closure Method 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 Ground Steel Tanks or Haul-off Bins Only:		
Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilit were utilized.	ies	
Disposal Facility Name: Disposal Facility Permit Number.		
Disposal Facility Name. Disposal Facility Permit Number:		
Were the closed-loop system operations and associated activities performed on or 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		
Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check may the box, that the documents are attached.	k 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 Latitude Longitude NAD 1927 1983	,	
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 Telephone:		

Form C-144 Oil Conservation Division

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)

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

1 lb. PLS 1 lb. PLS