District I 1625 N. French Dr., Hobbs, NM 88240	State of New Mexico Energy Minerals and Natural Resources	Form C-144 July 21, 2009 For temporary pits, closed-loop sytems, and below-grade
<u>District II</u> 1301 W. Grand Ave., Artesia, NM 88210 <u>District III</u>	Department Oil Conservation Division 1220 South St. Francis Dr.	tanks, submit to the appropriate NMOCD District Office.
1000 Rio Brazos Rd., Aztec, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505	Santa Fe, NM 87505	For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.
	Pit, Closed-Loop System, Below-Grad	e Tank. or
	sed Alternative Method Permit or Clos	
	X Permit of a pit, closed-loop system, below-grade to	
Type of action.	Closure of a pit, closed-loop system, below-grade	
•	Modification to an existing permit	
	Closure plan only submitted for an existing permit system, below-grade tank, or proposed alternative	
Please be advised that approval of t	e application (Form C-144) per individual pit, closed his request does not relieve the operator of liability should operations re e the operator of its responsibility to comply with any other applicable	esult in pollution of surface water, ground water or the
1 Operator: Burlington Resources Oil	& Gas Company, LP	OGRID#: <u>14538</u>
Address: PO Box 4289, Farmingtor	n, NM 87499	
Facility or well name: Grenier 13		
	-045-10483 OCD Permit Numbe	
U/L or Qtr/Qtr: <u>K(NE/SW)</u> Section Center of Proposed Design: Latitude:		1W County: San Juan 108.01679 °W NAD: X] ### 1983
Surface Owner: Federal	State Private Tribal Trust or Indian	
Lined Unlined Lin String-Reinforced Liner Seams: Welded Fac	over avitation P&A	DIL CONS. DIV. HDPE PVC Other DIST. 3
Type of Operation: X P&A Image: Drying Pad X Above Groun Image: Lined Image: Unlined Liner	d Steel Tanks Haul-off Bins Other	activities which require prior approval of a permit or
4 Below-grade tank: Subsection 1 Volume: bb Tank Construction material:	of 19.15.17.11 NMAC	omatic overflow shut-off
5 Alternative Method: Submittal of an exception request is req	uired. Exceptions must be submitted to the Santa Fe Envir	onmental Bureau office for consideration of approval.
Form C-144	Oil Conservation Division	Page 1 of 5

 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 barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, ins Four foot height, four strands of barbed wire evenly spaced between one and four feet 	titution or chu	urch)
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 (Fencing/BGT Liner)	sideration of a	pproval.
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 - iWATERS database search; USGS; Data obtained from nearby wells	Yes	No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	Yes	No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	Yes	No
(Applies to temporary, emergency, or cavitation pits and below-grade tanks) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	□ NA	
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	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
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.	l	
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	Yes	No
 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 inspection (certification) of the proposed site 	Yes	No
 Within the area overlying a subsurface mine. Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division 	Yes	No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological	Yes	No
Society; Topographic map Within a 100-year floodplain - FEMA map	TYes	No

11 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 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 19.15.17.12 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
13 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 (1) 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 Quality Control/Quality Assurance Construction and Installation Plan Operating and Maintenance 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 19.15.17.13 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 X 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)
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 G of 19.15.17.13 NMAC

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16 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 the facilities are required.	iids and drill cuttings. U	se attachment if more than two		
Disposal Facility Name: Envirotech / JFJ Landfarm / IEI Disp	oosal Facility Permit #:	<u>NM-01-0011 / NM-01-001</u>	<u>0B</u>	
Disposal Facility Name: Basin Disposal Facility Disp	osal Facility Permit #:	NM-01-005	<u> </u>	
Will any of the proposed closed-loop system operations and associated activities of Ves (If yes, please provide the information No	ccur on or in areas that	will not be used for future s	ervice and	
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	•		.C	
Site Reclamation Plan - based upon the appropriate requirements of Subsection				
17 <u>Siting Criteria (Regarding on-site closure methods only:</u> 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recon certain siting criteria may require administrative approval from the appropriate district office or may for consideration of approval. Justifications and/or demonstrations of equivalency are required. Pla	y be considered an exception	which must be submitted to the Se		
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 obtained	ed from nearby wells		🗍 N/A	_
Ground water is between 50 and 100 feet below the bottom of the buried waste			Yes	ΠNo
 NM Office of the State Engineer - iWATERS database search; USGS; Data obtaine 	d from nearby wells			
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtaine	d from pearby wells		Yes	No
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 Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significan lake (measured from the ordinary high-water mark). Topographic map; Visual inspection (certification) of the proposed site 	t watercourse or lakebed,	sinkhole, or playa	Yes	No
Within 300 feet from a permanent residence, school, hospital, institution, or church in exist - Visual inspection (certification) of the proposed site; Aerial photo; satellite image	stence at the time of initia	al application.	Yes	No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than a watering purposes, or within 1000 horizontal fee of any other fresh water well or spring, i application.	n existence at the time of		Yes	No
- NM Office of the State Engineer - iWATERS database; Visual inspection (certificati Within incorporated municipal boundaries or within a defined municipal fresh water well		nicipal ordinance	Yes	No
 adopted pursuant to NMSA 1978, Section 3-27-3, as amended. Written confirmation or verification from the municipality; Written approval obtain 	ed from the municipality			
Within 500 feet of a wetland			Yes	No
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspect	tion (certification) of the	proposed site		<u> </u>
Within the area overlying a subsurface mine.			Yes	No
 Written confiramtion or verification or map from the NM EMNRD-Mining and Min Within an unstable area. 	ieral Division		Yes	
- Engineering measures incorporated into the design; NM Bureau of Geology & Mine	ral Resources; USGS; NN	A Geological		No
Society; Topographic map	, .	-		_
Within a 100-ycar floodplain. - FEMA map			Yes	No
		· · · · · · · · · · · · · · · · · · ·		
18 On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of a	the following items mu	ist bee attached to the closu	re plan. Pl	ease
indicate, by a check mark in the box, that the documents are attached.				
Siting Criteria Compliance Demonstrations - based upon the appropriate re-	quirements of 19.15.17	.10 NMAC		
Proof of Surface Owner Notice - based upon the appropriate requirements	of Subsection F of 19.1	5.17.13 NMAC		

Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 N
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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

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Name (Print):	nformation submitted with this application is true, accurate and complete to the best of my knowledge and belief. Dollie L. Busse Title: Staff Regulatory Technician
Signature:	Dallie Louisie Date: 5/4/13
-mail address:	
CD Approval: X	Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)
CD Representative	Signature: Control. Kelly, Approval Date: 5/13/2013
tle: Com	ane Office Och Permit Number:
ne. 10mg	
osure Report (requ	tired within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure
	where the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an
proved closure plan ha	as been obtained and the closure activities have been completed.
	Closure Completion Date:
losure Method:	
Waste Excavation	n and Removal On-site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only)
If different from a	approved plan, please explain.
	ling Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:
	ntify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two
<i>ilities were utilized.</i> Disposal Facility Nan	ne: Disposal Facility Permit Number:
Disposal Facility Nan	
	system operations and associated activities performed on or in areas that will not be used for future service and operations?
	e demonstrate complilane to the items below)
	d areas which will not be used for future service and operations:
	(Photo Documentation)
	and Cover Installation
Re-vegetation Ap	pplication Rates and Seeding Technique
	tachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark
	ocuments are attached.
	e Notice (surface owner and division)
	Notice (required for on-site closure) n-site closures and temporary pits)
	ampling Analytical Results (if applicable)
	Sampling Analytical Results (if applicable) y Name and Permit Number
=	and Cover Installation
	and Cover Installation Application Rates and Seeding Technique
	······································
Re-vegetation A	n (Photo Documentation)
Re-vegetation A	n (Photo Documentation)
Re-vegetation A	
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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:

- 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.