State of New Mexico Energy Minerals and Natural Resources

Form C-144 July 21, 2008

Department Oil Conservation Division 1220 South St. Francis Dr. For temporary pits, closed-loop sytems, and below-grade tanks, submit to the appropriate NMOCD District Office.

District II 1301 W. Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

1000 Rio Brazos Rd., Aztec, NM 87410	Santa Fe, NM 87505	For permanent pits and exceptions submit to the Santa Fe
<u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505		Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.
$\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc$ Pit, Cl	losed-Loop System, Below-Grad	e Tank, or
Proposed Al	Iternative Method Permit or Clos	sure Plan Application
Type of action: X Perm	nit of a pit, closed-loop system, below-grade t	ank, or proposed alternative method
Clos	ure of a pit, closed-loop system, below-grade	tank, or proposed alternative method
Mod	ification to an existing permit	
	ure plan only submitted for an existing permi w-grade tank, or proposed alternative method	tted or non-permitted pit, closed-loop system,
Instructions: Please submit one application	n (Form C-144) per individual pit, closed-loc	op system, below-grade tank or alternative request
Please be advised that approval of this request	t does not relieve the operator of liability should operations r	result in pollution of surface water, ground water or the
environment. Nor does approval relieve the opera	ator of its responsibility to comply with any other applicable	governmental authority's rules, regulations or ordinances.
Operator: Burlington Resources Oil & Gas of	Company, LP	OGRID#: 14538
Address: PO Box 4289, Farmington, NM 8	37499	
Facility or well name: Grenier A 5		
API Number: 300-045-20	471 OCD Permit Numbe	er;
U/L or Qtr/Qtr: F(SENW) Section: 35	5 Township: 30N Range: 1	10W County: San Juan
Center of Proposed Design: Latitude:	36.7713300' N Longitude:	107.8575100' W NAD: X 1927 1983
Surface Owner: X Federal S	tate Private Tribal Trust or India	
2	The state of the s	
Pit: Subsection F or G of 19.15.17.11 NMA	С	
Temporary: Drilling Workover		White Committee
Permanent Emergency Cavitation	□P&A	
Lined Unlined Liner type:	Thickness mil LLDPE	HDPE PVC Other
String-Reinforced		
Liner Seams: Welded Factory	Other Volume:	bbl Dimensions Lx Wx D
3		
X Closed-loop System: Subsection H of 19		
Type of Operation: P&A Drilling	a new well Workover or Drilling (Applies to notice of intent)	activities which require prior approval of a permit or
Drying Pad X Above Ground Steel T.		A121314
Lined Unlined Liner type:		HDPE PVD Other 61011 A
	Other	HDPE PVD Other 0 10112137475
		- TECHNEL
Below-grade tank: Subsection I of 19.15.	17.11 NMAC	8 2009
	ype of fluid:	OIL CONS. DIV. DIST. 3
Tank Construction material:		OIL COROL
Secondary containment with leak detection	Visible sidewalls, liner, 6-inch lift and auto	omatic overflow shut-off
	ible sidewalls only Other	2821282
Liner Type: Thickness mil	HDPE PVC Other	
		· · · · · · · · · · · · · · · · · · ·
Alternative Method:		The second se
Submittal of an assentian manual is magniful. Fig.	continue must be submitted to the Santa Fe Enviro	anmental Purcous 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 of barbed wire evenly spaced between one and four feet Alternate. Please specify	tion or church	
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		
Administrative Approvals and Exceptions: Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance. Please check a box if one or more of the following is requested, if not leave blank: Administrative approval(s): Requests must be submitted to the appropriate division district of the Santa Fe Environmental Bureau office for consideration of approval.	leration of app	roval.
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.		COLD TO COLD T
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 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 Yes	□No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to temporary, emergency, or cavitation pits and below-grade tanks) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applied to permanent pits)	Yes NA Yes NA	No
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. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.	Yes,	No
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 inspection (certification) of the proposed site.	Yes Yes	□ No
Within the area overlying a subsurface mine. Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division Within an unstable area. Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	Yes	No.
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 1915.17.9				
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				
Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC				
Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC				
Quality Control/Quality Assurance Construction and Installation Plan				
Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC				
Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC				
Nuisance or Hazardous Odors, including H2S, Prevention Plan				
Emergency Response Plan				
Oil Field Waste Stream Characterization				
Monitoring and Inspection Plan				
Erosion Control Plan,				
Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC				
Proposed Closure: 49.15.17.13 NMAC				
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.				
Type: Drilling X 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)				
PROPERTY OF THE PROPERTY OF TH				
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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**Waste Removal Closure For Closed-loop Systems That Utilize Above Ground St. Instructions: Please identify the facility or facilities for the disposal of liquids, drilling.	teel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC) are fluids and drill cuttings. Use attachment if more than two		
facilities are required.			
Disposal Facility Name: Envirotech	Disposal Facility Permit #: NM-01-0011	- ter into east a	
Disposal Facility Name: Basin Disposal Facility	Disposal Facility Permit #: NM-01-005		* * * * * * * * * * * * * * * * * * * *
Will any of the proposed closed-loop system operations and associated active Yes (If yes, please provide the information No	vities occur on or in areas that will nbe used for future	e service and	, ,,,
Required for impacted areas which will not be used for future service and operation:	s:		- , <u>- </u>
Soil Backfill and Cover Design Specification - based upon the appro	- ·	MAC .	
Re-vegetation Plan - based upon the appropriate requirements of Subs			-4 1
Site Reclamation Plan - based upon the appropriate requirements of Si	ubsection G of 19 15.17.13 NMAC	**: .	
` 17.		-	* 7 * 7 * 7
Siting Criteria (Regarding on-site closure methods only: 19.15.17.10 NMA		,	, , , ,
Instructions. Each siting criteria requires a demonstration of compliance in the closure plan. I certain siting criteria may require administrative approval from the appropriate district office of office for consideration of approval. Justifications and/or demonstrations of equivalency are re-	or may be considered an exception which must be submitted to the S		
			<u> </u>
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 of	htained from nearby wells		LINO .
- NW Office of the State Eligineer - TWATERS database scarcii, 0505. Data of	blamed from fleatoy wens		
Ground water is between 50 and 100 feet below the bottom of the buried w	aste	Yes	∐No
- NM Office of the State Engineer - iWATERS database search; USGS; Data of	stained from nearby wells	N/A	11 11 11
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 of	otained from nearby wells	∏Ñ/A	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other sign (measured from the ordinary high-water mark).	ificant watercourse or lakebed, sinkhole, 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 i	in existence at the time of initial application	Yes	□No
- Visual inspection (certification) of the proposed site; Aerial photo; satellite ima	age		
Book as here is a first and a second	en a comment a martin de la commentación de la commentación de la commentación de la commentación de la commen La commentación de la commentación	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 ex			
NM Office of the State Engineer - iWATERS database; Visual inspection (cert	and the second s		
Within incorporated municipal boundaries or within a defined municipal fresh water v	well field covered under a municipal ordinance adopted	Yes	□ No
pursuant to NMSA 1978, Section 3-27-3, as amended. Written confirmation or verification from the municipality; Written approval of	Shtained from the municipality		
Within 500 feet of a wetland	totalined from the municipality	Ves	No
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual in	nspection (certification) of the proposed site		
Within the area overlying a subsurface mine.	· · · · · · · · · · · · · · · · · · ·	Yes	□No
-Written confiramtion or verification or map from the NM EMNRD-Mining and	d Mineral Division	海區於	·· 下水湖流流。
Within an unstable area.	The state of the s	Yes_	No
Engineering measures incorporated into the design; NM Bureau of Geology & Topographic map	Mineral Resources; USGS; NM Geological Society;		
Within a 100-year floodplain.		Yes	∏No
- FEMA map	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	小型	
18.	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	or was not that deep to the design	
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Ea by a check mark in the box, that the documents are attached.	ch of the following items must bee attached to the cl	osure plan. Pl	ease indicate,
Siting Criteria Compliance Demonstrations - based upon the approp	oriate requirements of 19.15.17.10 NMAC		
Proof of Surface Owner Notice - based upon the appropriate require	ements of Subsection F of 19.15.17.13 NMAC		
Construction/Design Plan of Burial Trench (if applicable) based upo	on the appropriate requirements of 19.15.17.11 NMA	Carrie	
Construction/Design Plan of Temporary Pit (for in place burial of a	그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그	E (actification)	II NMAC
Protocols and Procedures - based upon the appropriate requirements			
Confirmation Sampling Plan (if applicable) - based upon the approp	oriate requirements of Subsection F of 19.15.17.13 N	MAC	1965 - 1965 - 1965 - 1965 - 1965 - 1965 - 1965 - 1965 - 1965 - 1965 - 1965 - 1965 - 1965 - 1965 - 1965 - 1965 -
Waste Material Sampling Plan - based upon the appropriate requires	ments of Subsection F of 19 15 17 13 NMAC		
Disposal Facility Name and Permit Number (for liquids, drilling flu	ids and drill cuttings or in case on-site closure standa	rds cannot be a	chieved)
Soil Cover Design - based upon the appropriate requirements of Sul	osection H of 19.15.17.13 NMAC	門前孫	
Re-vegetation Plan - based upon the appropriate requirements of Su	bsection I of 19.15.17.13 NMAC	本的問題	
Site Reclamation Plan - based upon the appropriate requirements of	Subsection G of 19 15 17 13 NMAC		、学者的人工等相級關鍵。

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Operator Application Certification:			(大) (20m) \$20m (20m) (20m)
I hereby certify that the information submitted with this application is true, accurate	and complete to the be	។ ស្នែក្រិក្សាស្ថិត្	
Name (Print): Rhonda Rogers	Title:	Regulatory Technician	
Signature: And Cooks	Date:	1/8/2009	
e-mail address: rogerrs@conoeophillips.com	Telephone:	505-599-4018	
			1
OCD Approval: Permit Application (including closure plan)	Closure Plan (only)	OCD Conditions (see attachment)	
	<u>/</u>		
OCD Representative Signature:		Approval Date: 2~2~C	
OCD Representative Signature: Specific Environ Specific File: Environ Specific File File File File File File File File	OCD Pern	nit Number:	
21			
Closure Report (required within 60 days of closure completion): Subsection			
Instructions: Operators are required to obtain an approved closure plan prior to im report is required to be submitted to the division within 60 days of the completion of		- · · ·	, ,
approved closure plan has been obtained and the closure activities have been complete.			
	Closur	e 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.			
232.7		الله الله الله الله الله الله الله الله	
Closure Report Regarding Waste Removal Closure For Closed-loop Systems T	hat Utilize Above Gr	ound Steel Tanks or Haul-off Bins Only:	
Instructions: Please identify the facility or facilities for where the liquids, drilling			cilities
were utilized.	Discount English	A training the region of the r	
Disposal Facility Name:	•	y Permit Number:	
Disposal Facility Name: Were the closed-loop system operations and associated activities performed on o	•	y Permit Number:	
Yes (If yes, please demonstrate compliane to the items below)		be used for future service and open tions?	
Required for impacted areas which will not be used for future service and opera			
Site Reclamation (Photo Documentation)	10/15.	The state of the s	
Soil Backfilling and Cover Installation			
Re-vegetation Application Rates and Seeding Technique			
424/24 427 27 27 27 27 27 27 27 27 27 27 27 27 2			
Closure Report Attachment Checklist: Instructions: Each of the following	ing items must be atta	iched to the closure report. Please indicate, by a checl	k mark in
the box, that the documents are attached.			
Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure)		मा पर्ने के ने जीनायुक्त हैं है है अपने किसी है सिर्वारिक	A Company of the Comp
Plot Plan (for on-site closures and temporary pits)	* * *	an or the state that is a little of the little bearing	The state of the s
Confirmation Sampling Analytical Results (if applicable)		The Alexander of the Control of the	
Waste Material Sampling Analytical Results (if applicable)	***		
Disposal Facility Name and Permit Number	•	The state of the s	
Soil Backfilling and Cover Installation			
Re-vegetation Application Rates and Seeding Technique			
Site Reclamation (Photo Documentation)		్ సిలిమ్ మార్క్ మార్ మార్క్ మార్క్ మార్క మార్క్ మార్క్ మార్క	
On-site Closure Location: Latitude:	Longitude:	NAD 1927	983
A STATE OF THE STA			。 「ハ・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・
1		्राच्या प्राप्तिक स्थाप विश्व क्षित्र के स्थाप क स्थाप के स्थाप के स्	The Description
Operator Closure Certification:		The state of the s	yr asblue
I hereby certify that the information and attachments submitted with this closure rep		thought we are then you will be a property of the property of	also certify that
the closure complies with all applicable closure requirements and conditions specif	ied in the approved cl	losure plan.	
Name (Print):	Title:	文字中的 1997年	
Salar and Marian	Date	A second	
Signature	Date:		
e-mail address:	Telephone:		

Burlington Resources Oil & Gas Company, LP Closed-loop Plans

Closed-loop Design Plan

BR's closed loop system will not entail a drying pad, temporary pit, below grade tank or sump. It will include an above ground tank suitable for holding the cuttings and fluids for rig operations. The tank will be sufficient volume to maintain a safe free board between disposal of the liquids and solids from rig operations.

- 1. Fencing is not required for an above ground closed-loop system
- 2. It will be signed in compliance with 19.15.3.103 NMAC
- 3. A frac tank will be on location to store fresh water

Closed-loop Operating and Maintenance Plan

BR's closed-loop tank will be operated and maintained to contain liquids and solids in order to prevent contamination of fresh water sources, in order to protect public health and the environment. To ensure the operation is maintained the following steps will be followed:

- 1. The liquids will be vacuumed out and disposed of at the Basin Disposal facility (Permit # NM-01-005). Solids in the closed-loop tank will be vacuumed out and disposed of at Envirotech (Permit # NM-01-0011) 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
- 4. All of the above operations will be inspected and a log will be signed and dated. During rig operations the inspection will be daily.

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) immediately following rig operations. All remaining liquids will be transported and disposed of in the Basin Disposal facility (Permit # NM-01-005). 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.