District I 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 Fe, NM 87505	State of New Mexico Energy Minerals and Natural Resource Department Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505	Form C-144 July 21, 2008 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.
	Pit, Closed-Loop System, Below-Gra	ade Tank, or
	sed Alternative Method Permit or Cl	
Type of action:	X Permit of a pit, closed-loop system, below-grade	e tank, or proposed alternative method
10	Closure of a pit, closed-loop system, below-grad	de tank, or proposed alternative method
	Modification to an existing permit	
	Closure plan only submitted for an existing per below-grade tank, or proposed alternative metho	
Instructions: Please submit one app	plication (Form C-144) per individual pit, closed-	loop system, below-grade tank or alternative request
	his request does not relieve the operator of liability should operatio	
environment. Nor does approval reliev	e the operator of its responsibility to comply with any other applica	ble governmental authority's rules, regulations or ordinances.
Operator: Burlington Resources Oil	& Gas Company, LP	OGRID#: <u>14538</u>
Address: PO Box 4289, Farmington	, NM 87499	
Facility or well name: Howell L 4R		
API Number: 30-	045-27576 OCD Permit Num	nber:
U/L or Qtr/Qtr: G(SW/NE) Section	a: 34 Township: 30N Range:	8W County: San Juan
Center of Proposed Design: Latitude:	<b>36.77156 °N</b> Longitude:	107.65954 °W NAD: X 1927 1983
Surface Owner: X Federal	State Private Tribal Trust or Inc	lian Allotment
Lined Unlined Lin		RCVD FEB 14'13         OIL CONS. DIV.         DIST. 3         HDPE PVC Other
Type of Operation:     X     P&A       Drying Pad     X     Above Ground       Lined     Unlined     Liner	notice of intent)	to activities which require prior approval of a permit or
Below-grade tank: Subsection I of Volume:	Type of fluid:	ulomatic overflow shul-off
Submittal of an exception request is requ	red. Exceptions must be submitted to the Santa Fc Envir	onmental 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)					
	titution on abo	nah)			
Chain link, six feet in height, two strands of barbed wire at top <i>(Required if located within 1000 feet of a permanent residence, school, hospital, ins</i> Four foot height, four strands of barbed wire evenly spaced between one and four feet	numon or chui	iciy			
Afternate. 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 consideration of approval. (Fencing/BGT Liner)					
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.					
10	<u> </u>				
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 confidentian of acceptable invited in the interview of the submitted to the Santa Fe Environmental Bureau Office for appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau Office for confidentian of acceptable interview of the 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.		<b>—</b>			
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)	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) <ul> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>					
Within 500 horizonal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering	Yes	No			
purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.					
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.					
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended - Written confirmation or verification from the municipality; Written approval obtained from the municipality	Yes	No			
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Ycs	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	Yes	No			

11 Turney Bits Francisco Bits and Balance de Tarla Darmit Amplication Attachment Checkling, Subsection R of 10.15.17.0 NMAC				
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				
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.         Image: Cologic 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				
<ul> <li>Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9</li> <li>NMAC and 19.15.17.13 NMAC</li> </ul>				
Previously Approved Design (attach copy of design) API				
Previously Approved Operating and Maintenance Plan API				
<sup>13</sup> <u>Permanent Pits Permit Application Checklist:</u> 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				
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 XP&A Permanent Pit Below-grade Tank X Closed-loop System				
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 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 <u>Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:</u> (19.15.17.13.D NMAC) Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.	
Disposal Facility Name: Envirotech / JFJ Landfarm / IEI Disposal Facility Permit #: NM-01-0011 / NM-01-00	010B
Disposal Facility Name: Basin Disposal Facility Disposal Facility Permit #: NM-01-005	
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that <i>will not</i> be used for future Yes (If yes, please provide the information No	service 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 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	AC
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. Recommendations of acceptable source material are provided certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	
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 obtained 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 obtained from nearby wells	N/A
Ground water is more than 100 feet below the bottom of the buried waste.	Yes No
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	N/A
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).	Yes No
- Topographic map; Visual inspection (certification) of the proposed site	
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; satellite image	Yes No
	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.	Ycs 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	
Within the area overlying a subsurface mine. - Written confirantion or verification or map from the NM EMNRD-Mining and Mineral Division	Yes No
Within an unstable area.	Yes No
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	
Within a 100-year floodplain.	Yes No
- FEMA map	
<sup>18</sup> On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must bee attached to the close by a check mark in the box, that the documents are attached.	ure 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 Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC	19.15.17.11 NMAC

Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  $\square$  $\Box$ 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 II of 19.15.17.13 NMAC

 $\Box$ 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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<b>Operator Application Certification:</b>	
I hereby certify that the information submitted with this application is true	ue, accurate and complete to the best of my knowledge and belief.
Name (Print): Dollie L. Busse	Title: Staff Regulatory Technician
Signature: Allie Y.Su	ALL Date: 2/13/13
c-mail address: dollie.l.busse@conocophillips.com	
20	
OCD Approval: Permit Application (including closure plan	n) Clasure Plan (only) OCD Conditions (see attachment)
OCD Representative Signature:	), Kluby Approval Date: 2/19/2013
	Di Verte Approvar Dance - 41 for a C
Title: (OMPlance) CHETCE	OCD Permit Number:
21	
Closure Report (required within 60 days of closure completio	on): Subsection K of 19.15.17.13 NMAC
Instructions: Operators are required to obtain an approved closure plan	in 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 co approved closure plan has been obtained and the closure activities have	completion of the closure activities. Please do not complete this section of the form until an we been completed
αρμέντα σύναιτο μίαι πω ύσοη υσιάπου απά πο σύναι ο άστιντης πανά	
	Closure Completion Date:
22	
Closure Method:	
Waste Excavation and Removal On-site Closure Me	ethod Alternative Closure Method Waste Removal (Closed-loop systems only)
If different from approved plan, please explain.	
23	
	<u>p Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:</u>
	ids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities
were utilized.	
Disposal Facility Name:	Disposal Facility Permit Number:
Disposal Facility Name:	Disposal Facility Permit Number:
	formed on or in areas that <i>will not</i> be used for future service and opeartions?
Yes (If yes, please demonstrate compliane to the items below)	No
Required for impacted areas which will not be used for future service	ze and operations;
Site Reclamation (Photo Documentation)	
Soil Backfilling and Cover Installation	
Re-vegetation Application Rates and Seeding Technique	
24	
<u>Closure Report Attachment Checklist:</u> Instructions: Each of the box, that the documents are attached.	f the following items must be attached to the closure report. Please indicate, by a check mark in
Proof of Closure Notice (surface owner and division)	
<ul> <li>Proof of Deed Notice (required for on-site closure)</li> <li>Plot Plan (for on-site closures and temporary pits)</li> </ul>	
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 Secding Technique	
Site Reclamation (Photo Documentation)	Longitude: NAD 1927 1983
Site Reclamation (Photo Documentation) On-site Closure Location: Latitude:	
On-site Closure Location: Latitude:	
On-site Closure Location: Latitude:	
On-site Closure Location: Latitude:25 <u>Operator Closure Certification:</u> I hereby certify that the information and attachments submitted with this the closure complies with all applicable closure requirements and cond	ditions specified in the approved closure plan.
On-site Closure Location: Latitude:25 <u>Operator Closure Certification:</u> I hereby certify that the information and attachments submitted with this the closure complies with all applicable closure requirements and cond	ditions specified in the approved closure plan.
On-site Closure Location: Latitude: 25 Operator Closure Certification: 1 hereby certify that the information and attachments submitted with this the closure complies with all applicable closure requirements and condi- News (Deixt)	Title:

## 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.