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

## State of New Mexico Energy Minerals and Natural Resources

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

1220 S. St. Francis Dr, Santa Fe, NM 87505	The second secon
Pit, Closed-Loop System, Below-Gr	
Proposed Alternative Method Permit or C	Closure Plan Application
Type of action: Permit of a pit, closed-loop system, below-gra	de tank, or proposed alternative method
Closure of a pit, closed-loop system, below-gr	rade tank, or proposed alternative method
X Modification to an existing permit	
Closure plan only submitted for an existing pe below-grade tank, or proposed alternative met	ermitted or non-permitted pit, closed-loop system,
Instructions: Please submit one application (Form C-144) per individual pit, closed-	
Please be advised that approval of this request does not relieve the operator of hability should operation	
environment. Nor does approval relieve the operator of its responsibility to comply with any other applica-	able governmental authority's rules, regulations or ordinances
Operator: Burlington Resources Oil & Gas Company, LP	OGRID#: 14538
Address: PO Box 4289, Farmington, NM 87499	
Facility or well name: SAN JUAN 30-6 UNIT 43M	
API Number: 30-039-30776 OCD Permit Nu	ımber:
U/L or Qtr/Qtr:F(SE/NW) Section:14 Township:30N Range:	6W County: Rio Arriba
Center of Proposed Design: Latitude: 36.81611 °N Longitude:	<b>107.43432</b> °W NAD: 1927 X 1983
Surface Owner: X Federal State Private Tribal Trust or Ir	ndian Allotment
notice of intent)  Drying Pad Above Ground Steel Tanks Haul-off Bins Other  Lined Unlined Liner type: Thickness mil LLDPE Liner Seams: Welded Factory Other	HDPE PVC Other  bbl Dimensions L x W x D  es to activities which require prior approval of a permit or  HDPE PVD Other  AFR 2011  AFR 2011  automatic overflow shut-off
Below-grade tank: Subsection I of 19.15.17.11 NMAC	APR ZULE
Volume:bbl Type of fluid:  Tank Construction material:	ON CONS. DIV. DIST 3
Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and	automatic overflow shut-off
Visible sidewalls and liner Visible sidewalls only Other	SEL ST 1101 P.
Liner Type. Thicknessmil HDPE PVC Other	
5 Altownotive Methods	
Alternative Method:	
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environment of the San	vironmental 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)		i
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, institu	ution or church	1
Four foot height, four strands of barbed wire evenly spaced between one and four feet	mon or church	, I
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		
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:		
X Administrative approval(s): Requests must be submitted to the appropriate division district of the Santa Fe Environmental Bureau office for consideration pit for Pre-set)	leration of appr	roval.
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)	□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.  (Applied to permanent pits)	Yes	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.	Yes	No
- 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	Yes	No
- Written confirmation or verification from the municipality; Written approval obtained from the municipality Within 500 feet of a wetland.	Yes	□No
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site		ш <sup>мо</sup>
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 Society; Topographic map	Yes	No
Within a 100-year floodplain - FEMA map	Yes	No

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.  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		
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		
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 (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 X 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)		
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		
· 1		

16  Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Ste	al Tanks or Haul off Rins Only/19 15 17 12 D NMAC)	
Instructions Please identify the facility or facilities for the disposal of liquids, drilling facilities are required		
	Disposal Facility Permit #: NM-01-0011 / NM-01-0	010B
	Disposal Facility Permit #: NM-01-005	<u> </u>
Will any of the proposed closed-loop system operations and associated activity 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 Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Plan - based upon the appropriate requirements.	tion I of 19 15 17 13 NMAC	MAC
Siting Criteria (Regarding on-site closure methods only: 19 15.17 10 NMAC Instructions Each siting criteria requires a demonstration of compliance in the closure plan Receptum siting criteria may require administrative approval from the appropriate district office or	commendations of acceptable source material are provided below	
office for consideration of approval Justifications and/or demonstrations of equivalency are requ		ma 1 e Divisonmeniai Dureau
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	ained from nearby wells	Yes No
Ground water is between 50 and 100 feet below the bottom of the buried was	te	□Yes □No
- NM Office of the State Engineer - 1WATERS database search, USGS, Data obta	ined 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 obta	nned 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).	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	· · · · · · · · · · · · · · · · · · ·	∐Yes ∐No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less that 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 (certification)	tence at the time of the initial application.	∐Yes ∐No
Within incorporated municipal boundaries or within a defined municipal fresh water we pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality, Written approval obt	·	Yes No
Within 500 feet of a wetland  - US Fish and Wildlife Wetland Identification map; Topographic map, Visual insp	. ,	Yes No
Within the area overlying a subsurface mine.		Yes No
- Written confiramtion 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 & M Topographic map	meral Resources, USGS; NM Geological Society,	YesNo
Within a 100-year floodplain. - FEMA map		Yes No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each by a check mark in the box, that the documents are attached.	of the following items must bee attached to the clos	sure plan. Please indicate,
Siting Criteria Compliance Demonstrations - based upon the appropria	ate requirements of 19.15.17.10 NMAC	
Proof of Surface Owner Notice - based upon the appropriate requirement		
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  Fig. Discontinuous Proceedings of the August Procedure of the Aug		
X 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		

Form C-144 Oil Conservation Division

19 Operator Application Certification:
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.
Name (Print): Title: Regulatory Technician
Signature: () 000 (WIN Date: 4/19/11
e-mail address: Jamie L Goodwin@conocophillips.com Telephone: 505-326-9784
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)  OCD Representative Signature: Approval Date: 7/29/2011  Title: 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
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
22
23 <u>Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:</u> Instructions: Please identify the facility or facilities for where the liquids, 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  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)  No
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
24  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check 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)
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
25
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:

# Burlington Resources Oil & Gas Company, LP Cavitation Pit for Closed-Loop Locations

#### Design:

Burlington Resources Oil & Gas Company, LP will use a cavitation pit plan when the surface casing will be pre-set on closed-loop locations. The drill cuttings will be stockpiled on the surface.

### **Operations and Maintenance:**

The cavitation pit will be operated and maintained as follows:

- 1. Only Fresh water and air will be used in the drilling of the surface casing.
- 2. The Cement used will be: Neat Cement with no additives.
- 3. All of the fluids will be removed within 48hrs after drilling.
- 4. A representative five point composite sample will be taken of the drill cuttings, after the setting of the surface casing is complete, using sampling tools and all samples will be tested per Subsection B of 19.15.17.13(B)(1)(b). In the event that the testing criteria is not met, all contents will be dug and hauled per Subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13 i.e.

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

5. The NMOCD will be notified via email of the test results of the cavitation surface as follows:

Components	Tests Method	Limit (mg/Kg)	Results
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	

#### Closure Plan:

- 1. The NMOCD will be notified of the sample results and the intent to start the closure process 3-7 days prior to the drill cuttings being transported, moved, or distributed on location.
- 2. In the event the criteria are not met, all solids and liquids will be removed and disposed of at Envirotech (Permit #NM-01-0011) and/or Basin Disposal Facility (Permit #NM-01-005) and/or JFJ Landfarm % Industrial Ecosystem Inc. (Permit # NM-01-0010B).
- 3. Testing results will be submitted with the Closure Report of the well locations Closed-Loop Permit on Form C-144.

Burlington Resources is aware that approval of this plan does not relieve Burlington Resources of liability should operations result in pollution of surface water, ground water, or the environment. Nor does approval relieve ConocoPhillips of its responsibility to comply with any other applicable governmental authority's rules and regulations.