District I

1625 N Franch Dr , Robbs, NM 88240

1301 W Grand Ave , Artesia, NM 88210

District III

1000 Rio Brazos Rd, Aztec, NM 87410

⊆<u>District IV</u> 1220 S St Francis Dr , Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

> Department Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

July 21, 2008 For temporary pits, closed-loop sytems, and below-grade

Form C-144

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

Proposed Alternative Method Permit or Closure Plan Application				
Type of action:  Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method  Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method  Modification to an existing permit  X Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method  Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request  Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances				
Operator: Burlington Resources Oil & Gas Company, LP  Address: PO Box 4289, Farmington, NM 87499				
Facility or well name: HEATON COM 100S				
API Number: 30-045-34691 OCD Permit Number:				
U/L or Qtr/Qtr: D(NW/NW) Section: 32 Township: 31N Range: 11W County: San Juan				
Center of Proposed Design: Latitude: 36.860762 °N Longitude: 108.018731 °W NAD: 1927 X 1983  Surface Owner: Federal State X Private Tribal Trust or Indian Allotment				
Temporary: X Drilling Workover  Permanent Emergency Cavitation P&A  X Lined Unlined Liner type Thickness 20 mil X LLDPE HDPE PVC Other  X String-Reinforced  Liner Seams: X Welded X Factory Other Volume 4400 bbl Dimensions L 65' x W 45' x D 10'				
Closed-loop System: Subsection H of 19 15 17 11 NMAC   Type of Operation.   P&A   Drilling a new well   Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)   Drying Pad   Above Ground Steel Tanks   Haul-off Bins   Other				
Below-grade tank: Subsection I of 19 15 17 11 NMAC  Volume bbl Type of fluid  Tank Construction material:  Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  Visible sidewalls and liner Visible sidewalls only Other  Liner Type: Thickness mil HDPE PVC Other				
5  Alternative Method:  Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau 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, ins  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate Please specify  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	titution or chu	rch)
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.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	aderation of ap	) proval
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 - 1WATERS 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)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	Yes NA	∐No 
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
<ul> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	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	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				
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. X Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System  Alternative				
Proposed Closure Method X Waste Excavation and Removal				
Waste Removal (Closed-loop systems only)				
On-site Closure Method (only for temporary pits and closed-loop systems)				
In-place Burial On-site Trench				
Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)				
15				
Waste Excavation and Removal Closure Plan Checklist: (19.15 17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan.				
Please indicate, by a check mark in the box, that the documents are attached.    Value   Proceedings   Procedings   Procedings   Procedings   Proceedings   Proceedings   Proceedings   Procedings   Proceedings   Proceedings   Proceedings   Proceedings   Procedings   Proceding				
X   Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC   X   Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC				
X   Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)				
X Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC				
X   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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Form C-144 Oil Conservation Division

Operator Application Certification:					
I hereby certify that the information submitted with this application is the faccurate and complete to the best of my knowledge and belief.					
Name (Print) Marie, H. Jagamillo J. Title. Staff Regulatory, Technician					
Signature Date 7/11/0					
e-mail address matile e. jaramillo@conocophillips com Telephone. 505-326-9865					
20					
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)					
OCD Representative Signature: 3/2/10					
Title: Enviro/Spec OCD Permit Number:					
21  Closure Report (required within 60 days of closure completion): Subsection K of 19 15 17 13 NMAC					
Instructions Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure					
report is required to be submitted to the division within 60 days of the completion of the closure activities Please do not complete this section of the form until an					
approved closure plan has been obtained and the closure activities have been completed					
Closure Completion Date:					
22					
Closure Method:					
Waste Excavation and Removal On-site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only)					
If different from approved plan, please explain					
23					
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:					
Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities					
were utilized.					
Disposal Facility Name: Disposal Facility Permit Number.					
Disposal Facility Name.  Disposal Facility Permit Number					
Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations?					
Yes (If yes, please demonstrate compliane to the items below)					
Required for impacted areas which will not be used for future service and operations  Site Reclamation (Photo Documentation)					
Soil Backfilling and Cover Installation					
Re-vegetation Application Rates and Seeding Technique					
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					
ine ciosure compiles with all applicable ciosure requirements and conditions specified in the approved closure plan					
Name (Print) Title					
Signature. Date					
e-mail address: Telephone:					

## Burlington Resources Oil & Gas Company, LP San Juan Basin Dig & Haul Closure Plan

In accordance with Rule 19.15.17.12 NMAC the following information describes the closure requirements of temporary pits on Burlington Resources Oil & Gas Company, LP (BR) locations. This is BR's standard procedure for temporary pits, which BR intends to excavate pit contents and dispose of off-site. A separate plan will be submitted for any temporary pit which does not conform to this plan.

All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of pit closure. Closure report will be filed on C-144 and incorporate the following:

- Details on Capping and Covering, where applicable.
- Plot Plan (Pit Diagram)
- Inspection Reports
- Sampling Results
- C-105
- Copy of Deed Notice will be filed with County Clerk

## **General Plan:**

- 1. All free standing liquids will be removed at the start of the pit closure process from the pit and disposed of in a division—approved facility or recycle, reuse or reclaim the liquids in a manner that the appropriate division district office approves. The facilities to be used will be Basin Disposal (Permit #NM-01-005) and Envirotech Land Farm (Permit #NM-01-011).
- 2. The surface owner shall be notified of BR's closing of the temporary pit prior to closure as per the approved closure plan via certified mail, return receipt requested.
- 3. Within 6 months of the Rig Off status occurring BR will ensure that temporary pits are closed, re-contoured, and reseeded.
- 4. Notice of Closure will be given prior to closure to the Aztec Division office between 72 hours and one week via email, or verbally. The notification of closure will include the following:
  - i. Operator's name
  - Location by Unit Letter, Section, Township, and Range. Well name and API number.
- 5. All contents of the temporary pit including the liner will be excavated and hauled to the Envirotech Land Farm located 16 miles south of Bloomfield on Angel Peak Road, CR 7175. Permit # NM010011
- 6. A five point composite sample will be taken from the soil under the pit using sampling tools and all samples tested per Subsection B of 19.15.17.13(B)(1)(b).

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	1000/500

- 7. Upon testing standards being passed, the pit area will be backfilled with compacted, nonwaste containing, earthen material. The cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater
- 8. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Reshaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be place in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.
- 9. Notification will be sent to OCD when the reclaimed area is seeded.

10. BR shall seed the disturbed areas the first growing season after the operator removes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM stipulated seed mixes will used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.

Туре	Variety or Cultivator	PLS/A
Western wheatgrass	Arriba	3.0
Indian ricegrass	Paloma or Rimrock	3.0
Slender wheatgrass	San Luis	2.0
Crested wheatgrass	Hy-crest	3.0
Bottlebrush Squirreltail	Unknown	2.0
Four-wing Saltbrush	Delar	.25

Species shall be planted in pounds of pure live seed per acre: Present Pure Live Seed (PLS) = Purity X Germination/100 Two lots of seed can be compared on the basis of PLS as follows:

Source No. One (poor quality)
Purity
50 percent
Germination
Percent PLS
20 percent

Source No. two (better quality)
Purity
80 percent
Germination
63 percent
Percent PLS
50 percent

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

1 lb. PLS 1 lb. PLS

11. The temporary pit will be located with a steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial upon the abandonment of all the wells on the pad. The marker will be flush with the ground to allow access of the active well pad and for safety concerns. The marker will include a threaded collar to be used for future abandonment. The top of the marker will contain a welded steel 12" square plate that indicates the onsite burial of the temporary pit. The plate will be easily removable and a four foot tall riser will be threaded into the top of the collar marker and welded around the base with the operator's information at the time of all wells on the pad are abandoned. The operator's information will include the following: Operator Name, Lease Name, Well Name and number, Unit Number, Section, Township, Range and an indicator that the marker is an onsite burial location.