<u>District I</u> 1625 N French Dr., Hobbs, NM 88240

State of New Mexico Energy Minerals and Natùral Resources Form C-144 July 21, 2008

<u>District II</u> 1301 W Grand Ave , Artesia, NM 88210

District III

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

For temporary pits, closed-loop sytems, and below-grade tanks, submit to the appropriate NMOCD District Office

1000 Rio Brazos Rd , Aztec, NM 87410 District IV	Santa Fe, NM 87505	For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the
1220 S St Francis Dr , Santa Fe, NM 87505		appropriate NMOCD District Office
	Closed-Loop System, Below-Gra	<u> </u>
Proposed A	Alternative Method Permit or Clo	osure Plan Application
Type of action: X Pe	rmit of a pit, closed-loop system, below-grade	tank, or proposed alternative method
7489 🗀 ci	osure of a pit, closed-loop system, below-grad	le tank, or proposed alternative method
8 (□ □ Mo	odification to an existing permit	
Clo	osure plan only submitted for an existing pern	nitted or non-permitted pit, closed-loop system,
	low-grade tank, or proposed alternative metho	
Instructions: Please submit one application	on (Form C-144) per individual pit, closed-le	oop system, below-grade tank or alternative request
	test does not relieve the operator of liability should operation	
environment (Noi does approvar reneve the op	erator of its responsibility to comply with any other applicate	the governmental authority's fures, regulations of ordinances
Operator: Burlington Resources Oil & Ga	s Company, LP	OGRID#: <u>14538</u>
Address: PO Box 4289, Farmington, NM	87499	
Facility or well name: CANYON LARGO	UNIT 16	
API Number: 30-039-6	0052 OCD Permit Num	iber
J/L or Qtr/Qtr: A(NE/NE) Section:	30 Township: 25N Range:	7W County: Rio Arriba
Center of Proposed Design: Latitude:	36.3763 °N Longitude:	107.60968 °W NAD: X 1927 1983
Surface Owner: X Federal	State Private Tribal Trust or Ind	
Permanent Emergency Cavitation Lined Unlined Liner type String-Reinforced Liner Seams Welded Factory		HDPE PVC Other bbl Dimensions L x W x D
	notice of intent) Tanks Haul-off Bins Other	to activities which require prior approval of a permit or HDPE PVD Other RECEIVED
Below-grade tank: Subsection I of 19 1: Volumebbl Tank Construction material	5.17 11 NMAC Type of fluid	6 JUN 2018
Secondary containment with leak detection Visible sidewalls and liner Liner Type Thickness mi	Visible sidewalls, liner, 6-inch lift and au Visible sidewalls only Other HDPE PVC Other	oll CONS DIV. DIST. 3
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, institution or church) 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 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 cons (Fencing/BGT Liner) Exception(s) Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval	ideration of ap	proval	
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau Office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above grade-tanks associated with a closed-loop system.			
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search, USGS, Data obtained from nearby wells	Yes	No	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	Yes	□No	
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	Yes	No	
(Applies to temporary, emergency, or cavitation pits and below-grade tanks) - Visual inspection (certification) of the proposed site; Aerial photo, Satellite image	∐NA		
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (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 - 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	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 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 [] Hydrogood six Boy and (Dalay goods Tarks), be adversed to an application of Days with 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				
No. Design Plan - based upon the appropriate requirements of 19 15 17.11 NMAC				
X Operating and Maintenance Plan - based upon the appropriate requirements of 19.15 17 12 NMAC				
X Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15 17 9				
NMAC and 19 15.17 13 NMAC				
Previously Approved Design (attach copy of design) API				
Previously Approved Operating and Maintenance Plan API				
13				
Permanent Pits Permit Application Checklist: Subsection B of 19 15.17.9 NMAC				
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.				
Hydrogeologic Report - based upon the requirements of Paragraph (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 X P&A Permanent Pit Below-grade Tank X Closed-loop System				
Alternative				
Proposed Closure Method Waste Excavation and Removal				
X Waste Removal (Closed-loop systems only)				
On-site Closure Method (only for temporary pits and closed-loop systems)				
In-place Burial On-site Trench				
Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)				
15				
Waste Excavation and Removal Closure Plan Checklist: (19 15 17 13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Plance indicate by a check wask in the box, that the documents are attached.				
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				
Ste 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 System:</u> Instructions Please identify the facility or facilities	s That Utilize Above Ground St	eel Tanks or Haul-off Bins On	<u>lv:</u> (19 15 17 13 D NMAC)		
facilities are required	jor me disposat of riquias, arms	ig francis und urm carrings Osc	and on the state of the state o		
Disposal Facility Name Envirotech / JFJ L	andfarm % IEI	Disposal Facility Permit #	NM-01-0011 / NM-01-00	010B	
Disposal Facility Name Basin Disposal Fa	cility .	Disposal Facility Permit #	NM-01-005		
Will any of the proposed closed-loop system op Yes (If yes, please provide the information	on No		vill not be used for future	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 G of 19 15 17 13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19 15 17 13 NMAC					
17				_	
Siting Criteria (Regarding on-site closure m Instructions Each stung criteria requires a demonstratic certain siting criteria may require administrative appro- office for consideration of approval Justifications and	oon of compliance in the closure pla val from the appropriate district off	n Recommendations of acceptable ace or may be considered an excep	tion which must be submitted to		
Ground water is less than 50 feet below the bot		11.6		Yes	No
- NM Office of the State Engineer - IWATERS	database search, USGS Data of	otained from nearby wells		∐N/A	
Ground water is between 50 and 100 feet below				Yes	∐No
- NM Office of the State Engineer - 1WATERS	database search, USGS, Data ob	tained from nearby wells		∐N/A	
Ground water is more than 100 feet below the b	oottom of the buried waste			Yes	No
- NM Office of the State Engineer - 1WATERS	database search, USGS, Data ob	tained from nearby wells		□N/A	
Within 300 feet of a continuously flowing watercour (measured from the ordinary high-water mark)	se, or 200 feet of any other signif	icant watercourse or lakebed, su	nkhole, or playa lake	Yes	No
- Topographic map, Visual inspection (certifica	tion) of the proposed site				
Within 300 feet from a permanent residence, school, - Visual inspection (certification) of the propose	• •		pplication	∐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 pursuant to NMSA 1978, Section 3-27-3, as amende	a defined municipal fresh water ved	vell field covered under a munic	ipal ordinance adopted	Yes	No
- Written confirmation or verification from the i	nunicipality, Written approval ob	tained from the municipality		□vas	Пмо
Within 500 feet of a wetland - US Fish and Wildlife Wetland Identification in	nap, Topographic map, Visual ins	pection (certification) of the pro	posed site	Yes	
Within the area overlying a subsurface mine	1, 101 1,			Yes	No
- Written confirantion or verification or map fro	om the NM EMNRD-Mining and	Mineral Division			
Within an unstable area				Yes	No
 Engineering measures incorporated into the de Topographic map 	sign, NM Bureau of Geology & N	Ameral Resources, USGS, NM	Geological Society,		
Within a 100-year floodplain - FEMA map				Yes	□No
18					
On-Site Closure Plan Checklist: (19 15 17 1 by a check mark in the box, that the documen	•	h of the following items mu	st bee attached to the closi	ure plan. Plea	se indicate,
Siting Criteria Compliance Demonstrati	ons - based upon the appropris	ate 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 Tree	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					
Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19 15 17 13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)					
Soil Cover Design - based upon the appropriate requirements of Subsection H of 19 15 17 13 NMAC					
Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19 15 17 13 NMAC					
Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19 15 17 13 NMAC					

Operator Application Con	tifications		
Operator Application Cer I hereby certify that the inform	tification: ation submitted with this application is true, ac	curate and complete to the	he best of my knowledge and belief
Name (Print)	CRYSTAL TAFOYA	Title	STAFF REGULATORY TECHNICIAN
Signature	to talous	Date	(4)(6)(1)
e-mail address	crysfal tafoya@conocophillips com	Telephone	(505) 326-9837
OCD Approval: Perm OCD Representative Signs Title:		Closure Plan (on	Approval Date: 417/2001
\			
Instructions Operators are recreased to be submit		or to implementing any cetion of the closure activition activities activities are completed	MAC losure activities and submitting the closure report—The closure ities. Please do not complete this section of the form until an sure Completion Date:
22			
Closure Method: Waste Excavation and If different from appro	Removal On-site Closure Method ved plan, please explain	Alternative Close	ure Method Waste Removal (Closed-loop systems only)
23			
			Ground Steel Tanks or Haul-off Bins Only: uttings were disposed. Use attachment if more than two facilities
were utilized.	ne factory or factories for where the aquais, in	ruung junus ana aria ci	uungs were uisposeu. Ose uuuchmen ij more inun iwo jacuutes
Disposal Facility Name		Disposal Faci	lity Permit Number
Disposal Facility Name			lity Permit Number
	•	_	not be used for future service and opeartions?
	ionstrate complilane to the items below)	∐No	
Required for impacted area Site Reclamation (Photo	is which will not be used for future service and	operations	
Soil Backfilling and Co	· ·		
Re-vegetation Applicat	ion Rates and Seeding Technique		· ·
24			
	ment Checklist: Instructions: Each of the f	following items must be	attached to the closure report. Please indicate, by a check mark in
the box, that the document			
. —	tice (surface owner and division)		
	e (required for on-site closure) closures and temporary pits)		
I	ing Analytical Results (if applicable)		
1 🖹 '	pling Analytical Results (if applicable)		
] =	me and Permit Number		
Soil Backfilling and			
= "	cation Rates and Seeding Technique		
=	noto Documentation)		
On-site Closure Loca	ation Latitude	Longitude	NAD 1927 1983
		•	ate and complete to the best of my knowledge and belief I also certify that ed closure plan
Name (Print)	· •	Title	
Signature		Date.	
e-mail address		Telephone	

Form C-144 Oil Conservation Division

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) 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.