Cistrict 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

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 tanks, submit to the appropriate NMOCD District Office.

Form C-144

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-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action:  X Permit of a pit, closed-loop system, below-grade Closure of a pit, closed-loop system, below-grade Modification to an existing permit Closure plan only submitted for an existing permit below-grade tank, or proposed alternative method	de tank, or proposed alternative method nitted or non-permitted pit, closed-loop system,
Instructions: Please submit one application (Form C-144) per individual pit, closed-l	
Please be advised that approval of this request does not relieve the operator of liability should operation environment. Nor does approval relieve the operator of its responsibility to comply with any other applical	
Operator: ConocoPhillips Company	OGRID#: <b>217817</b>
Address: PO Box 4289, Farmington, NM 87499	
Facility or well name: San Juan 29-6 Unit #65B	
API Number: 30-039-30447 OCD Permit Num	
U/L or Qtr/Qtr: I(NESE) Section: 19 Township: 29N Range:	6W County: Rio Arriba 107.4992150' W NAD: X 1927 1983
Surface Owner: Federal State X Private Tribal Trust or Ind	
Temporary: Drilling Workover  Permanent Emergency Cavitation P&A  Lined Unlined Liner type: Thickness mil LLDPE  String-Reinforced  Liner Seams: Welded Factory Other Volume:	HDPE PVC Other bbl Dimensions L x W x D
X Closed-loop System: Subsection H of 19.15.17.11 NMAC  Type of Operation: P&A X Drilling a new well Workover or Drilling (Applies notice of intent)  X Drying Pad X Above Ground Steel Tanks Haul-off Bins Other  X Lined Unlined Liner type: Thickness 20 mil X LLDPE Liner Seams: X Welded X Factory Other	HDPE PVD 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 a visible sidewalls and liner Visible sidewalls only Other  Liner Type: Thickness mil HDPE PVC Other	automatic overflow shut-off
5  Alternative Method:  Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Env	

6 ,		
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	THE OF CHILD	,
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		ļ
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		
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	ideration of ap	proval.
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		į
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.	Yes	No
- 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	Yes	ΠNo
lake (measured from the ordinary high-water mark).		
- 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	Yes	□No
application.		
(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)  - 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	L_JNo
purposes, or minimized on any only recall mater with or spring, in suscessor as the same approximately		
- NM Office of the State Engineer - 1WATERS 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	Yes	□No
adopted pursuant to NMSA 1978, Section 3-27-3, as amended	🗀	
- Written confirmation or verification from the municipality; Written approval obtained from the municipality	١	_
Within 500 feet of a wetland.  LIS Fish and Wildlife Wetland Identification many Tonographic many Visual inspection (certification) of the proposed site.	Yes	∐No
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<sub> </sub>	
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	∐Yes	∐ <sup>No</sup>
Society; Topographic map		
Within a 100-year floodplain	Yes	ΠNo
- FFMA man	"-"	LJ***

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		
Situag 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.    Coolege and Hydrogeologic Parts (only for one site closure)   based upon the requirements of Paragraph (3) of Subsection B of 10.15.17.9		
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		
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 P&A Permanent Pit Below-grade Tank X 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)		
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 1 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 Page 3 of 5

16 Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel	Tanks or Haul-off Bins Only	<u>y:</u> (19.15 17.13.D NMAC)		
Instructions Please identify the facility or facilities for the disposal of liquids, drilling j are required.	luids and drill cuttings. Use a	ttachment if more than two fa	cilities	
Disposal Facility Name. Envirotech	Disposal Facility Permit #:			
	Disposal Facility Permit #:			
Will any of the proposed closed-loop system operations and associated activities  Yes (If yes, please provide the information No	s occur on or in areas that wi	all not be used for future se	rvice and operations?	
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				
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 R certain siting criteria may require administrative approval from the appropriate district office of for consideration of approval. Justifications and/or demonstrations of equivalency are required.	ecommendations of acceptable so r may be considered an exception	which must be submitted to the S		
Ground water is less than 50 feet below the bottom of the buried waste			Yes No	
- NM Office of the State Engineer - (WATERS database search; USGS. Data obtain	ned from nearby wells		∐N/A	
Ground water is between 50 and 100 feet below the bottom of the buried waste			Yes No	
- NM Office of the State Engineer - 1WATERS database search, USGS; Data obtain	ned 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 - tWATERS database search; USGS, Data obtain	ned 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).	ant watercourse or lakebed, sin	khole, 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 in e - Visual inspection (certification) of the proposed site; Aerial photo, satellite image	existence at the time of initial ap	pplication.	YesNo	
			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 existe - NM Office of the State Engineer - iWATERS database; Visual inspection (certific	ence at the time of the initial ap			
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 obta		ipal ordinance adopted	Yes No	
Within 500 feet of a wetland	med from the mamerpancy		□Yes □No	
- US Fish and Wildlife Wetland Identification map; Topographic map, Visual inspe	ection (certification) of the prop	posed site		
Within the area overlying a subsurface mine.			Yes No	
- Written confiramtion or verification or map from the NM EMNRD-Mining and M	Ineral Division			
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Mi	neral Resources; USGS, NM C	Geological Society;	YesNo	
Topographic map		ļ		
Within a 100-year floodplain FEMA map			Yes No	
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of by a check mark in the box, that the documents are attached.	of the following items must	bee attached to the closure	e plan. Please indicate,	
Siting Criteria Compliance Demonstrations - based upon the appropriate	requirements of 19.15.17.1	0 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 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				
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				
Soil Cover Design - based upon the appropriate requirements of Subsect  Re-vegetation Plan - based upon the appropriate requirements of Subsect				
Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC				

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): Crystal Tafoya Title:	Regulatory Technician
Signature: Date Date	8/25/08
e-mail address crystal.tafoya@conocophillips/com Telephone	505-326-9837
20	
OCD Approval: Permit Application (including closure plan) Closure Plan (only)	OCD Conditions (see attachment)
OCD Representative Signature:	Approval Date: 8-26-08
our our	Approvai Date: 2 26-00
Title: Enviro 15 pec OCD Permit N	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 a report is required to be submitted to the division within 60 days of the completion of the closure activities. Pi	
approved closure plan has been obtained and the closure activities have been completed.	
Closure Co	ompletion Date:
22 Clasura Mathada	
Closure Method:  Waste Excavation and Removal  On-site Closure Method  Alternative Closure Method	had Wasta Pamayal (Classed learn austrance and a
	hod 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	
Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were utilized.	were disposed. Use attachment if more than two facilities
Disposal Facility Name Disposal Facility Peri	mit Number
Disposal Facility Name: Disposal Facility Peri	
Were the closed-loop system operations and associated activities performed on or in areas that will not be	
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	d 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
I hereby certify that the information and attachments submitted with this closure report is ture, accurate and	
the closure complies with all applicable closure requirements and conditions specified in the approved closus	re plan.
Name (Print): Title:	
Signature: Date:	
e-mail address: Telephone	

## **ConocoPhillips Company**

#### Closed Loop Design:

The closed loop design will not incorporate a temporary pit or below grade tank. The plan will utilize an above grade tank suitable for holding the cuttings and fluids generated during drilling operations. The volume of the tank shall be of a sufficient volume to maintain an adequate free board for periodic removal and disposal of cuttings and fluids.

ConocoPhillips Company may incorporate the use of a 20 mil, string reinforced, LLDPE liner with factory welded seams to line the drying pad in order to minimize the volume of fluids to be disposed of. The drying pad will be designed to prevent contamination of fresh water, protect public health and the environment, and have sumps to facilitate the collection of liquids derived from drilling cuttings, as specified per subsection H of 19.15.17.11. The cuttings pad will be constructed above grade and containment will be through the use of earthen berms of sufficient height to contain the cuttings and prevent run-off of surface water or fluids. The drying pad area will replace the area of the drill site previously designated for the reserve pit. It will be signed in compliance with 19.15.3.103.NMAC. Frac tanks will be utilized on site for fresh water storage.

#### **Closed Loop Operations and Maintenance:**

The closed loop system will be operated and maintained for solids and liquid containment to prevent ground water contamination as follows:

- 1. Any free liquids will be recovered and reused or disposed of at the Basin Disposal Facility (Permit # NM-01-005). Reuse may include the relocating of liquids to be used in other permitted drilling operations.
- 2. Drill solids will be recovered from location and hauled to a Envirotech (Permit #NM-01-0011) periodically as required to maintain a safe free board in the cuttings tank. No onsite trench burial of cuttings will occur.
- 3. In the event a drying pad is utilized, the cuttings will be picked up and transported to Basin Disposal Facility (Permit #NM-01-005). The liner will be disposed of at the San Juan County Landfill located on CR 3100. The drying pad will be closed within 6 months from the date that the drilling rig is released. Berms constructed from native materials will be bladed on site to the location's contour.
- 4. Any drilling materials or trash will be stored and disposed of appropriately.
- 5. The NMOCD will be notified within 48 hours of the discovery of compromised integrity of the closed loop containment. Any required repairs will commence immediately.

### **Closed Loop Closure Plan:**

- 1. Upon completion of the drilling operations, all solids and liquids will be removed and disposed of to Envirotech (Permit #NM-01-0011) and Basin Disposal Facility (Permit #NM-01-005). Equipment shall also be removed from location. In the event a drying pad is utilized, the solids contained on the pad shall remain on site to allow sufficient drying and will then be transported to Envirotech (Permit #NM-01-0011) within 6 months from the date that the drilling rig is released.
- 2. After the drying pad is removed the surface below will be visually inspected for any contamination. If contamination is discovered a five point composite sample will be taken of the drying pad area using sampling tools and all samples tested per Subsection B of 19.15.17.13(B)(1)(b). In the event that the criteria are not met, all contents will be handled per Subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13 i.e., Dig and haul.

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

- 3. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Re-shaping 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.
- 4. Notification will be sent to OCD when the reclaimed area is seeded.
- 5. COP shall seed the disturbed areas the first growing season after the operator closes the drying pad. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service 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

Source No. two (better quality)

Source No. two (better quality)

Purity

Source No. two (better quality)

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

1 lb. PLS 1 lb. PLS