District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

# State of New Mexico Energy Minerals and Natural 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.

	Pit, Closed-Loop System, Below-Grade Tank, or
$\lambda_{\alpha}$	Proposed Alternative Method Permit or Closure Plan Application
10864	Type of action: X 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

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 operation environment. Nor does approval relieve the operator of its responsibility to comply with any other applications.	· · · · · · · · · · · · · · · · · · ·
Operator: ConocoPhillips Company	OGRID#: <b>217817</b>
Address: PO Box 4289, Farmington, NM 87499	
Facility or well name: San Juan 28-7 Unit 166M	
API Number: 30-039-26736 OCD Permit Nu	
U/L or Qtr/Qtr: <u>E(SW/NW)</u> Section: <u>16</u> Township: <u>27N</u> Range:	7W County: Rio Arriba
Center of Proposed Design: Latitude: 36.575986 °N Longitude:	-107.585889 °W NAD: X 1927 1983
Surface Owner: Federal X State Private Tribal Trust or In	idian Allotment
Pit: Subsection F or G of 19.15.17.11 NMAC  Temporary: Drilling Workover  Permanent Emergency Cavitation P&A  Lined Unlined Liner type: Thickness mil LLDPE  String-Reinforced  Liner Seams: Welded Factory Other Volume:	RCVD JAN 23 '13 OIL CONS. DIV. DIST. 3  HDPE Processors I was a War at D
Liner Seams. Weided Pactory Other Volume:	bbl Dimensions Lx Wx D
X   Closed-loop System: Subsection H of 19.15.17.11 NMAC     Type of Operation: P&A   Drilling a new well   X   Workover or Drilling (Applie notice of intent)     Drying Pad   X   Above Ground Steel Tanks   Haul-off Bins   Other     Lined   Unlined   Liner type: Thickness   mil   LLDPE     Liner Seams: Welded   Factory   Other	es to activities which require prior approval of a permit or  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 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	ironmental 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	nunon or chareny				
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					
9					
Administrative Approvals and Exceptions:					
Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.					
Please check a box if one or more of the following is requested, if not leave blank:					
Administrative approval(s): Requests must be submitted to the appropriate division district of the Santa Fe Environmental Bureau office for consideration of approval.  (Fencing/BGT Liner)					
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	·				
10	***************************************	····			
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 N	No			
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake	Yes N	No			
(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 D	Nο			
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 N	No			
(Applied to permanent pits)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	∐NA				
Within 500 horizonal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering	☐Yes ☐N	No			
purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.		110			
- 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	Yes N	No			
<ul> <li>adopted pursuant to NMSA 1978, Section 3-27-3, as amended</li> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> </ul>					
Within 500 feet of a wetland.	Yes N	No			
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	□V <sub>22</sub> □	No.			
Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division	∐Yes ∐N	No			
Within an unstable area.	Yes N	No			
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological					
Society; Topographic map Within a 100-year floodplain	☐ Yes ☐ N	No			
- FEMA map					
	<del></del>				

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			
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			
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  Clearer Plan   Location Control Plan   Clearer Plan   Location Control Plan   Lo			
Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC			
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 X Workover Emergency Cavitation 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)			
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan.			
Please indicate, by a check mark in the box, that the documents are attached.  Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC			
Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC			
Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)			
Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC			
Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC			
Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC			

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16 Waste Removal Closure For Closed-loop Systems That Utilize Above Ground St	aal Tanks or Haulaff Rins On	lv: (19 15 17 13 D NMAC)					
Instructions: Please identify the facility or facilities for the disposal of liquids, drilln facilities are required.	ng fluids and drill cuttings. Use	attachment if more than two					
Disposal Facility Name: Envirotech / JFJ Landfarm % IEI	Disposal Facility Permit #:	NM-01-0011 / NM-01-00	010B				
Disposal Facility Name: Basin Disposal Facility	Disposal Facility Permit #:						
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and  Yes (If yes, please provide the information No							
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							
17							
Siting Criteria (Regarding on-site closure methods only: 19.15.17.10 NMA Instructions: Each siting criteria requires a demonstration of compliance in the closure pla certain siting criteria may require administrative approval from the appropriate district off office for consideration of approval. Justifications and/or demonstrations of equivalency and the constraints of equivalency and the constrai	n. Recommendations of acceptable ice or may be considered an except	tion which must be submitted to					
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 of	otained 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 - iWATERS database search; USGS; Data ob	tained 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 ob	tained from nearby wells		□ N/A				
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other signif (measured from the ordinary high-water mark).	icant watercourse or lakebed, sir	nkhole, 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 - Visual inspection (certification) of the proposed site; Aerial photo; satellite image	· · · · · · · · · · · · · · · · · · ·	oplication.	∐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			YesNo				
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					
Within 500 feet of a wetland	Written confirmation or verification from the municipality; Written approval obtained from the municipality  Within 500 feet of a wetland  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site		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 & N Topographic map	Mineral Resources; USGS; NM C	Geological Society;	YesNo				
Within a 100-year floodplain FEMA map			Yes No				
18							
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each by a check mark in the box, that the documents are attached.	h of the following items mus	t bee attached to the closu	re 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 dr	ying pad) - based upon the ap	propriate requirements of	19.15.17.11 NMAC				
Protocols and Procedures - based upon the appropriate requirements o							
Confirmation Sampling Plan (if applicable) - based upon the appropria							
Waste Material Sampling Plan - based upon the appropriate requireme			41 12 6				
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 Subsection H of 19.15.17.13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC							
Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC							

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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): DENISE JOURNEY Title: Regulatory Technician
Signature: Date: 1/23/2013
e-mail address: Denise Sourney@conocopt lips.com Telephone: (505) 326-9556
20
OCD Approval: Permit Application (including flosure plan) Closure Plan (only) OCD Conditions (see attachment)
OCD Representative Signature:
Title: OMDIGUCE OFFICE 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 <u>Closure Report Attachment Checklist:</u> 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
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:

# ConocoPhillips Company Closed-loop Plans

#### Closed-loop Design Plan

COPC'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**

COPC'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.