State of New Mexico **Energy Minerals and Natural Resources**

Form C-144 July 21, 2008

1301 W. Grand Ave., Artesia, NM 88210

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.

District III 1000 Rio Brazos Rd., Aztec, NM 87410

For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office

District IV 12

Type of

20 S. St. Francis Dr., Santa Fe, NM 87505
Pit, Closed-Loop System, Below-Grade Tank, or
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
Type of action: Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method X 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 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.
perator: ConocoPhillips Company OGRID#: 217817
ddress: PO Box 4289, Farmington, NM 87499
acility or well name: Maddox B Federal 2
PI Number: 30-045-30333 OCD Permit Number:
/L or Qtr/Qtr: N(SE/SW) Section: 13 Township: 30N Range: 13W County: San Juan
enter of Proposed Design: Latitude: 36.808017 °N Longitude: 108.159797 °W NAD: X 1927 1983
urface Owner: X Federal State Private Tribal Trust or Indian Allotment
Pit: Subsection F or G of 19.15.17.11 NMAC Pit: Subsection F or G of 19.15.17.11 NMAC OIL CONS. DIV.
Temporary: Drilling Workover Permanent Emergency Cavitation P&A DIST. 3
Lined Unlined Liner type: Thickness mil LLDPE HDPE PVC Other
String-Reinforced
Liner Seams: Welded Factory Other Volume: bbl Dimensions L x W x D
X Closed-loop System: Subsection H of 19.15.17.11 NMAC
Type of Operation: X 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 X Above Ground Steel Tanks Haul-off Bins Other
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVD Other
Liner Seams: Welded Factory Other
7 2 2 4 4 5 5 5 5 6 6 6 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Below-grade tank: Subsection I of 19.15.17.11 NMAC Volume: bbl Type of fluid:
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: Thicknessmil
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, instance of barbed wire evenly spaced between one and four feet Alternate. Please specify	titution or chu	rch)
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 cons	rideration of a	proval
(Fencing/BGT Liner)	ideration of ap	ргочат.
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.		
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau Office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above grade-tanks associated with a closed-loop system.		
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes	No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	Yes	□No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	Yes	No
(Applies to temporary, emergency, or cavitation pits and below-grade tanks)	□NA	
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image		
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applied to permanent pits)	☐ Yes ☐ NA	No
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	[_],,,,	
Within 500 horizonal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.	Yes	No
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.		
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended - 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.
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
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
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
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 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 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 Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NM.				
Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more that facilities are required.	i two			
Disposal Facility Name: Disposal Facility Permit #:				
Disposal Facility Name: 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 fu 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 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	NMAC			
17				
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. 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. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.				
Ground water is less than 50 feet below the bottom of the buried waste.	Yes No			
- NM Office of the State Engineer - iWATERS database search; USGS: Data obtained 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 - iWATERS database search; USGS; Data obtained 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 obtained from nearby wells	N/A □			
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).	Yes No			
- Topographic map; Visual inspection (certification) of the proposed site				
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; satellite image	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 a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.	Yes No			
- Written confirmation or verification from the municipality; Written approval obtained from the municipality Within 500 feet of a wetland	Yes No			
 US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site Within the area overlying a subsurface mine. 				
- Written confirantion or verification or map from the NM EMNRD-Mining and Mineral Division	Yes No			
Within an unstable area.	Yes No			
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society;				
Topographic map Within a 100-year floodplain FEMA map	Ycs No			
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must bee attached to the	closure plan. Please indicate,			
by a check mark in the box, that the documents are attached.				
Siting Criteria Compliance Demonstrations - based upon the appropriate 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 Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMA				
Construction/Design Plan of Temporary Pit (for in place burial of a drying pad) - based upon the appropriate requirement	s of 19.15.17.11 NMAC			
Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC	440			
Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NM	/IAC			
Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC	de accord ha makima 18			
☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved) ☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC				
Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC				
Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC				

Form C-144

19 Operator Application Certification:
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief. Name (Print): Title:
e-mail address: Telephone:
C-mail additioss.
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: 1/30/201/2 Title: OCD Permit Number:
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Instructionis: 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. [X] Closure Completion Date: 11/2/2012
22 Closure Method: Waste Excavation and Removal On-site Closure Method Alternative Closure Method X Waste Removal (Closed-loop systems only) If different from approved plan, please explain.
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: Envirotech / JFJ Landfarm % IE1 Disposal Facility Permit Number: NM-01-0011 / NM-01-0010B
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:
Operator Closure Certification: Thereby 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 plain.
Name (Print): Dollie L. Busse, Title: Staff Regulatory Technician
Signature: Date: 11/27/12
e-mail address: dollie.l.busse@conocophillips.com Telephone: (505) 324-6104

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.