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

# State of New Mexico Energy Minerals and Natural Resources Department

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

 $Form\ C\text{-}144$   $July\ 21,\ 2008$  For temporary pits, closed-loop sytems, and below-grade

tanks, submit to the appropriate NMOCD District Office.

District III	1220 South St. Francis D	r.
1000 Rio Brazos Rd , Aztec, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505	Santa Fe, NM 87505	For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office
1220 S St Flancis Di , Santa Fe, Nivi 87303	Pit, Closed-Loop System, Below	y-Grade Tank or
Pron	osed Alternative Method Permit of	
' <b>7</b> 00 π π π π π π π π π π π π π π π π π π		
Type of action:	Permit of a pit, closed-loop system, below	w-grade tank, or proposed alternative method
		ow-grade tank, or proposed alternative method
	X Modification to an existing permit	
	Closure plan only submitted for an existing below-grade tank, or proposed alternative	ng permitted or non-permitted pit, closed-loop system, e method
Instructions: Please submit one a	pplication (Form C-144) per individual pit, cl	losed-loop system, below-grade tank or alternative request
Please be advised that approval o	f this request does not relieve the operator of liability should of	perations result in pollution of surface water, ground water or the
environment. Nor does approval reli	eve the operator of its responsibility to comply with any other	applicable governmental authority's rules, regulations or ordinances.
t Operator: ConocoPhillips Compan	y	OGRID#: <b>217817</b>
Address: PO Box 4289, Farmingto	on, NM 87499	
Facility or well name: YERT HZM	<del> </del>	
	7K	nit Number:
U/L or Qtr/Qtr: B(NW/NE) Section		
Center of Proposed Design: Latitude	· ·	
Surface Owner: X Federal		or Indian Allotment
2 X Pit: Subsection F or G of 19.15.1	7.11 NMAC	
		RCVD SEP 20 '1
_ ` ' ' ' ' '	rkover	OIL CONS. DIV
	Cavitation P&A (Pre-set) uner type: Thickness mil LLI	DPE HDPE PVC Other DIST. 3
	mer type. Thickness iiii ELI	DIE HOPE TIVE Other
String-Reinforced		`
Liner Seams. Welded F	actory Other Volume:	bbl Dimensions L x W x D
3		
	tion H of 19 15.17.11 NMAC	
		A
Type of Operation P&A	Drilling a new well Workover or Drilling (A	Applies to activities which require prior approval of a permit or
Type of Operation P&A	Drilling a new well Workover or Drilling (A	Applies to activities which require prior approval of a permit or
Type of Operation P&A   Drying Pad Above Grou	Drilling a new well Workover or Drilling (A	
Type of Operation P&A   Drying Pad Above Grou  Lined Unlined Line	Drilling a new well Workover or Drilling (Anotice of intent)  und Steel Tanks Haul-off Bins Other	
Type of Operation P&A  Drying Pad Above Grou Lined Unlined Line Liner Seams Welded F.	Drilling a new well Workover or Drilling (Anotice of intent)  and Steel Tanks Haul-off Bins Other  er type: Thickness mil LLD	
Type of Operation P&A   Output  Drying Pad Above Grou  Lined Unlined Line  Liner Seams Welded F:	Drilling a new well Workover or Drilling (Anotice of intent)  and Steel Tanks Haul-off Bins Other  er type: Thickness mil LLD  actory Other	
Type of Operation P&A  Drying Pad Above Grou Lined Unlined Line Liner Seams Welded F.  Below-grade tank: Subsection	Drilling a new well Workover or Drilling (Anotice of intent)  and Steel Tanks Haul-off Bins Other  er type: Thickness mil LLD  actory Other  I of 19.15.17.11 NMAC	
Type of Operation P&A  Drying Pad Above Grou Lined Unlined Line Liner Seams Welded F.  Below-grade tank: Subsection Volume:	Drilling a new well Workover or Drilling (Anotice of intent)  and Steel Tanks Haul-off Bins Other  er type: Thickness mil LLD  actory Other	
Type of Operation P&A  Drying Pad Above Grou Lined Unlined Line Liner Seams Welded F.  Below-grade tank: Subsection Volume: b Tank Construction material	Drilling a new well Workover or Drilling (Anotice of intent)  and Steel Tanks Haul-off Bins Other  er type: Thickness mil LLD  actory Other  I of 19.15.17.11 NMAC  abl Type of fluid.	DPE HDPE PVD Other
Type of Operation P&A  Drying Pad Above Grou Lined Unlined Line Liner Seams Welded F.  Below-grade tank: Subsection Volume: b Tank Construction material Secondary containment with leak de	Drilling a new well Workover or Drilling (Anotice of intent)  and Steel Tanks Haul-off Bins Other  er type: Thickness mil LLD  actory Other  I of 19.15.17.11 NMAC  obl Type of fluid.	DPE HDPE PVD Other
Type of Operation P&A   Drying Pad Above Grou Lined Unlined Line Liner Seams Welded F.  Below-grade tank: Subsection Volume: b Tank Construction material	Drilling a new well	DPE HDPE PVD Other

Form C-144

Oil Conservation Division

Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

Page 1 of 5

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, instituted from the 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	ttion or church	)
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:  X Administrative approval(s) Requests must be submitted to the appropriate division district of the Santa Fe Environmental Bureau office for consideration pit for Pre-set)  Exception(s) Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	leration of appi	roval.
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	Yes	No
Society; Topographic map  Within a 100-year floodplain  - FEMA map	Yes	No

Temporary Pits, Emergency Pits and Below-grade Tanks Permit Application Attachment Checklist Subsection B of 19.15.17.9 NMAC
Instructions Each of the following items must be attached to the application Please indicate, by a check mark in the box, that the documents are attached.
Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17 9 NMAC
Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9
String Criteria Compliance Demonstrations - based upon the appropriate requirements of 19 15.17 10 NMAC
Design Plan - based upon the appropriate requirements of 19 15.17.11 NMAC
Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 15 17 9 NMAC and 19.15 17.13 NMAC
Previously Approved Design (attach copy of design)  API  or Permit
12
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.  Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
Previously Approved Design (attach copy of design)  API
Previously Approved Operating and Maintenance Plan API
13
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.
Hydrogeologic Report - based upon the requirements of Paragraph (I) of Subsection B of 19 15.17.9 NMAC
Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
Climatological Factors Assessment
Certified Engineering Design Plans - based upon the appropriate requirements of 19 15.17 11 NMAC
Dike Protection and Structural Integrity Design: based upon the appropriate requirements of 19.15.17.11 NMAC
Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC  Quality Control/Quality Assurance Construction and Installation Plan
Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
Nuisance or Hazardous Odors, including H2S, Prevention Plan
Emergency Response Plan
Oil Field Waste Stream Characterization
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 X 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)
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
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Form C-144 Oil Conservation Division Page 3 of 5

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Sanstructions Please identify the facility or facilities for the disposal of liquids, drilling		
Justines are required Disposal Facility Name: Envirotech / JFJ Landfarm % IEI	Disposal Facility Permit # NM-01-0011 / NM-01-0	010R
Disposal Facility Name: Basin Disposal Facility	Disposal Facility Permit #: NM-01-005	
Will any of the proposed closed-loop system operations and associated act  Yes (If yes, please provide the information No	<del></del>	service and
Required for impacted areas which will not be used for future service and operation  Soil Backfill and Cover Design Specification - based upon the appr  Re-vegetation Plan - based upon the appropriate requirements of Sub  Site Reclamation Plan - based upon the appropriate requirements of Sub	opriate requirements of Subsection H of 19.15.17.13 N section I of 19 15 17 13 NMAC	MAC
Siting Criteria (Regarding on-site closure methods only: 19 15 17 10 NM Instructions Each siting criteria requires a demonstration of compliance in the closure plan certain siting criteria may require administrative approval from the appropriate district office office for consideration of approval Justifications and/or demonstrations of equivalency are	Recommendations of acceptable source material are provided below or 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.  - NM Office of the State Engineer - tWATERS database search, USGS, Data of the State Engineer - twater of twater - twat	obtained from nearby wells	∏Yes ∏No ∏N/A
Ground water is between 50 and 100 feet below the bottom of the buried v	vaste	Yes No
- NM Office of the State Engineer - (WATERS database search, USGS, Data of		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 of	obtained from nearby wells	N/A
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other sign (measured from the ordinary high-water mark)	nificant watercourse or lakebed, sinkhole, 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 - Visual inspection (certification) of the proposed site, Aerial photo, satellite in		Yes No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less purposes, or within 1000 horizontal fee of any other fresh water well or spring, in e - NM Office of the State Engineer - iWATERS database, Visual inspection (cer	xistence at the time of the initial application	
Within incorporated municipal boundaries or within a defined municipal fresh water pursuant to NMSA 1978, Section 3-27-3, as amended.	·	Yes No
<ul> <li>Written confirmation or verification from the municipality; Written approval</li> <li>Within 500 feet of a wetland</li> <li>US Fish and Wildlife Wetland Identification map, Topographic map; Visual</li> </ul>		Yes No
Within the area overlying a subsurface mine.	· · · · · · · · · · · · · · · · · · ·	Yes No
- Written confiramtion or verification or map from the NM EMNRD-Mining ar	nd Mineral Division	
Within an unstable area.  - Engineering measures incorporated into the design. NM Bureau of Geology & Topographic map	દે Mineral Resources, USGS, NM Geological Society,	Yes No
Within a 100-year floodplain FEMA map		Yes No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Edby a check mark in the box, that the documents are attached.	ach of the following items must bee attached to the clo	osure plan. Please indicate,
Siting Criteria Compliance Demonstrations - based upon the appro	priate requirements of 19.15 17.10 NMAC	
Proof of Surface Owner Notice - based upon the appropriate requir	•	
Construction/Design Plan of Burial Trench (if applicable) based up	oon the appropriate requirements of 19.15.17.11 NMAC	
Construction/Design Plan of Temporary Pit (for in place burial of a	a drying pad) - based upon the appropriate requirement	s of 19.15 17 11 NMAC
X Protocols and Procedures - based upon the appropriate requirement		
Confirmation Sampling Plan (if applicable) - based upon the appro		MAC
X Waste Material Sampling Plan - based upon the appropriate require		de consiste de S
X Disposal Facility Name and Permit Number (for liquids, drilling flu	<del>-</del>	ds 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 Oil Conservation Division Page 4 of 5

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) Jamie Goodwin Title: Regulatory Technician
Signature. 1 10000 13000 Date. 12012
e-mail address
V
20
OCD Approval: Permit Application (including closure plan) OCD Conditions (see attachment)
OCD Representative Signature: Approval Date: 9/20/2012
0.000
Title: OMO (auce Office OCD Permit Number:
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:
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
It different from approved plant, piease 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 complilane to the items below)
Required for impacted areas which will not be used for future service and operations
Site Reclamation (Photo Documentation)
Soil Backfilling and Cover Installation
Re-vegetation Application Rates and Seeding Technique
24
Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in
the box, that the documents are attached.
Proof of Closure Notice (surface owner and division)
Proof of Deed Notice (required for on-site closure)
Plot Plan (for on-site closures and temporary pits)
Confirmation Sampling Analytical Results (if applicable)
Waste Material Sampling Analytical Results (if applicable)
Disposal Facility Name and Permit Number
Soil Backfilling and Cover Installation
Re-vegetation Application Rates and Seeding Technique
Site Reclamation (Photo Documentation)
On-site Closure Location: Latitude: Longitude: NAD 1927 1983
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 Cavitation Pit for Closed-Loop Locations

### Design:

ConocoPhillips Company will use a cavitation pit plan when the surface casing will be pre-set on closed-loop locations. The drill cuttings will be stockpiled on the surface.

#### **Operations and Maintenance:**

The cavitation pit will be operated and maintained as follows:

- 1. Only Fresh water and air will be used in the drilling of the surface casing.
- 2. The Cement used will be: Neat Cement with no additives.
- 3. All of the fluids will be removed within 48hrs after drilling.
- 4. A representative five point composite sample will be taken of the drill cuttings, after the setting of the surface casing is complete, using sampling tools and all samples will be tested per Subsection B of 19.15.17.13(B)(1)(b). In the event that the testing criteria is not met, all contents will be dug and hauled per Subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13 i.e.

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

5. The NMOCD will be notified via email of the test results of the cavitation surface as follows:

Components	Tests Method	Limit (mg/Kg)	Results
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	Chlorides EPA 300.1		

#### Closure Plan:

- 1. The NMOCD will be notified of the sample results and the intent to start the closure process 3-7 days prior to the drill cuttings being transported, moved, or distributed on location.
- 2. In the event the criteria are not met, all solids and liquids will be removed and disposed of at Envirotech (Permit #NM-01-0011) and/or Basin Disposal Facility (Permit #NM-01-005) and/or JFJ Landfarm % Industrial Ecosystem Inc. (Permit # NM-01-0010B).
- 3. Testing results will be submitted with the Closure Report of the well locations Closed-Loop Permit on Form C-144.

ConocoPhillips is aware that approval of this plan does not relieve ConocoPhillips of liability should operations result in pollution of surface water, ground water, or the environment. Nor does approval relieve ConocoPhillips of its responsibility to comply with any other applicable governmental authority's rules and regulations.