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 systems, 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

District II Oil Co 1301 W Grand Ave , Artesia, NM 88210 1220 S District III 1220 S 1000 Rio Brazos Rd , Aztec, NM 87410 Sant District IV

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 in Closure of a pit, closed-loop system, below-grade tank, or proposed alternative in Closure of a pit, closed-loop system, below-grade tank, or proposed alternative in Closure of a pit, closed-loop system, below-grade tank, or proposed alternative in Closure of a pit, closed-loop system, below-grade tank, or proposed alternative in Closure of a pit, closed-loop system, below-grade tank, or proposed alternative in Closure of a pit, closed-loop system, below-grade tank, or proposed alternative in Closure of a pit, closed-loop system, below-grade tank, or proposed alternative in Closure of a pit, closed-loop system, below-grade tank, or proposed alternative in Closure of a pit, closed-loop system below-grade tank, or proposed alternative in Closure of a pit, closed-loop system below-grade tank, or proposed alternative in Closure of a pit, closed-loop system below-grade tank, or proposed alternative in Closure of a pit, closed-loop system below-grade tank, or proposed alternative in Closure of a pit, closed-loop system below-grade tank, or proposed alternative in Closed-loop system below-grade tank, or proposed alternat

Permit of a pit, closed-loop system, below-gi	ade tank, or proposed	alternative nearly UECZ 1.
Closure of a pit, closed-loop system, below-g	grade tank, or proposed	d alternative method
X Modification to an existing permit	~,	OIL CONS. DIV
Closure plan only submitted for an existing p	permitted or non-perm	itted pit, closed-loop system,
below-grade tank, or proposed alternative me	ethod	DIST. 3

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Operator: ConocoPhillips Company Address: PO Box 4289, Farmington, NM 87499 Facility or well name: MOORE LS 5B API Number: 30-045-35266 OCD Permit Num U/L or Qtr/Qtr. E(SW/NW) Section: 24 Township 32N Range.	
API Number: 30-045-35266 OCD Permit Num U/L or Qtr/Qtr. E(SW/NW) Section: 24 Township 32N Range.	
U/L or Qtr/Qtr. <u>E(SW/NW)</u> Section: <u>24</u> Township <u>32N</u> Range.	
	ber
	12W County SAN JUAN
Center of Proposed Design. Latitude: 36.97326 °N Longitude:	108.053393 °W NAD: 1927 X 1983
Surface Owner: X Federal State Private Tribal Trust or Ind	lian Allotment
X Pit: Subsection F or G of 19 15 17 11 NMAC Temporary	HDPE PVC Other bbl Dimensions L x W x D
Closed-loop System: Subsection H of 19 15 17 11 NMAC Type of Operation P&A Drilling a new well Workover or Drilling (Applies notice of intent) Drying Pad Above Ground Steel Tanks Haul-off Bins Other Lined Unlined Liner type Thickness mil LLDPE Liner Seams Welded Factory Other	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 a Visible sidewalls and liner Visible sidewalls only Other Liner Type Thickness mil HDPE PVC Other	utomatic overflow shut-off

Fencing: Subsection D of 19 15 17 11 NMAC (Applies to permanent pit, temporary pits, and below-grade tanks) Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church) Four foot height, four strands of barbed wire evenly spaced between one and four feet Alternate Please specify		
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)		
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 consi (Cavitation pit for Pre-set)	deration of app	roval
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) - Visual inspection (certification) of the proposed site, Aerial photo, Satellite image	NA	
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applied to permanent pits)	☐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 - (WATERS 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

11 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
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 Contribute For the Contribute For the Contribute Contribute For the Contr
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)
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
1 1 100-vogoration 1 tan - based apon the appropriate requirements of Subsection 1 of 15 25 17 25 17 18 17 18

16 Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only; (19 15 17 13	D NIMAC)	
Instructions Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if m		
facilities are required	/NIM 01 0010D	
Disposal Facility Name Envirotech / JFJ Landfarm % IEI Disposal Facility Permit # NM-01-0011	7 NMI-01-0010B	
Disposal Facility Name Basin Disposal Facility Disposal Facility Permit # NM-01-005 Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used	d 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	17 IS MINE	
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 Recommendations of acceptable source material certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be office for consideration of approval Justifications and/or demonstrations of equivalency are required. Please refer to 19 15 17 10 NMAC for a	e submitted to the Santa Fe Environmental Bureau	
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 obtained from nearby wells	Yes No	
Ground water is between 50 and 100 feet below the bettem of the buried weets	Yes No	
Ground water is between 50 and 100 feet below the bottom of the buried waste - 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 (measured from the ordinary high-water mark)	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 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, doinestic fresh water well or spring that less than five households use for domestic or stock 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	atering :	
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance as pursuant to NMSA 1978, Section 3-27-3, as amended	dopted 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	Yes No	
- Written confirantion or verification or map from the NM EMNRD-Mining and Mineral Division Within an unstable area	Yes No	
- Engineering measures incorporated into the design, NM Bureau of Geology & Mineral Resources, USGS, NM Geological Soci		
Topographic map Within a 100-year floodplain - FEMA map	∐Yes ∏No	
18	1	
On-Site Closure Plan Checklist: (19 15 17 13 NMAC) Instructions: Each of the following items must bee attached by a check mark in the box, that the documents are attached.	l to the closure plan. Please indicate,	
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 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		
X 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		
Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19 15 17 13 NMAC		
 ✓ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved) ✓ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19 15 17 13 NMAC 		
Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19 15 17 13 NMAC		
Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19 15 17 13 NMAC		

Form C-144 Oil Conservation Division

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 Opodwin Title Regulatory Technician
Signature Date Date
e-mail address / Jamie L Goodwin@conocophillips com Telephone 505-326-9784
C mail address / game a see my seem to see the
20
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)
OCD Representative Signature: Approval Date: 1/02/2011
A CO
Title: OCD Permit Number:
21
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 Payageteting Application Pates and Seeding Technique
Re-vegetation Application Rates and Seeding Technique
Closure Perost Attachment Checklists Justines Each of the following items must be attached to the election agrees. Black in a check work in
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 Clasura Cartification:
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
Ivano (tint)
Signature Date
e-mail address Telephone
e-mail address Telephone

ConocoPhillips Company San Juan Basin

Modification for a temporary pit Drilling/Completion and Workover MOORE LS 5B – MODIFICATION PRE - SET

The Moore LS 5B has an approved C-144 for a Closed Loop dated 5/26/2011. Due to change in plans we will Air Drill pre set.

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
- 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	02
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

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	EPA 300 1	500	

Closure Plan:

- 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.