

ConocoPhillips

Drilling Operations

H₂S Plan

30-025-39727

ConocoPhillips, Inc. will comply with Onshore Order No. 2 and No. 6 for working in an H₂S environment or a potential H₂S environment.

I. Hydrogen Sulfide Training

All contractors and subcontractors employed by ConocoPhillips will receive or have received training from a qualified instructor within the last twelve months in the following areas prior to commencing drilling operations on this well.

1. The hazards and characteristics of hydrogen sulfide (H₂S).
2. Safety precautions.
3. Operations of safety equipment and life support systems.

In addition, contractor supervisory personnel will be trained or prepared in the following areas:

1. The effect of H₂S on metal components in the system, especially where high tensile strength tubulars are to be used.
2. Corrective action and shutdown procedures when drilling or reworking a well, blowout prevention and well control procedures, if the nature of the work involves these items.
3. The contents and requirements of the contingency plan when such plan is required.

II. H₂S Equipment and Systems

1. Safety Equipment

The following minimum safety equipment will be on location:

- a. Wind direction indicators placed near rig floor/mud return lines and at points along the perimeter of the location to allow visibility of at least one indicator from any point on location.
- b. Automatic H₂S detection alarm equipment (both audio and visual).
- c. Clearly visible warning signs. Signs will use the words "POISON GAS" and "CAUTION" with a strong color contrast.
- d. Protective breathing equipment will be located in the doghouse and at briefing areas on location.

2. Well Control Systems

- a. Blowout Prevention Equipment

Refer to master drilling plan.

- b. Communication

The rig contractor will be required to have two-way communication capability. ConocoPhillips will have either, land-line, satellite phone, microwave phone, or mobile (cellular) telephone capabilities.

c. Mud Program

The mud program has been designed to minimize the volume of H_2S circulated to surface. Proper mud weight, safe drilling practices and the use of H_2S scavengers when appropriate will minimize hazards when penetrating H_2S bearing zones.

d. Drill stem tests

Any planned drill stem test will be cancelled if H_2S is detected prior to such test. In the event that H_2S is detected during testing, the test will be terminated immediately.

ConocoPhillips Emergency Contact Phone Numbers

ConocoPhillips

		(281)293-3600
Drilling Superintendent	Cotton Hair	work (432)368-1302 cell (432)556-9116
Safety (WSER)	Tom Samarripa	work (432)368-1263 cell (432)556-9113
Drilling Engineer	Jason Tilley	work (832)486-2919 cell (281)684-4720
Regulatory Contact	Celeste Dale	(432)688-6884

Emergency Numbers

Hospital: Lea Co. Regional Medical Center(Hobbs)	(575)492-5000
Ambulance: Hobbs Fire Dept.	(575)397-9308
Air Ambulance: Care Star	(888)624-3571
Aero Star	(800)627-2376
Fire Dept (Hobbs)	(575)397-9308

State Police:

(Hobbs)

Emerg

(575)392-5580

(575)392-5588

Sheriff: (Hobbs)

(575) 396-3611

Police: (Hobbs)

(575)397-9265

NM OCD

Emerg

(575)393-6161

(575)370-7106

BLM

fax

(575)393-3612

(575)393-4280

New Mexico Emerg Response Comm(Santa Fe)

24HR

(505)476-9600

(505)827-9126

New Mexico State Emerg Ops Ctr

(505)476-9635

National Emerg Response Center (Washington, DC)

(800)424-8802

Recommended Telephone Procedures for Emergencies

- 1 State emergency situation
- 2 Give your full name, company & phone number
- 3 Give cause of injury and condition of injured
- 4 Provide good directions to location or highway
- 5 Send vehicle to meet EMS at highway or landmark
- 6 Stay by phone until EMS arrives on location

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Regulatory Contact	Justin Firkins	work (432)688-6913 cell (432)599-2751

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	Aero Star	(800)627-2376
Fire Dept	(Hobbs)	(575)397-9308
State Police:		
	(Hobbs)	(575)392-5580
	Emerg	(575)392-5588
Sheriff:	(Hobbs)	(575) 396-3611
Police:	(Hobbs)	(575)397-9265
NM OCD		(575)393-6161
	Emerg	(575)370-7106
BLM		(575)393-3612
	fax	(575)393-4280
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MASTER SURFACE USE PLAN OF OPERATIONS

CONOCOPHILLIPS COMPANY SEMU AND WARREN UNITS, LEA COUNTY, NM May 7, 2008

This plan is to be submitted with BLM Form 3160-3, Application for Permit to Drill. The purpose of this plan is to describe the location of the proposed wells, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations. This plan will allow a complete appraisal to be made of the environmental effects associated with the proposed operation.

ConocoPhillips requests that each 3160-3 serve as the application for Right-of-Way for the access, well pad, flow lines, power lines, and water hauling routes on Federal lands.

UNIT AREA: Leases in the following Sections, Townships and Ranges that ConocoPhillips Company operates. Lease numbers as follows, but not limited to:

Southeast Monument Unit

Lease	Suffix	Lessor	Township	Range	Section	QQ
155692	000	NM 557686	20	37	13	S2SW
155692	000	NM 557686	20	37	13	SE
265155	000	NMNM 90161	20	37	13	NWSW
265155	000	NMNM 90161	20	37	13	SWNE
155692	000	NM 557686	20	37	14	NWNE
155692	000	NM 557686	20	37	14	S2NE
155692	000	NM 557686	20	37	14	SE
155692	000	NM 557686	20	37	14	W2
017994	000	LC 031621B	20	37	15	E2E2
155692	000	NM 557686	20	37	22	E2NE
271248	000	NM 557686	20	37	22	E2SE
155692	000	NM 557686	20	37	23	All
155692	000	NM 557686	20	37	24	N2N2
020643	000	LC 031620A	20	37	24	S2
020643	000	LC 031620A	20	37	24	S2N2
018625	000	LC 031696A	20	37	25	N2S2
018625	000	LC 031696A	20	37	25	S2NE
018625	000	LC 031696A	20	37	25	S2NW
020643	000	LC 031620A	20	37	25	N2N2
018625	000	LC 031696A	20	37	26	NE
018625	000	LC 031696A	20	37	26	N2SE
018625	000	LC 031696A	20	37	26	SESE
155818	000	NMNM 002511	20	37	26	SWSE
155818	000	NMNM 002511	20	37	26	W2
155818	000	NMNM 002511	20	37	27	E2E2

Warren Unit

Lease	Suffix	Township	Range	Section	QQ
018642	000 LC 031670B	20	38	20	SE
018642	000 LC 031670B	20	38	21	SW
018642	000 LC 031670B	20	38	21	W2SE
032310	000 LC 061983	20	38	21	E2SE
018642	000 LC 031670B	20	38	22	S2S2
006710	000 LC 063458	20	38	25	W2
006710	000 LC 063458	20	38	26	ALL
018642	000 LC 031670B	20	38	27	N2N2
019406	000 LC 031695B	20	38	27	S2
019406	000 LC 031695B	20	38	27	S2N2
018642	000 LC 031670B	20	38	28	N2N2
019406	000 LC 031695B	20	38	28	S2
019406	000 LC 031695B	20	38	28	S2N2
018642	000 LC 031670B	20	38	29	N2NE
019405	000 LC 031695A	20	38	29	W2SW
019406	000 LC 031695B	20	38	29	E2SW
019406	000 LC 031695B	20	38	29	S2NE
019406	000 LC 031695B	20	38	29	SE
019406	000 LC 031695B	20	38	33	ALL
006710	000 LC 063458	20	38	34	ALL
006710	000 LC 063458	20	38	35	ALL

If drilling is proposed on additional leases, the BLM will be advised when they are proposed.

1. Existing Roads:

- A. The well site and elevation plat for each well will be provided with the 3160-3 when proposed.
- B. All roads to the location are shown with each individual location plat. The existing roads are illustrated and are adequate for travel during drilling and production operations. Upgrading of the roads prior to drilling will be done where necessary, or as determined during the Onsite inspections.
- C. Directions to location will be provided for each well application.
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on the lease.

2. New or Reconstructed Access Roads:

- A. The maximum width of the road will be fifteen (15) feet.
- B. It will be crowned and made of 6 inches of rolled and compacted caliche. Water will be diverted, as necessary, to avoid accumulation and prevent surface erosion.

- C. Surface material will be native caliche. This material will be obtained from a BLM-approved pit nearest in proximity to the location.
- D. The average grade will be approximately 1%.
- E. No cattle guards, grates, or fence cuts will be required.
- F. No turnouts are planned.

3. Location of Existing Wells:

See 1-mile radius plat for each well with Form 3160-3 when proposed.

4. Location of Existing and/or Proposed Production Facilities:

A. On Well Pad

- 1. **Oil Producing Wells:** It is the intent to connect a 2-7/8" steel flow line or 3" fiber re-enforced polyethylene lines, above ground, from the well to an existing production infrastructure. The flow lines will be laid along lease roads from well to facility. All necessary approvals from surface owners and/or governmental agencies will be obtained prior to construction.
 - 2. Any new facility or expansion of existing facilities will obtain all necessary approvals from surface owners and/or governmental agencies prior to construction.
 - 3. Any temporary production facilities will be on-site or at existing facilities.
 - 4. All above ground facilities will be painted per Carlsbad BLM office area guidelines, a color that blends with the surrounding area within six (6) months of well completion, unless approved otherwise.
 - 5. **Water Injection Wells:** Prior to injection, a line of either 2-3/8", 2-7/8", or 3-1/2" 2500# fiberglass tubing will be installed for the purpose of transporting water from the main water injection line to the individual wells. All necessary approvals from surface owners and/or governmental agencies will be obtained prior to construction.
- B. The planned facility diagram will be submitted with each Form 3160-3.
 - C. New power lines will be either primary 12,470 volt 3-phase or 480 volt 3-phase power for each unit. All existing power lines are Company-owned lines.

5. Location & Types of Water Supply:

- A. Some fresh water, for the surface section of the wells, may be recycled from the fresh water pit from the drilling of the previous well and, perhaps, combined or diluted with new fresh water, as necessary. Otherwise, new fresh water may be obtained from a licensed supply source.
- B. No water wells will be drilled at these locations.

6. Construction Materials:

Road and location construction materials will be obtained from the landowner in most cases. Otherwise, the construction materials will be obtained from a permitted source.

7. Methods For Handling Waste:

- A. A closed loop zero discharge system will be utilized by ConocoPhillips. The drilling waste materials may include:

- Drill cuttings
- Excess drilling fluids, including fresh water, fresh water mud, brine, and brine based mud
- Any water that might flow from the well due to possible water flows that may be encountered during drilling operations
- Excess cement (cement returns) from cementing operations

A closed loop zero discharge system will be used, no reserve pit will be built on location. The rig's steel pits along with cuttings boxes and frac tanks will be used for containments.

After drilling operations are concluded, any remaining free water (either brine water or fresh water) will be hauled to an approved disposal facility, or if in suitable condition, may be reused on the next well. In the use of a zero discharge system, the drill cuttings and cement returns circulated to surface will be hauled to an approved disposal facility.

The portion of the drilling pad to be used by the production equipment (pumping unit) will remain in use and will not be reclaimed.

B. A portable chemical toilet will be available on the location for human waste during the drilling operations.

C. Garbage, trash and waste paper produced during drilling operations will be collected in a contained trailer and disposed of at an approved landfill within 30 days after the well has been either completed or abandoned. All such waste material will be contained to prevent scattering by the wind.

D. In the event water is produced from a well during completion operations; the water will be disposed of into a steel tank. After placing the well on production through the production facilities; all water will be collected in tanks and injected into the water injection system. Produced oil will be separated into steel stock tanks until sold.

E. No toxic waste or hazardous chemicals will be generated by this operation.

8. Ancillary Facilities:

No ancillary facilities are planned.

9. Well Site Layout:

The drill pad layout will be included for each individual well on separate Forms 3160-3.

10. Plans for Surface Reclamation:

- A. If a well is a producer, all site rehabilitation shall be completed as required. The unused portion of the site will be ripped prior to replacing the topsoil. The soil-banked material will be spread over the area. Reseeding will be utilizing a BLM-approved mixture. The prepared seed shall be broadcast or drill seeded with the approved seed mixture, as required by the soil and/or wildlife needs. If the broadcast method is utilized, the seed mixture shall be doubled. There shall be no primary or secondary noxious weed seed in the native seed mixture.

- B. At such time the well location is abandoned, ConocoPhillips Company will contact the BLM for development of the final rehabilitation plan. Upon abandonment, a dry hole marker welded to the surface casing four feet below ground level. It will contain the same information as the well sign as directed by 43 CFR 3162.6 (30 CFR 221.22). The dry hole marker sealing the casing will have a 1/8" to 1/4" weep hole which will allow pressure to dissipate and make detection of any fluid seepage easier.
- C. Weeds will be controlled on disturbed areas within the exterior limits of the well pad. The control methods will be in accordance with guidelines established by EPA, BLM, state and local authorities.

11. Surface Ownership:

The surface ownership for most of these wells will be private surface and federal minerals with the exception of a few that will be on federal surface.

Private surface owners will be identified on separate Forms 3160-3. Additionally, those surface owners will be provided a copy of the respective Surface Use Plan.

12. Other Information:

- A. The area that would be impacted by the well site and access road has been, or will be, surveyed for cultural resources.
- B. ConocoPhillips will be responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites or for collecting artifacts.

If historic or archaeological materials are uncovered; ConocoPhillips Company will suspend all operations that might further disturb such materials and immediately contact the Authorized Officer, Bureau of Land Management.

Within five (5) working days the Authorized Officer will inform ConocoPhillips Company as to whether the materials appear eligible for the National Register of Historic Places; the mitigation measures the Operator will likely have to undertake before the site can be used (assuming in site preservation is not necessary); and time frame for the Authorized officer to complete an expedited review under 36 CFR 800.11 for confirm, through the State Historic Preservation Officer, that the findings of the Authorized Officer are correct and that mitigation is appropriate.

- C. ConocoPhillips Company will protect, in place, all public land survey monuments, private property corner, and Forest Service boundary markers. In the event that any such land markers or monuments are destroyed in the exercise of their rights, depending on the type of monument destroyed, the Operator shall see that they are reestablished or referenced in accordance with (1) the procedures outlined in the "Manual of Instructions for the Survey of the Public Land of the United States", (2) the specifications of the county surveyor, or (3) the specifications of the BLM.
- D. A cultural resource survey will be performed by Lone Mountain Archaeological Services, Inc. and forwarded to the Carlsbad, NM BLM office.

13. Lessee's and Operator's Representatives:

The ConocoPhillips Company representatives responsible for assuring compliance of the Surface Use Plan include:

Greg Ashdown
Manager, Permian Operations
1410 NW County Rd.
Hobbs, NM 88240
Office: 432-368-1100/Cell: 575-390-1710

Eileen D. Dey
Regulatory Manager
3300 N. "A" St., Bldg. 6
Midland, TX 79705
Office: 432-688-9042/Cell: 432-889-8161

Tommy E. Brooks
SENM Production Superintendent
1410 NW County Rd.
Hobbs, NM 88240
Office/Cell: 575-390-3275

C. John Coy
Production Supervisor
1410 NW CR
Hobbs, NM 88240
Office: 575-391-3127/Cell: 575-390-6247

Larry E. Deen
Projects Supervisor
HC 60 Box 66
Lovington, NM 88260
Office: 575-391-3186/Cell: 575-390-3421

Vernon Mackey
Production Foreman
1410 NW CR
Hobbs, NM 88240
Office: 575-391-3129/Cell: 575-390-3411


Justin C. Firkins
Regulatory Specialist
3300 N. "A" St., Bldg. 6
Midland, TX 79705
Office: 432-688-6913/Cell: 432-599-2751

Operator Certification

CONOCOPHILLIPS COMPANY

CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this APD package are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by CONOCOPHILLIPS COMPANY and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. I also certify responsibility for the operations conducted on that portion of the leased lands associated with this application with bond coverage provided by Nationwide Bond ES-0085. This statement is subject to the provisions of 18 U.S.C. 1001 for filling a false statement.



Justin C. Firkins
Regulatory Specialist
P.O. Box 51810
Midland, Texas 79710

Date: 1-14-10

Field Representative: (If not above signatory) C. John Coy, Production Supervisor
Address: 1410 NW CR, Hobbs, NM 88240
Telephone: 575-391-3186