Hydrogen Sulfide Drilling Operations Plan

Triste Draw 25 Federal 5H

Cimarex Energy Co. UL: P, Sec. 25, 23S, 32E

SFP 1 2 2014

HOBBS OCD

Lea Co., NM

30-025-42105 REC

RECEIVED

- 1 <u>All Company and Contract personnel admitted on location must be trained by a qualified</u> H2S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazards
 - C. Principal and operation of H2S detectors, warning system and briefing areas.
 - D. Evacuation procedure, routes and first aid.
 - E. Proper use of safety equipment & life support systems
 - F. Essential personnel meeting Medical Evaluation criteria will receive additional training on the proper use of 30 minute pressure demand air packs.

2 H₂S Detection and Alarm Systems:

- A. H2S sensors/detectors to be located on the drilling rig floor, in the base of the sub structure/cellar area, on the mud pits in the shale shaker area. Additional H2S detectors may play placed as deemed necessary.
- An audio alarm system will be installed on the derrick floor and in the top doghouse.

3 Windsock and/or wind streamers:

- A. Windsock at mudpit area should be high enough to be visible.
- В.

Windsock on the rig floor and / or top doghouse should be high enough to be visible.

4 Condition Flags and Signs

- A. Warning sign on access road to location.
- B. Flags to be displayed on sign at entrance to location. Green flag indicates normal safe condition. Yellow flag indicates potential pressure and danger. Red flag indicates danger (H₂S present in dangerous concentration). Only H2S trained and certified personnel admitted to location.

5 Well control equipment:

A. See exhibit "E-1"

6 Communication:

- A. While working under masks chalkboards will be used for communication.
- B. Hand signals will be used where chalk board is inappropriate.
- C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.

7 Drillstem Testing:

No DSTs r cores are planned at this time.

- 8 Drilling contractor supervisor will be required to be familiar with the effects H₂S has on tubular goods and other mechanical equipment.
- 9 If H2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H2S scavengers if necessary.

H₂S Contingency Plan Trista Draw 25 Federal 5h

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Emergency Procedures

In the event of a release of gas containing H₂S, the first responder(s) must:

- « Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- « Evacuate any public places encompassed by the 100 ppm ROE.
- « Be equipped with H₂S monitors and air packs in order to control the release.
- « Use the "buddy system" to ensure no injuries occur during the response.
- « Take precautions to avoid personal injury during this operation.
- « Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- « Have received training in the:
 - Detection of H₂S, and
 - · Measures for protection against the gas,
 - · Equipment used for protection and emergency response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO_2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas.

Characteristics of H₂S and SO₂

Please see attached International Chemical Safety Cards.

Contacting Authorities

Cimarex Energy Co. of Colorado's personnel must liaise with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. Cimarex Energy Co. of Colorado's response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

H₂S Contingency Plan Emergency Contacts

Triste Draw 25 Federal 5H

Cimarex Energy Co. UL: P, Sec. 25, 23S, 32E Lea Co., NM

)	800-969-4789	
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		Mobile
		580-243-8485
	- 	806-640-2605
	432-620-1989	432-894-5572
Construction Superintendent		432-634-2136
	911	
	575-746-2703	
	575-746-2703	
	575-746-9888	
	575-746-2701	
ommittee	575-746-2122	
n Division	575-748-1283	
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nent	575-887-6544	
ponse Commission (Santa Fe)	505-476-9600	
	505-827-9126	
cy Operations Center	505-476-9635	
so Contar (Machinetes, D.C.)	900 424 9902	
se center (washington, D.C.)	000-424-0002	
.; Lubbock, TX	806-743-9911	
bock, TX	806-747-8923	
ale Blvd S.E., #D3; Albuquerque, NM	505-842-4433	
ark Carr Loop S.E.; Albuquerque, NM	505-842-4949	
	800-256-9688	or 281-931-8884
		or 432-563-3356
	432-699-0139 575-746-2757	or 432-563-3356
	Title Drilling Manager Drilling Superintendent Construction Superintendent Construction Superintendent Drilling Superintendent Construction Superintendent Drilling Superintendent Construction Superintendent Drilling Superintendent Construction Superintendent Drilling Superintendent Construction Superintendent Superintendent Drilling Superintendent Construction Superintendent Superintendent Drilling Superintendent Construction Superintendent Construction Superintendent Superintendent Drilling Superintendent Construction Superintendent Cons	Title Office Drilling Manager 432-620-1934 Drilling Superintendent 432-620-1989 Construction Superintendent 911 575-746-2703 575-746-2703 575-746-2703 575-746-2703 575-746-2201 Dommittee 575-746-2122 In Division 575-885-3137 575-887-7551 575-887-7551 575-887-3798 Dommittee 575-887-6544 Denomittee 575-887-887-887-887-887-887-887-887-887-

