

HOBBS OCD

NOV 22 2016

Hydrogen Sulfide Drilling Operations Plan
Station SWD, #1
Mesquite SWD, Inc
UL: F, Sec.7, 24S, 32E
Lea Co., NM

- 1 All Company and Contract personnel admitted on location must be trained by a qualified 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 and 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 be placed as deemed necessary.
 - B. 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.
 - B. Windsock on the rig floor and/or on 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 Exhibits A-1 and A-2, pages 11 & 12 above.
- 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 or 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.

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 (SO₂). 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.

Hydrogen Sulfide Drilling Operations Plan

Big Eddy #6

Mesquite SWD, Inc

UL: L, Sec.34, 19S, 31E

Eddy Co., NM

Contacting Authorities

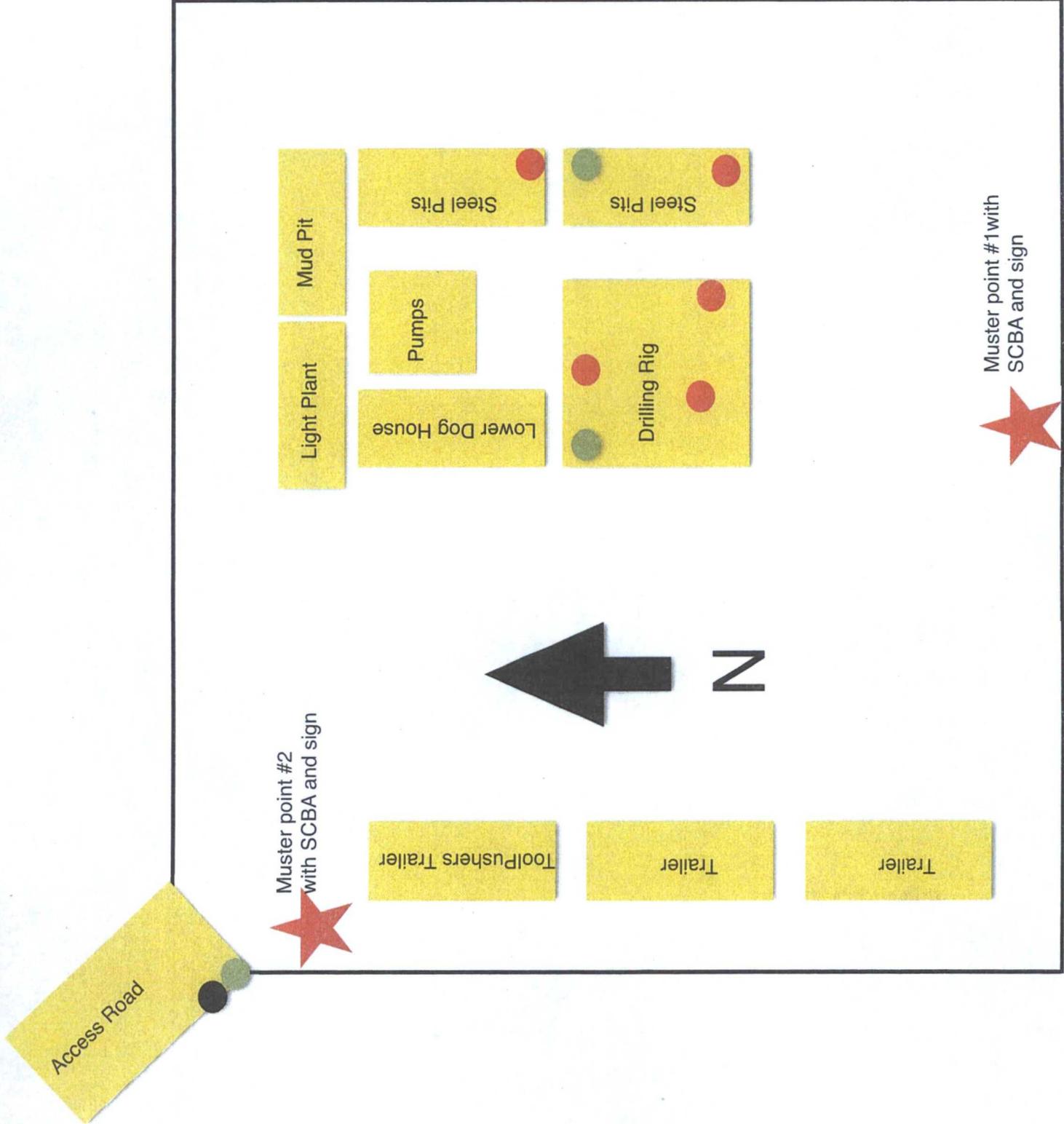
Mesquite SWD's personnel must liaise with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, 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. Mesquite SWD, Inc's response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

EMERGENCY CALL LIST

Mesquite SWD, Inc.	575-706-1840
Clay Wilson	575-706-1840
Riley Neatherlin	575-706-7288
Kay Havenor	575-626-4518

EMERGENCY RESPONSE NUMBERS

State Police	575-748-9718
State Police Lea Co.	575-392-5588
Eddy County Sheriff	575-746-2701
Lea County Sheriff	575-396-3611
Emergency Medical Services	911 or 575-746-2701
Artesia Fire and Ambulance	575-746-5050
Maljamar Fire and Ambulance	575-674-4100
Artesia General Hospital	
702 N. 13th St. Artesia	575-748-3333
Carlsbad Medical Center	
2430 West Pierce Street	575-887-4100
Lea County Emergency Response	575-396-8602
Lea County Ambulance Eunice	911 or 575-396-8602
Carlsbad Police Department	575-885-2111
Eddy County Emergency Management	575-887-9511
Carlsbad Fire Department	575-885-3125



● H2S monitors located on rig floor, in sub structure, and on both steel pits

● Wind indicators, located on rig floor, working pit, and at the entry to location

● Entry sign on access road, marking H2S conditions and all appropriate safety information

★ Muster points, equipped with SCBA, and sign marking muster point

★ Muster point #1 with SCBA and sign

Mesquite SWD INC.
Station SWD #1
2625' FNL & 2315' FWL
Sec &, T24S-R32E
Reclamation Diagram

