

**Hydrogen Sulfide Drilling Operations Plan**  
**D. K. BOYD Oil and Gas Co., Inc.**  
**Littman 8-2**  
**Lea County, New Mexico**

I. Hydrogen Sulfide Training: All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S).
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H<sub>2</sub>S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

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

1. The effects of H<sub>2</sub>S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. Knowledge of the contents and requirements of the H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H<sub>2</sub>S zone (within 3 days or 500') and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan. This Plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H<sub>2</sub>S Safety Equipment and Systems; All H<sub>2</sub>S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500' above, or 3 days prior to penetrating the first zone containing or reasonably expected to contain H<sub>2</sub>S.

1. Well Control Equipment:
  - A. Flare line with electronic igniter or continuous pilot.
  - B. Choke manifold with a minimum of 1 remote choke.
  - C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
  - D. Auxiliary equipment will include annular preventer, mud-gas separator, rotating head, and flare gun with flares.