

II. H₂S Safety Equipment and Systems

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth OF 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H₂S.

1. Well control Equipment:
 - A. Choke manifold with a minimum of one remote choke.
 - B. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
2. Protective Equipment for Essential Personnel:
 - A. Mark II Surviveair 30 minute units located in the dog house and at briefing areas.
3. H₂S Detection and Monitoring Equipment:
 - A. Two portable H₂S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 20 ppm are reached.
4. Visual Warning Systems:
 - A. Wind direction indicators as shown on well site diagram.
 - B. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location.. Bilingual signs will be used when appropriate.
5. Mud Program:
 - A. The mud program has been designed to minimize the volume of H₂S circulated to the surface. Proper mud weight, safe drilling practices, and the use of H₂S scavengers will minimize hazards when penetrating H₂S bearing zones.
6. Metallurgy:
 - A. All drill strings, casing, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.
7. Communication:
 - A. Radio communication in company vehicles including cellular telephones.