

H2S Emergency Contingency Plan For Field Operation

Alert and account for all personnel on location.

- Move away from the source of the H2S and get out of the affected area. Move upwind from the well bore. Avoid inhalation of H2S.
- Don proper personal breathing equipment – 30 min. SCBA.
- Assist any personnel in distress using the ‘buddy system’
- Alert other affected personnel on location.
- Proceed to pre-designated meeting area.
- Account for all personnel on location.

Take action to control the release of the H2S. Eliminate all possible sources of ignition.

Do not re-enter the affected area without appropriate breathing equipment.

- Take all appropriate measures to shut in the H2S gas source.
- Put out all open flames in the affected area and shut down all motors.
- **Notify Supervisors.**

The YPC Supervisor that will assess the situation and assign duties to various persons to bring the situation under control. Notifications of local law enforcement agencies, residents, and emergency vehicles will be assigned by the YPC Office.

Any press inquiries are to be referred to the YPC main office at 105 S Fourth Street, Artesia NM 88210. No statement to the Public or Media will be made by anyone other than management or a spokesperson authorized by management.

If The Above Actions Cannot Be Safely Accomplished:

Alert The Public That May Be Immediately Affected.

- Down wind residences.
- Highway or street traffic that may be affected.

Contact The Appropriate Government Agency(s) (911, Sheriff, Railroad Commissions, City Police Etc.).

- State police – if on or near a state road
- Sheriff’s dept. – if on or near a county road
(Requests help to evacuate the public if necessary and to help maintain roadblocks)
- Make any necessary recommendations, wind direction, affected area, etc.
- Start evacuation procedures where appropriate.
- Proceed with best plan (at the time) to regain control of the leak.
- Maintain tight security and safety procedures.

Rescue & First Aid For Victims Of Hydrogen Sulfide Poisoning

Do not panic!
Remain calm and think!

Don (put on) breathing apparatus.

Remove victim to fresh air as quickly as possible (i.e. Upwind from source or crosswind to achieve upwind). Do not run downwind.

Provide artificial respiration and/or CPR as necessary. (Use proper technique of turning your head after each breath to avoid inhaling exhaled H₂S). If victim's clothing is contaminated with fluid that contains H₂S then strip them to the waist.

Provide for prompt medical attention.

Notify the medical personnel beforehand that the victim has been poisoned by H₂S.

In addition to basic First Aid, everyone on location should have a good working knowledge of CPR.

Physical Effects of Hydrogen Sulfide

Concentrations		Physical Effects
0.001%	10 ppm	obvious, and unpleasant odor- safe for 8 hours exposure
0.005%	50 ppm	cause some flu-like symptoms and can cause pneumonia
0.01%	100 ppm	kills sense of smell in 3-15 minutes – may sting eyes and throat.
0.02%	200 ppm	kills sense of smell rapidly, severely stings eyes and throat, severe flu-like symptoms 4 or more hours may cause lung damage and/or death.
0.06%	600 ppm	unconscious quickly, death will result if not rescued promptly.

* at 15.00 psia and 60 deg F.

CAUTION:

Hydrogen Sulfide is a colorless, transparent gas and is flammable. It is heavier than air and may accumulate in low places.

Public Evacuation Plan

1. When the YPC supervisor determines the H2S or other emergency cannot be limited to the well location and the public will be involved, he will activate the evacuation plan.
2. The supervisor will notify local government agencies that a hazardous condition exists and evacuation needs to be implemented.
3. A safety person who has been trained in the use of H2S detection equipment and self-contained breathing apparatus shall monitor H2S concentrations, heat exposure, wind directions, and area of exposure. He/she will delineate the outer perimeter of the hazardous gas area. Extension to the evacuation area shall be determined from the information gathered.
4. Law enforcement shall be called to aid in setting up and maintaining roadblocks. They will also aid in evacuation of the public if necessary, but they shall not be asked to enter the hazardous zone.
5. Constant communications shall be maintained between company personnel and law enforcement safe for re-entry.
6. After the discharge of gas has been controlled, the safety person will determine when the area is safe for re-entry.

All atmospheric monitoring equipment shall have a minimum capability of reading H2S, oxygen, and flammability values.