

New York

Regulations for Oil and Gas Operations in H₂S Areas

1. Are there any devices/alarms required of operators that have H₂S on location, and if so, at what ppm H₂S are they required to be set?

The New York State Department of Environmental Conservation (DEC) requires operators drilling wildcat wells to adhere to the practices set forth in the American Petroleum Institute (API) publication RP49, *Recommended Practices for Safe Drilling of Wells Containing Hydrogen Sulfide*", which includes the use of H₂S monitors set at a low alarm of 10 ppm. DEC also requires adherence to the same API practices for wells with H₂S that are plugged under DEC's New York Works Well Plugging Initiative (NYWWPI). The NYWWPI is used to plug orphaned and abandoned wells that DEC has taken temporary possession of for the purposes of proper plugging and abandonment.

2. Are there any postings required of operators that have H₂S on location, and if so, under what circumstances?

DEC does not have any posting requirements for sites with H₂S on location.

3. How are facilities at which H₂S is present tracked?

If an inspector encounters H₂S above the alarm threshold of 10 ppm during a site inspection, the encounter must be documented on the associated inspection report. Inspection report information is uploaded into a tracking database that can be easily queried to show any well where H₂S has been encountered above the alarm threshold.

4. What level or levels of H₂S are considered actionable and under what circumstances?

DEC Division of Mineral Resources (DMN) safety procedures, discussed in items 12-16 below, require a low alarm threshold of 10 ppm and a high alarm threshold of 15 ppm. Any event or circumstance in which a personal H₂S detector alarm is triggered is considered a cause for action.

5. Are any additional standards for rules implemented for H₂S other than the following?
 - a. ANSI- American Nation Standards Institute.
 - b. API – American Petroleum Institute.
 - c. EPA – Environmental Protection Agency.

No additional standards for H₂S monitoring are implemented.

6. Does your state have any specific H₂S safety regulations? If so, please list them below.

DEC does not have any specific H₂S safety regulations. The requirement for specific operators/contractors to adhere to the API practices discussed in item 1 above appear either as permit conditions or contract terms in the case of well plugging conducted under the NYWWPI.

7. What are the purposes of the H₂S regulations?

- a. Public safety
- b. Worker safety
- c. Other: _____

Although DEC does not have H₂S regulations, the requirements discussed in items 1 and 6 above are enforced through permit condition or contract terms, and are intended to protect public safety and the environment.

Safety Procedures for Field Inspectors

8. What type of training is required for Field Inspectors?

All DMN personnel engaged in oil and gas field inspections receive a one-day awareness training session with respect to the properties and characteristics of H₂S and safe working practices in a potential H₂S environment.

9. Are certifications required for Field Inspectors?

No, certifications are not required for field inspectors in New York State. Inspectors are required to adhere to DMN's health and safety policy, which dictates that inspectors are to immediately exit from a site if their personal 4-gas detector's H₂S alarm sensor, or the 4-gas alarm sensor of other, on-site personnel is triggered.

10. Do you have an H₂S safety specialist, and if so, what is the specialist's level of expertise?

There is not a designated H₂S safety specialist. However, DMN does have its own Health and Safety Coordinator who works in association with DEC's Health and Safety Unit's industrial hygienists to ensure that adequate health and safety policies and procedures are in place to protect inspectors from workplace hazards.

11. Do state inspectors check H₂S levels, or do they require operators to check?

State field inspectors are not specifically required to check H₂S levels. However, DMN health and safety policy requires field inspectors to wear personal portable electronic 4-gas detectors, which include a H₂S sensor, during all field activities. Please see items 12 – 16 for additional details.

12. If state inspectors check H₂S levels, what are the required procedures/protocols for checking to determine H₂S levels?

If the state inspector's personal portable electronic 4-gas detector's H₂S alarm is activated, the inspector must:

- a. retreat from the site until the detector is no longer sounding alarm;
- b. contact their supervisor;
- c. not reenter the site under any circumstances until it is deemed safe by oil and gas industry personnel trained and qualified to use self-contained breathing apparatus; and
- d. notify the operator of the H₂S presence.

13. How often are readings required to be made? By whom? How/who keeps up with those readings?

While H₂S readings are not required to be made, it is the responsibility of the personnel wearing the H₂S detector to adhere to any safety procedures should the alarm be triggered.

14. Where are Field Inspectors most likely to check for H₂S?

- a. Top of stock tanks
- b. Wellheads
- c. Gas streams
- d. Other: _____
- e. Not applicable

DMN field inspectors do not specifically check any equipment for H₂S. Personal 4-gas detectors with H₂S sensors are worn during all inspections and therefore H₂S can be detected at any location inspected, including wellheads, flowlines, surface processing equipment and any above-ground gathering lines. Inspectors however, do not climb stock tank ladders as part of their inspections.

15. How do Field Inspectors respond to an H₂S complaint? (Please include in the response information on any requirements about when the Field Inspector must be accompanied by another person.)

DMN response to an H₂S complaint depends on the nature of the complaint. If the complaint is an odor complaint, an inspection of the location is performed. If during the course of the inspection, the inspector's H₂S alarm on their personal 4-gas detector is triggered, the inspector would comply with DMN health and safety policy, vacate the site, and notify the well operator to address the issue. If a residence was located nearby, the inspector would also notify emergency response staff if necessary. If an H₂S odor was confirmed during the inspection, but the inspector's H₂S alarm was not activated, the inspector would complete the inspection and contact the operator to address the issue. In either instance, periodic contact would be maintained with the operator until the operator

indicates that there is no longer an H₂S issue, at which point the location would be reinspected to confirm.

If however, the H₂S complaint was actually an operator notification regarding the presence of H₂S at a location, information would be gathered from the operator but a site inspection would not be performed at the time the complaint/notification was made. If circumstances warrant, DMN would assist in contacting any necessary emergency response staff. Periodic contact would be maintained with the operator until such time as the operator indicates that there is no longer an H₂S issue, at which point an inspection would be performed to confirm.

16. Are inspectors required to wear H₂S monitors? If so, what type of equipment?

DMN health and safety policy requires that all oil and gas inspectors wear personal portable electronic 4-gas detectors, which include sensors for detecting CO, O₂, H₂S, and combustible gases at the *Lower Explosive Limit*, while performing all field activities. The detectors have audio and visual alarms for detecting the listed gases, have a three-year shelf life and do not require charging. The H₂S detector's alarm threshold settings are: Low (10 ppm), High (15 ppm), TWA (time weighted average) (10 ppm) and STEL (short term exposure limit) (15 ppm).