

# New Mexico

## New Mexico EMNRD OCD

### Regulations for Oil and Gas Operations in H<sub>2</sub>S Areas

1. Are there any devices/alarms required of operators that have H<sub>2</sub>S on location, and if so, at what ppm H<sub>2</sub>S are they required to be set?

Monitoring and alarm requirements specified by State Administrative Code; relevant sections listed below and italicized for emphasis.

**19.15.11.11.B NMAC:** Detection and monitoring equipment. Drilling, completion, workover and well servicing operations involving a hydrogen sulfide concentration of 100 ppm or greater shall include hydrogen sulfide detection and monitoring equipment as follows.

(1) Each drilling and completion site shall have an accurate and precise *hydrogen sulfide detection and monitoring system that automatically activates visible and audible alarms when the hydrogen sulfide's ambient air concentration reaches a predetermined value the operator sets, not to exceed 20 ppm*. The operator shall locate a sensing point at the shale shaker, rig floor and bell nipple for a drilling site and the cellar, rig floor and circulating tanks or shale shaker for a completion site.

(2) For workover and well servicing operations, the person shall locate one operational sensing point as close to the well bore as practical. Additional sensing points may be necessary for large or long-term operations.

(3) The operator shall provide and maintain as operational hydrogen sulfide detection and monitoring equipment during drilling when drilling is within 500 feet of a zone anticipated to contain hydrogen sulfide and continuously thereafter through all subsequent drilling.

2. Are there any postings required of operators that have H<sub>2</sub>S on location, and if so, under what circumstances?

Signage requirements specified by State Administrative Code; relevant sections listed below and italicized for emphasis.

19.15.11.10 NMAC - SIGNS, MARKERS: For each well, facility or operation involving a hydrogen sulfide concentration of 100 ppm or greater, the person shall install and maintain signs or markers that conform with the current ANSI standard Z535.1-2002 (Safety Color Code), or some other division-approved standard. The sign or marker shall be readily readable, and shall contain the words "poison gas" and other information sufficient to warn the public that a potential danger exists. The person shall prominently post signs or markers at locations, including entrance points and road crossings, sufficient to alert the public that a potential danger exists.

19.15.11.12.E NMAC: Tanks or vessels. The person shall chain each stair or ladder leading to the top of a tank or vessel containing 300 ppm or more of hydrogen sulfide in the gaseous mixture or mark it to restrict entry.

3. How are facilities at which H<sub>2</sub>S is present tracked?

Facilities which meet the regulatory threshold for development of a contingency plan of managing H<sub>2</sub>S are tracked through an online database and are identified with a unique ID upon approval of a submitted contingency plan.

4. What level or levels of H<sub>2</sub>S are considered actionable and under what circumstances?

Action levels specified by State Administrative Code; relevant sections listed below and italicized for emphasis.

**19.15.11.9.C NMAC:** Plan activation. The person shall activate the hydrogen sulfide contingency plan when a *release creates a hydrogen sulfide concentration greater than the activation level set forth in the hydrogen sulfide contingency plan. At a minimum, the person shall activate the plan whenever a release may create a hydrogen sulfide concentration of more than 100 ppm in a public area, 500 ppm at a public road or 100 ppm 3000 feet from the site of release.*

5. Are any additional standards for rules implemented for H<sub>2</sub>S other than the following?

- a. ANSI- American Nation Standards Institute.
- b. API – American Petroleum Institute.
- c. EPA – Environmental Protection Agency.

- Gas Processors Association (GPA)
- National Association of Corrosion Engineers (NACE) Standard MR0175

6. Does your state have any specific H<sub>2</sub>S safety regulations? If so, please list them below.

State Administrative Code has dedicated an entire Part within State Administrative Code to H<sub>2</sub>S safety regulations specified by **19.15.11 NMAC - HYDROGEN SULFIDE GAS**

7. What are the purposes of the H<sub>2</sub>S regulations?

- a. Public safety                      Yes
- b. Worker safety                      Yes
- c. Other: \_\_\_\_\_

**19.15.11.2 - SCOPE:** *19.15.11 NMAC applies to a person subject to the division’s jurisdiction, including a person engaged in drilling, stimulating, injecting into, completing, working over or producing an oil, gas or carbon dioxide well or a person engaged in gathering, transporting, storing, processing or refining of oil, gas or carbon dioxide. 19.15.11 NMAC does not exempt or otherwise excuse surface waste management facilities the division permits pursuant to 19.15.36 NMAC from more stringent conditions on the handling of hydrogen sulfide required of such facilities by 19.15.36 NMAC or more stringent*

conditions in permits issued pursuant to 19.15.36 NMAC, nor shall the facilities be exempt or otherwise excused from the requirements set forth in 19.15.11 NMAC by virtue of permitting under 19.15.36 NMAC.

**19.15.11.6 - OBJECTIVE:** To require oil and gas operations be conducted in a manner that *protects the public from exposure to hydrogen sulfide gas.*

### **Safety Procedures for Field Inspectors**

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

H<sub>2</sub>S inspectors regularly attend 8-Hr training addressing hydrogen sulfide safety.

9. Are certifications required for Field Inspectors?

Yes, a certificate of training completion is issued to attendees.

10. Do you have an H<sub>2</sub>S safety specialist, and if so, what is the specialist's level of expertise?

Presently, No.

11. Do state inspectors check H<sub>2</sub>S levels, or do they require operators to check?

Both State Oil Conservation Division (OCD) Inspectors and Operators are required to check H<sub>2</sub>S levels.

- For State OCD Inspectors – H<sub>2</sub>S regulations are part of all inspection processes, including:
  - Well inspections;
  - Bradenhead testing;
  - Mechanical testing of UIC wells;
  - Incidents; and
  - Inspection of produced water recycling facilities, refineries, tank batteries, gas processing plants, and compressor stations.

Inspection Procedures are described in the OCD Standard Operating Procedures (SOP) for Field Inspections

- For Operators – H<sub>2</sub>S regulations are specified by regulation in **19.15.11.11.B NMAC.**

12. If state inspectors check H<sub>2</sub>S levels, what are the required procedures/protocols for checking to determine H<sub>2</sub>S levels?

State inspector requirements to don personnel monitoring during field inspection are specified in internal field inspection Standard Operating Procedures and safety policy.

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

Operators monitoring of hydrogen sulfide concentrations specified in **19.15.11.11.B NMAC**, as described above.

14. Where are Field Inspectors most likely to check for H<sub>2</sub>S?

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

15. How do Field Inspectors respond to an H<sub>2</sub>S complaint? (Please include in the response information on any requirements about when the Field Inspector must be accompanied by another person.)

The OCD will typically receive notification of a release from an operator or third party via email or phone call in accordance with 19.15.29.10 NMAC.

- a) Upon receiving a release notification, the inspector/Environmental Specialist may contact the operator if additional information is needed.
- b) Upon arriving at the site, the inspector/Environmental Specialist will wait at the entrance of the site for a site representative to ensure that the site is safe to enter. Once site safety is confirmed, inspector/Environmental Specialist will attempt to locate the representative who has operational control over the incident.
- c) If no one is at the site, and access to the site cannot be obtained, the inspector/Environmental Specialist must assess the situation to determine if emergency responders must be notified and then comply with all signage and warnings.
- A. Prior to conducting any inspection, the inspector/Environmental Specialist will participate in the operator's safety briefing, if any. After the completion of any safety briefing and ensuring the absence of any hazards, the inspector/Environmental Specialist will commence inspecting the site, documenting conditions with photos.
- d) After completing the inspection, if the original release was reported by the surface owner, the inspector/Environmental Specialist will follow up with the surface owner to confirm the surface owner's awareness, how the incident will be

handled, and the contact information for the representative of the operator who has responsibility over the release.

16. Are inspectors required to wear H<sub>2</sub>S monitors? If so, what type of equipment?

Yes, during inspection as required for personnel safety. Types of monitoring deployed may include passive gas-specific analyzers or a multi-gas monitor with an H<sub>2</sub>S-specific detector.