

# Chapter 34A - Wells

## Proposed Ordinance

June 5, 2018

Santa Barbara County

Board of Supervisors

Santa Barbara County

**PUBLIC**

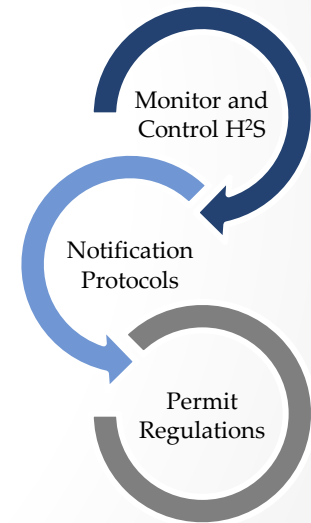
**Health**

DEPARTMENT



# Summary

- **Consider adopting an ordinance amending Chapter 34A-Wells to:**
  - Establish requirements for monitoring and controlling the release of hydrogen sulfide gas as it relates to water well drilling any time well depth exceeds 1,200 feet;
  - Introduce protocols for notifications upon a hydrogen sulfide gas release;
  - Require that the driller notify the administrative authority prior to making any changes to the granted permit in terms of depth or diameter.



# Background

- **The Recent Drought Caused:**
  - A decrease in water production in many wells
  - Complete water production failure in some wells



- **The result is that wells are being drilled deeper to ensure stable and long-term water supplies**

# Background

- **The Risk of H<sup>2</sup>S is More Likely with Deeper Well Drilling**
  - Hydrogen sulfide gas (H<sup>2</sup>S) is a colorless, highly toxic and explosive gas that can be released during water well drilling activities.
  - H<sup>2</sup>S has a distinctive “rotten egg” odor which can saturate olfactory senses.
  - H<sup>2</sup>S is considered immediately dangerous to life and health (IDLH) at 100 parts per million (ppm) in air.
  - In 2016, Goleta experienced an H<sup>2</sup>S release from well drilling activity in the area.
    - The “rotten-egg” smell of the gas travelled into nearby residential neighborhoods resulting in complaints of burning eyes and difficulty in breathing. Many people chose to evacuate their homes.





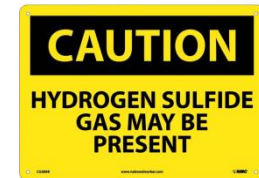
# Provisions to Address H<sup>2</sup>S

- **Require Hydrogen Sulfide Gas Meters**

- H<sup>2</sup>S Meter to be kept on-site and in operation during well drilling activities any time a well exceeds 1,200 feet in depth.

- **Notify Agencies and Implement Mitigation**

- If/When Hydrogen Sulfide Gas is detected\*, the well driller shall notify the following County agencies and initiate prompt and effective mitigations measures
  - Environmental Health Services
  - Air Pollution Control District
  - Office of Emergency Services



- **Adherence to Permit Specifications**

- Notify the administrative authority prior to making any changes or deviations from an approved permit in terms of well depth or well diameter.

\* at specified concentrations, for specified time periods, as laid out in the proposed ordinance

# Summary

- **Consider adopting an ordinance amending Chapter 34A-Wells to:**
  - Establish requirements for monitoring and controlling the release of hydrogen sulfide gas as it relates to water well drilling;
  - Introduce protocols for notifications upon a hydrogen sulfide gas release;
  - Require that any changes to the granted permit be approved by the administrative authority.

June 5, 2018  
Santa Barbara County  
Board of Supervisors

# Thank You

