



**Devon Energy Corporation  
20 North Broadway  
Oklahoma City, Oklahoma 73102-8260**

# **Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan**

**For**

**Rifleman "5" # 4**

**990'FNL & 990' FEL,  
Sec-5, T-22S R-26E**

**Eddy County NM**

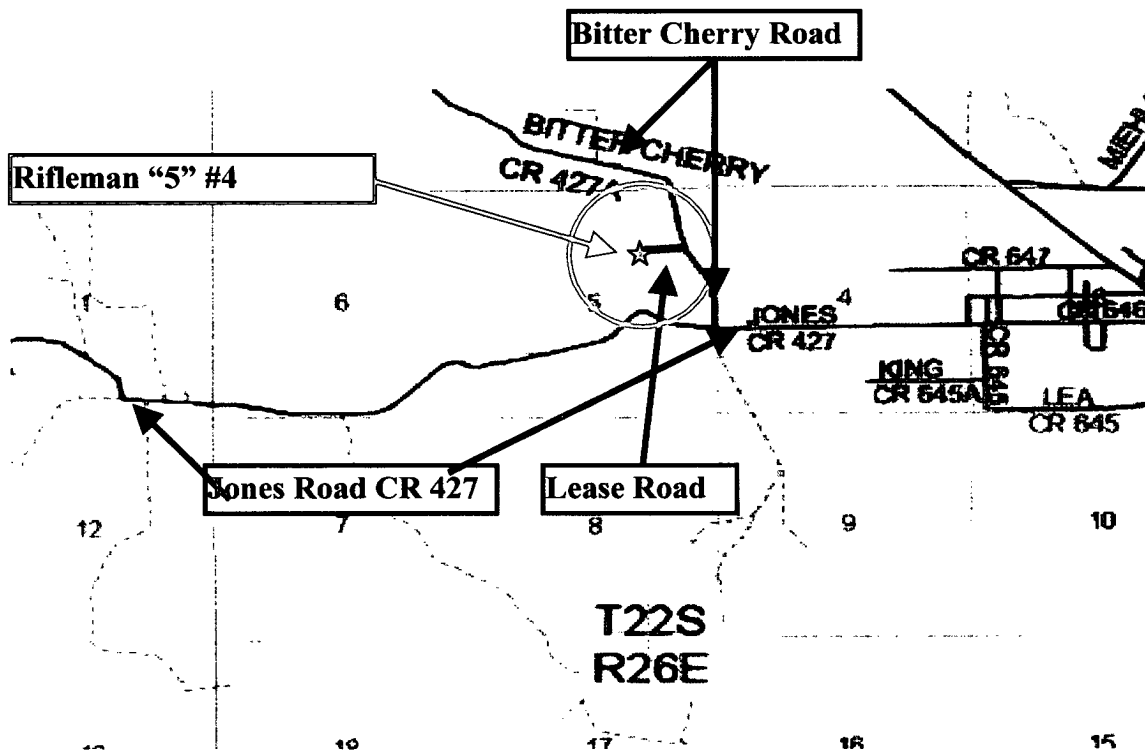
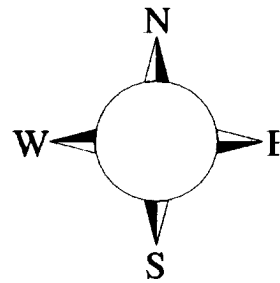
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**OKLAHOMA**

## Rifleman "5" # 4

This is an open drilling site. H<sub>2</sub>S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H<sub>2</sub>S, including warning signs, wind indicators and H<sub>2</sub>S monitor.



**Assumed 100 ppm ROE = 3000' (Radius of Exposure)**  
**100 ppm H<sub>2</sub>S concentration shall trigger activation of this plan.**

### Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated East on lease road to Bitter Cherry road. Crews should then move North or South outside of the shown ROE. Provision should then be made to block both directions of Bitter Cherry Road and both directions of Jones Road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE. There are no homes or buildings in the ROE. There is one home approximately ½ mile south. Care and consideration for the safety of the residents is primary in the event of a hazardous release. Evacuate the home despite the direction of the wind if the H<sub>2</sub>S reaches the ROE concentration.

## Emergency Procedures

In the case of a release of gas containing H<sub>2</sub>S, the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

All responders must have training in the detection of H<sub>2</sub>S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H<sub>2</sub>S monitors and air packs in order to control the release. Use the “buddy system” to ensure no injuries during the response.

## Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

## Characteristics of H<sub>2</sub>S and SO<sub>2</sub>

| Common Name      | Chemical Formula | Specific Gravity | Threshold Limit | Hazardous Limit | Lethal Concentration |
|------------------|------------------|------------------|-----------------|-----------------|----------------------|
| Hydrogen Sulfide | H <sub>2</sub> S | 1.189<br>Air = 1 | 10 ppm          | 100 ppm/hr      | 600 ppm              |
| Sulfur Dioxide   | SO <sub>2</sub>  | 2.21<br>Air = 1  | 2 ppm           | N/A             | 1000 ppm             |

## Contacting Authorities

Devon Energy Corp. personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Devon Energy Corp. Company response must be in coordination with the State of New Mexico’s ‘Hazardous Materials Emergency Response Plan’ (HMER)

## Devon Energy Corp. Company Call List

| <u>Artesia (505)</u>              | <u>Cellular</u>    | <u>Office</u>      | <u>Home</u>    |
|-----------------------------------|--------------------|--------------------|----------------|
| Foreman – BJ Cathey .....         | 390-5893 .....     | 748-0176 .....     | 887-6026       |
| Asst. Foreman – Bobby Jones ..... | 748-7447 .....     | 748-0176 .....     | 746-3194       |
| Cecil Thurmond .....              | 748-7180 .....     | 748-0171 .....     | 887-1479       |
| Mike Myers .....                  | (505) 513-0782.... | (505) 748-0187 ... | (505) 395-3020 |
| Engineer – Tom Pepper.....        | (405) 203-2242.... | (405) 552-4513 ... | (405) 728-8641 |

## Agency Call List

|                      |   |                                  |
|----------------------|---|----------------------------------|
| <b><u>Eddy</u></b>   | <b>Artesia</b>  |                                  |
| <b><u>County</u></b> | State Police .....                                      | 746-2703                         |
| <b><u>(505)</u></b>  | City Police .....                                       | 746-2703                         |
|                      | Sheriff's Office .....                                  | 746-9888                         |
|                      | Ambulance .....   | 911                              |
|                      | Fire Department .....                                   | 746-2701                         |
|                      | LEPC (Local Emergency Planning Committee) .....         | 746-2122                         |
|                      | NMOCD .....   | 748-128                          |
|                      | <b>Carlsbad</b>   |                                  |
|                      | State Police .....                                      | 885-3137                         |
|                      | City Police .....                                       | 885-2111                         |
|                      | Sheriff's Office .....                                  | 887-7551                         |
|                      | Ambulance .....   | 911                              |
|                      | Fire Department .....                                   | 885-2111                         |
|                      | LEPC (Local Emergency Planning Committee).....          | 887-3798                         |
|                      | US Bureau of Land Management.....                       | 887-6544                         |
|                      | New Mexico Emergency Response Commission (Santa Fe) ... | (505)476-9600                    |
|                      | 24 HR .....   | (505) 827-9126                   |
|                      | National Emergency Response Center (Washington, DC)     | (800) 424-8802                   |
|                      | <b>Emergency Services</b>                               |                                  |
|                      | Boots & Coots IWC .....                                 | 1-800-256-9688 or (281) 931-8884 |
|                      | Cudd Pressure Control.....                              | (915) 699-0139 or (915) 563-3356 |
|                      | Halliburton .....                                       | (505) 746-2757                   |
|                      | B. J. Services.....                                     | (505) 746-3569                   |
| <i>Give</i>          | Flight For Life - Lubbock, TX .....                     | (806) 743-9911                   |
| <i>GPS</i>           | Aerocare - Lubbock, TX .....                            | (806) 747-8923                   |
| <i>position:</i>     | Med Flight Air Amb - Albuquerque, NM .....              | (505) 842-4433                   |
|                      | Lifeguard Air Med Svc. Albuquerque, NM ....             | (505) 272-3115                   |

Prepared in conjunction with  
Wade Rohloff of;





# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

April 6, 2005

Devon Energy Production Company, LP

20 North Broadway

Oklahoma City, OK 73102

Attn: Linda Guthrie/Norvella Adams

**Re: Devon Energy Production Company: Rifleman '5' # 4, located in Unit A  
(990' FNL & 990' FEL) of Section 5, Township 22 South, Range 26 East, Eddy County,  
New Mexico, NMPM**

Dear Ms. Guthrie and Ms. Adams,

In regards with conditions for approval (in part) for the above captioned well, the New Mexico Oil Conservation Division (NMOCD) will require the following:

This is for Devon Energy Production Company, LP to take samples from the flow line of the drilling mud every 100 'in order to determine the chloride levels starting at surface down through the setting depth of the intermediate casing projected to be @ 2150'.

In addition, the surface and intermediate section of the well bore is to be drilled with fresh water mud as noted on your APD.

The results of this data are to be submitted to the NMOCD in Artesia.

Please call our office if you have any questions regarding this matter.

Respectfully yours,

Bryan G. Arrant

PES

CC: Well File