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**Hydrogen Sulfide (H₂S)
Contingency Plan**

For

*Stone 30 Federal
Lease NM 117545
Section 30, T20S, R25E
660' FNL & 1300' FWL (D)*

Eddy County, New Mexico

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Preface:

An effective and viable Contingency Plan is intended to provide prior planning and guidance in responding to emergency incidents. The primary considerations in its development is the protection of personnel, the public, company and public property, and the environment.

Although the plan addresses varied emergency situations which may occur, it recognizes that flexibility and the use of the operator, contractors and public service knowledge and experience is critical to safe resolution of emergency incidents. Response actions outlined in the plan provide a framework, which may be placed into operation without confusion. These actions should promote quick and decisive actions during the critical initial period and immediately following an emergency. As the response progresses, additional guidelines and procedures will occur to properly implement and address the emergency situation. All emergency incidents must be properly reported by Rubicon Oil and Gas, LLC policy, abiding by all state and federal agency requirements.

This Contingency Plan is intended for use on the Rubicon Oil and Gas, LLC (*Rub*) drilling, downhole and surface projects associated with the drilling and production of oil and/or gas, and the operations within their area of responsibility.

A copy of this Contingency Plan is to be maintained in the drilling dog house, rig managers trailer, and with the company representative at all times.

EMERGENCY RESPONSE ACTIVATION AND GENERAL RESPONSIBILITIES

Activation of the Emergency Action Plan:

In the event of any emergency situation, all personnel on location should first ensure that the following items are initiated. After that, they should refer to the appropriate Specific Emergency Guidance sections as specified under "Well Control" within this document for further responsibilities:

1. Notify the senior ranking contract representative on site.
2. Notify Rubicon representative in charge.
3. Notify civil authorities if the Rubicon representative cannot be contacted and the situation dictates.
4. Perform rescue and first aid as required, without harm to additional personnel.

General Responsibilities:

Operations Specialist: The Rubicon drilling/well servicing supervisor or contract supervisory personnel will serve as Operations Chief Officer for all emergency incidents. The Operations Chief Officer is responsible for:

1. Notification to the downhole/drilling supervisor for the company and rig of the incident occurrence.
2. Notification to the onsite Rubicon representative to lead the emergency response notification to area emergency responders and establish situational control and restore operations to a non-emergency state.
3. The Incident Commander shall be the Rubicon drilling supervisor on site, who will serve as the overall Incident Commander for the drilling, downhole or critical well servicing emergency incident. He/she is responsible for:
 - a. Coordinating with downhole service personnel for notification to all Rubicon personnel and their representatives.
 - b. Establishing and managing the overall incident command structure and response from inception through restoration of normal activities on location and in the area.

Contract Drilling Personnel will immediately report to their assigned stations and perform their duties as outlined in the appropriate *Specific Emergency Guidance* section within this report.

Other Contractor Personnel will report to the safe briefing area to assist Rubicon personnel and civil authorities as requested when it is safe to so do and if they have been adequately trained in their assigned duties.

Civil Authorities: Law Enforcement, Fire and EMS will be responsible for:

1. Establishing membership in the unified incident command.
2. As directed by the site supervisor and as directed by civil procedure, control site access, re-route traffic, and provide escort services for response personnel.

3. Perform all fire control activities in coordination with the site command.
4. Initiate public evacuation plans as instructed by the site command.
5. Perform rescue or recovery activities with coordination from the site command.
6. Provide medical assistance as dictated by the situation at hand.

H2S Release:

The following procedures and responsibilities will be implemented on activation of the H2S siren and lights.

All Personnel:

1. On alarm, put on escape unit (as available) and report to upwind briefing area.

Rig Manager/Tool Pusher:

1. Check that all personnel are accounted for and their condition.
2. Administer or arrange for first aid treatment and/or call EMTs as needed.
3. Identify two people best suited to secure well and perform rescue, and instruct them to don SCBA.
4. Notify Contractor management and the Rubicon representative(s).
5. Remain at the briefing area, assess and monitor personnel and overall situation for hazards or conditions that might warrant a change in the action plan.

Two People Responsible for Shut-in and Rescue:

1. Put on SCBA and acquire tools to secure well and perform rescue, i.e., wrenches, retrieval ropes, etc.
2. Utilize the buddy system to secure well and perform rescue(s).
3. Return to the briefing area and stand by for further instructions.

All Other Personnel:

1. Isolate the area and prevent entry by other persons into the 100 ppm radius of exposure (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.

Rubicon Representative(s):

1. Remain at the briefing area, assess and monitor personnel and overall situation for hazards or conditions that might warrant a change in the action plan.
2. Notify all operations representatives, H2S response representatives, police, fire department and other local emergency services, as required.

Training:

There will be an initial training session prior to encountering a known or Probable H₂S zone (within 3 days or 500 ft.) and weekly H₂S and well Control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Contingency Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received proper training.

Ignition of Gas Source:

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the New Mexico Oil Conservation Division (NMOCD) and local officials. Additionally the New Mexico State Police shall be the Incident Command of any major release. Ignition of the well will be with the concurrence of the drilling supervisor and the Rubicon supervisor as time allows.

Characteristics of H₂S and SO₂:

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

Contacting Authorities:

Rubicon personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the NMOCD 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. This response plan must be in coordination with the State of New Mexico's Hazardous Materials Emergency Response Plan (HMER).