# HYDROGEN SULFIDE (H2S) CONTINGENCY PLAN

# Assumed 100 ppm ROE = 3000'

100 ppm H<sub>2</sub>S concentration shall trigger activation of this plan.

# **Emergency Procedures**

In the event 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.
- Evacuate any public places encompassed by the 100 ppm ROE.
- 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 occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
  - Detection of H<sub>2</sub>S, and
  - Measures for protection against the gas,
  - Equipment used for protection and emergency 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 this 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	H₂S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	2.21 Air = 1	2 ppm	N/A	1000 ppm

## **Contacting Authorities**

Seely Oil Company 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 including directions to site. The following call list of essential and potential responders has been prepared for use during a release. Lime Rock Resources response must be in coordination with the State of New México's "Hazardous Materials Emergency Response Plan" (HMER).

# H<sub>2</sub>S CONTINGENCY PLAN EMERGENCY CONTACTS

<u>Company Office</u> –CML Exploration, LLC 325-573-1938 Answering Service (During Non-Office Hours)

325-207-2915

Key Personnel	`	
Name	Title	Phone Number
Nolan von Roeder	Production Engineer	Phone Number 325-574-6295 Cell: 325-072-2915
Mike Frazier	Production Supervisor	
	4	
Ambulance	,	911 975 746 2702
City Police		575-746-2703 575-746-2703
Shariff's Office		
Local Emergency Di	anning Committee	575-746-2701 575-746-2122
Now Movice Oil Con	servation Division	575-740-2122 575-748-1283
	SELVACION DIVISION	575-140-1265
<u>Carlsbad</u>		
Ambulance		911
State Police		575-8885-3137
City Police		575-885-2111
Sheriff's Office	,	575-887-7551
Fire Department		5/5-88/-3/98
Local Emergency Pl	anning Committee	575-887-6544
	Management	
		Santa Fe)505-476-9600
24 Hour		505-827-9126
New Mexico State E	505-476-9635	
National Emergency	Response Center (Washingto	on, DC)800-424-8802
Other		000 000 0000 004 004 0004
Boots & Coots IWC_		800-256-9688 or 281-931-8884
		915-699-0139 or 915-563-3356
Halliburton		575-746-2757
B. J. Services	0 04th 04 1 ú.b.b 1- T	575-746-3569
_	0 24th St. Lubbock, Texas	806-743-9911
•	49F, Lubbock, Texas	806-747-8923
Med Flight Air Amb	· · · · · · · · · · · · · · · · · · ·	
S B Air Med Service	lbug., NM 505-842-4949	

## MULTI POINT SURFACE USE AND OPERATIONS PLAN

7. 47:13-199

#### CML EXPLORATION, LLC

Paddy 24 Federal, Well No. 2 2095' FNL & 330' FEL, Sec. 24-T17S -R32E Lea County, New Mexico Lease No.: NM-059152b (Development Well)

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well; the proposed construction activities and operations plan to be followed in rehabilitating the surface and environmental effects associated with the operations.

## 1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a BLM minerals map showing the location of the proposed well as staked. The well site location is approximately 4 road miles southeast of Maljamar, NM. Traveling east of Artesia, NM on U.S. Highway 82, there will be approximately 42 miles of paved highway and .1 mile of gravel oil field road.
- B. Directions: Travel east of Artesia, NM on U.S. Highway 82 for approximately 38 miles to Maljamar, NM. Turn south on CR#126, Maljamar Rd, for .6 mile to a "Y". Take southeast road, CR #125, Mescalero Rd. for 3.3 miles. Turn east across cattle guard. The proposed access road for the Paddy 24 Federal, #2 will start approximately 500' east of the cattle guard and run east for 195 feet to the southwest corner of this well pad.

#### 2. PLANNED ACCESS ROAD:

- A. Length and Width: The proposed access road will be constructed to a surface width of 12 feet and will be approximately 195 feet long. The proposed and existing roads are color coded on Exhibit "A".
- B. Construction: The proposed access road will be constructed by grading and topping with compacted caliche. The surface will be properly drained.
- C. Turnouts: None required.
- D. Culverts: None.
- E. Cuts and Fills: None required.
- F. Gates, Cattle guards: None required. There is one in place at the county road turnoff.
- G. Off lease right of way: None required.

## 3. LOCATION OF EXISTING WELLS:

A. Existing wells within a two-mile radius are shown on Exhibit "C".

#### CML EXPLORATION, LLC

Paddy 24 Federal, Well No. 2 Page 2

# 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES;

- A. CML Exploration, LLC has production facilities on the lease at this time.
- B. If the well proves to be commercial, the necessary production facilities, gas separation-process equipment will be installed on the drilling pad. A 2.5" J-55 steel line will be run on surface parallel to the access road north for approximately 1700 feet to the Paddy Federal 24, #1 tank battery.

## 5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing and proposed access roads

## 6. SOURCE OF CONSTRUCTION MATERIALS:

A. Caliche for surfacing the proposed access road and well site pad will be obtained from the location, if available, or will purchase caliche from the closest open pit. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access road.

## 7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings and liquids will be stored in steel tanks of the closed loop mud system during the drilling operation. Drill cuttings will be delivered to CRI, Permit No. R-9166, as needed and at closure. Drilling liquids will be hauled to a separate approved disposal system.
- B. There are no mud pits to be fenced.
- C. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.
- D. Oil produced during operations will be stored in tanks until sold.
- E. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- F. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering by the wind and will be removed for deposit in an approved sanitary landfill within 30 days after finishing drilling and/or completion operations.

# 8. ANCILLARY FACILITIES:

A. None required.

## CML EXPLORATION, LLC

Paddy 24 Federal, Well No. 2 Page 3

## 9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged, 600' X 600'.
- B. Mat Size: 275' X 250', including closed loop system on the north.
- Cut & Fill: The location will require a cutting of 1-2.0 foot on the north and east with fill to the south and west.
- D. The surface will be topped with compacted caliche.

## 10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not required for operations will be removed. The location will be cleaned of all trash and junk to leave the well site in an aesthetically pleasing a condition as possible.
- B. All produced mud and fluids of the closed loop mud system will be removed to authorized disposal sites.
- C. If the proposed well is non-productive or usable as an injection well, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible.

## 11. OTHER INFORMATION:

- A. Topography: The proposed well site and access road are located west of the Mescalero Ridge and in the Querecho Plains with a 2% slope to the south/southwest from an elevation of 4089' GL.
- B. Soil: The topsoil at the well site is a tan sandy loam with possible caliche below the surface. The soil is part of the Pyote and Maljamar fine sands series.
- C. Flora and Fauna: The vegetation cover has a poor to fair grass stand consisting of three-awn, muhly, grama, showy chloris and other miscellaneous grasses along with plants of mesquite, yucca, broomweed, cacti and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, antelope, deer, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: None in the immediate vicinity.
- E. Residences and Other Structures: None in the immediate vicinity except oil field facilities.
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The proposed well site and access road is on State surface and with Federal minerals. Surface lessee is the Caswell Ranch, 1702 Gilham Dr., Brownfield, TX 79316 and they have been notified.
- H. There is no visible evidence of archaeological, historical or cultural sites in the staked area. Southern New Mexico Archaeological Services, Inc., P. O. Box 1, Bent, NM 88314, has conducted an archaeological survey and their report was submitted to the appropriate government agencies.

## ·CML EXPLORATION, LLC

Paddy 24 Federal, Well No. 2 Page 4

# 2. OPERATOR'S REPRESENTATIVE:

A. The field representative for assuring compliance with the approved use and operations plan is as follows:

Nolan Von Roeder CML EXPLORATION, LLC P. O. Box 890 Snyder, Texas 79550 Office Phone: (325) 573-1938

Direct Phone: (325) 574-6295 Cell Phone: (325) 207-2915

٤.

## **CERTIFICATION:**

I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by CML EXPLORATION, LLC and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

June 3, 2010

George R. Smith

Agent for: CML EXPLORATION, LLC

