

March 2, 2005

Transmittal of East Vacuum CO<sub>2</sub> Reinjection/EVLRP H<sub>2</sub>S Reaction Contingency Plan Revision

East Vacuum CO<sub>2</sub> Reinjection/EVLRP H<sub>2</sub>S Contingency Plan Book Holders:

Attached is a revised H<sub>2</sub>S Contingency Plan for the East Vacuum CO<sub>2</sub> Reinjection/EVLRP operated by ConocoPhillips Company.

If you have any questions regarding this plan, please call Sean Robinson at ConocoPhillips Company, (505) 391-3158.

Sean Robinson SHEAR PSM Specialist

# Distribution List for East Vacuum Plant

New Mexico Oil Conservation Division	1
New Mexico Environmental Department	1
New Mexico State Police	1
Lea County Sheriff Department	1
Lea Regional Hospital	1
Hobbs Fire Department	1
Lovington Fire Department	1
ConocoPhillips – Odessa Office	1
<b>ConocoPhillips – Permian Operations Manager</b>	1
ConocoPhillips – Buckeye Office	1
ConocoPhillips – East Vacuum Plant	1
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# HYDROGEN SULFIDE (H<sub>2</sub>S) OPERATIONS

REACTION CONTINGENCY PLAN FOR East Vacuum CO<sub>2</sub> Reinjection/EVLRP

AS SPECIFIED BY OCD OF NEW MEXICO RULE 118

> CONOCOPHILLIPS COMPANY MID AMERICA BUSINESS UNIT PERMIAN ASSET AREA

**ConocoPhillips** Company

Lower 48/LA Division

Mid America BU

Permian Basin Asset Area

# East Vacuum CO<sub>2</sub> Reinjection/EVLRP

#### H<sub>2</sub>S REACTION CONTINGENCY PLAN

IN COMPLIANCE WITH NEW MEXICO OIL CONSERVATION COMMISSION RULE 118

#### I. PURPOSE

The purpose of this Contingency Plan is to provide an organized plan of action for alerting and protecting the public following the release of a potentially hazardous volume of hydrogen sulfide. This plan prescribes mandatory safety procedures to be followed in the event of a release of  $H_2S$  into the atmosphere from exploration and production operations included in the scope of this plan. The extent of action taken will be determined by the supervisor and will depend on the severity and extent of  $H_2S$  release as defined by current New Mexico Oil Conservation Division Rule 118 and New Mexico Environmental Regulations. Release of  $H_2S$  must be reported and the Incident Log maintained.

## **II. SCOPE**

This Reaction Contingency plan shall cover the East Vacuum  $CO_2$  Reinjection/EVLRP and surrounding area, which contains gas with the specified  $H_2S$  content (refer to Section VIII:  $H_2S$  Reporting Form) and could result in the listed maximum radius of exposure. Radius of exposure is defined as the maximum distance from the source of release that a specified calculated average concentration of  $H_2S$  could exist under specific weather conditions.

## **III. PROCEDURES**

First Employee on Scene

\_\_\_\_\_ Assess the incident and ensure your own safety.

Note the following:

— Location of the incident.

\_\_\_\_\_ Nature of the incident.

— Wind direction and weather conditions.

\_\_\_\_\_ Other assistance that may be needed.

Call local supervisory personnel (refer to Section V: Emergency Call List) until personal contact is made with a person on the list.

Perform emergency assessment and response as needed (refer to Section IX: Plat of Radius of Exposure.) The response may include rescue and/or evacuation of personnel, shutting in a system and/or notification of nearby residents/public (refer to Section VII: Public Notification/Evacuation).

Secure the site.

Follow the direction of the On-scene Incident Commander (first ConocoPhillips supervisor arriving on-scene).

First Supervisor on Scene (ConocoPhillips On-scene Incident Commander)

----- Becomes ConocoPhillips' On-scene Incident Commander upon arrival to location.

----- Follow the principles of the **D.E.C.I.D.E.** process below to assess the incident. (Note wind direction and weather conditions and ensure everyone's safety).

DETECT the problem ESTIMATE likely harm without intervention CHOOSE response objectives IDENTIFY action options DO the best option EVALUATE the progress

Complete the Preliminary Emergency Information Sheet (refer to Section X: Forms/Reports).

Call your	supervisor	(refer to	Section V	: Emergency	Call List).
		(			

Perform emergency response as necessary. (This may include notification & evacuation of all personnel and/or nearby residents/public (refer to Section VII: Public Notification/Evacuation), requesting assistance from ConocoPhillips personnel or outside agencies (refer to Section V: Emergency Call List) and obtaining any safety equipment that may be required (refer to Section IV: Emergency Equipment and Maintenance).

— Notify appropriate local emergency response agencies of the incident as needed (refer to Section V: Emergency Call List).

— Ensure site security.

— Set barricades and /or warning signs at or beyond the calculated 100 ppm H<sub>2</sub>S radius of exposure (ROE). All manned barricades must be equipped with an H<sub>2</sub>S monitor and a 2-way radio.

— Set roadblocks and staging area as shown on the "Radius of Exposure Plats" (refer to Section IX: Plat of Radius of Exposure).

Establish the Incident Command Structure by designating appropriate on-scene response personnel as follows:

Recording Secretary Public Information Officer	
Safety/Medical Officer	
Decontamination Officer	

Have the "Recording Secretary" begin documenting the incident on the "Incident Log" (refer to Section X: Forms/Reports).

— If needed, request radio silence on all channels that use your radio tower stating that, until further notice, the channels should be used for emergency communications only.

—— Perform a Site Characterization and designate the following:

Hot Zone	 Hazardous Area
Warm Zone	 Preparation & Decontamination Area
Cold Zone	 Safe Area

#### AND

On-Scene Incident Command Post Public Relations Briefing Area Staging Area Triage Area Decontamination Area (Cold Zone) (Cold Zone) (Cold Zone) (Cold Zone) (Warm Zone)

— Refer all media personnel to ConocoPhillips' On-Scene Public Information Officer (refer to Section VI: Public Media Relations).

Coordinate the attempt to stop the release of  $H_2S$ . You should consider closing upstream and downstream valves to shut-off gas supply sources, and/or plugging or clamping leaks. Igniting escaping gas to reduce the toxicity hazard should be used **ONLY AS A LAST RESORT**. (It must first be determined if the gas can be safely ignited, taking into consideration if there is a possibility of a widespread flammable atmosphere.)

Once the emergency is over, return the situation to normal by:

Confirming the absence of H<sub>2</sub>S and combustible gas throughout the area,

Discontinuing the radio silence on all channels, stating that the emergency incident is over,

Removing all barricades and warning signs,

Allowing evacuees to return to the area, and

Advising all parties previously notified that the emergency has ended.

Ensure the proper regulatory authorities/agencies are notified of the incident (refer to Section V: Emergency Call List).

Clean up the site. (Be sure all contractor crews have had appropriate HAZWOPER training.)

\_ Report completion of the cleanup to the Asset Environmentalist. (Environmentalist will report this to the proper State and/or Federal agencies.)

Fill out all required incident reports and send originals to the Safety Department. (Keep a copy for your records.)

• Company employee receiving occupational injury or illnesses.

• Company employee involved in a vehicle accident while driving a company vehicle.

• Company property that is damaged or lost.

• Accident involving the public or a contractor; includes personal injuries, vehicle accidents, and property damage. Also includes any situation, which could result in a claim against the Company.

- Hazardous Material Spill/Release Report Form
- Emergency Drill Report
- Assist the Safety Department in the investigation of the incident. Review the factors that caused or allowed the incident to occur, and modify operating, maintenance, and/or surveillance procedures as needed. Make appropriate repairs and train or retrain employees in the use and operation of the system.
- If this incident was simulated for practice in emergency response, complete the Emergency Drill Report found in Section X: Forms/Reports and submit a copy to the Operations Manager. (Keep one copy in area files to document exercising of the plan.)

# IV. EMERGENCY EQUIPMENT and MAINTENANCE

## **Emergency Equipment Suppliers**

Vallen Safety Supply, Odessa	(432) 561-8418
H <sub>2</sub> S monitors (personal & fixed) Breathing air including cascade systems Safety Equipment First aid and medical supplies	
Callaway Safety Equipment Co., Inc. H <sub>2</sub> S monitors	(432) 561-5049 Odessa (505) 392-2973 Hobbs (505) 885-5799 Carlsbad
Breathing air includes cascade systems Fire fighting equipment First aid and medical supplies Safety equipment	
Leek Fire & Equipment Company, Odessa	(432) 332-1693 (432) 332 7645
$H_2S$ monitors Breathing air Fire fighting equipment First aid and medical supplies Safety equipment	(192) 292 7015
Thompson Specialties, Odessa	(432) 337-3891
H <sub>2</sub> S monitors Breathing air Fire fighting equipment First aid and medical supplies Safety equipment	
Donaldson Fire & Safety, Odessa	(432) 334-8523
$H_2S$ monitors Breathing air including trailer-mounted cascade refill tanks Fire fighting equipment	
Indian Fire & Safety, Hobbs	(505) 393-3093
H <sub>2</sub> S monitors (personal & fixed) Breathing air including cascade systems trailer mounted 30 minute air paks Safety Equipment	

#### **Emergency Equipment and Maintenance (continued)**

#### **Fire Protection**

Available for use in fighting incipient stage fires at various locations covered by this plan are approximately 60 ConocoPhillips employees who have been trained in incipient stage fire-fighting techniques common to the industry. These employees may be called for duty from maintenance, field, and production groups throughout the Permian Basin South Eastern New Mexico Area.

Personnel in the facility experiencing the fire emergency will use the fire equipment in the capacity in which they have been trained. The only exception to this rule would be when a fire truck or pumping unit is dispatched to the scene and the driver or operator of this equipment will remain the operator of said under direction of the ConocoPhillips' supervisor.

#### **General Information**

Materials used for repair should be suitable for use where  $H_2S$  concentrations exceed 100 ppm. In general, carbon steels having low-yield strengths and a hardness below RC-22 are suitable. The engineering staff should be consulted if any doubt exists on material specifications.

Appropriate signs should be maintained in good condition at lease entrances, wells, tank batteries, flow lines, gas lines, and other locations as specified in NMOCD Rule 118.

All notification lists should be kept current with changes in names, telephone numbers, etc.

All shutdown devices, alarms, monitors, breathing air systems, etc., should be maintained in accordance with applicable regulations.

All personnel working in  $H_2S$  areas shall have received training on the hazards, characteristics, and properties of  $H_2S$ , and on procedures and safety equipment applicable for use in  $H_2S$  areas.

#### **Emergency Equipment and Maintenance (continued)**

Quantity	Equipment Description
2	Fixed $H_2S$ monitors are located on the south side of Vacuum Glorieta East Unit East Battery.
1	Fixed $H_2S$ monitor is located on the north side of Vacuum Glorieta East Unit West Battery.
1	Fixed H <sub>2</sub> S monitor is located on the Vacuum Abo Battery number 4.
4	30-minute Scott Air-Paks at EVGSAU CO <sub>2</sub> Plant.
5	30-minute Scott Air-Paks at field production office.
2	Unit mounted equipped with 300 cu. ft. breathing air cylinder w/50' air hose w/dual connection.
6	300 cu. Ft. cylinders with the above safety trailer.
2	Scott hoseline units with 5-min. Ska-Paks with the above safety trailer.
3	II-A, 30-minute Scott Air-Paks with the above safety trailer.
	30 min. Scott Air Pak available in each vehicle unit.

Note: Industrial Scientific HS-110, T-80, HS-560 single gas, HMX-271, TMX-410 and TMX-412 multi gas monitors and the BW Technologies Tri-Gas Monitors and H2S ToxyClip personal monitors are available to field personnel working within the S.E. New Mexico Area.

## EMERGENCY EQUIPMENT AND MAINTENANCE (Continued)

### Fresh Air Breathing Equipment Available (ConocoPhillips)

Below is a list of safety equipment available to the East Vacuum  $CO_2$  Reinjection/EVLRP.

Equipment	Location	Telephone
1 - 300 cu. ft. breathing air cylinder w/50' air hose with dual connections.	Vacuum Glorieta East Unit	Emergency Contact Tommy Brooks
1 - 300 cu. ft. breathing air cylinders w/50' air hoseVacuum Glorieta East Unit West Battery.with dual connections.		Office (505) 391-3147 Cellular (505) 390-3275 Home (505) 397-2660
Fixed H <sub>2</sub> S Monitors w/sensor head (County Rd. No. 50)	Vacuum Glorieta East Unit Vacuum Abo Battery #4	
1 - cascade breathing air system containing:		Steve Wilson
<ul> <li>4 - 300 cu. ft. cylinders.</li> <li>1 - Portable airline system (without cylinder)</li> <li>1 - Spare 30 min cylinder</li> <li>4 - 2.2-30 min. Scott Air Paks</li> <li>2 - Scott 5 minute Ska-Paks.</li> <li>1 - 25' air hose</li> <li>1 - 100' extension cord</li> </ul>	Safety Air Trailer Located at Buckeye New Mexico Field Office	Office: (505) 391-3170 Cellular: (505) 390-3106 Home: (505) 392-1877

## V. EMERGENCY CALL LIST: ConocoPhillips Personnel

The following is a priority list of personnel to contact in an emergency situation:

Local Supervisory Personne	l Office No.	Home	Pager/Cellular/ Mobile Overdial
H.L. Owens, Supervisor Plant Process (After normal duty hours, call East Vacuum CO2 Plant @ (505) 396-7923 for emergency calls)	(505) 391-3156	(505) 392-8638	C (505) 390-8300 M 1234 / 2F P 1-800 585-4572
Tommy Brooks Production Supervisor	(505) 391-3147	(505) 397-2660	<b>C</b> (505) 390-3275 <b>P</b> 1-800 588-8773
Sean Robinson SHEAR Specialist	(505) 391-3158	(505) 396-3256	<b>C</b> (505) 390-8873 <b>P</b> 1-800 348-4620
Steve Wilson Environmentalist	(505) 391-3170	(505) 392-1877	<b>C</b> (505) 390-3106
<b>Greg Ashdown</b> Permian Asset Operations Manager	(505) 391-3124	(505) 397-2467	<b>P</b> 1-888 385-1908 <b>C</b> (505) 390-1710
Jim Werner Production Engineer	(432) 368-1425	(432) 694-1499	<b>C</b> (432) 556-7160
<b>David Kannel</b> Safety and Environmental Coordinator	(432) 368-1248		<b>C</b> (432) 556-9117

To reach the mobile tower, dial Hobbs (505) 397-5599 or (505) 397-5502, Maljamar Tower (505)396-7953; at the tone, dial the 4 digit tower over-dial number. Note: If unable to notify above personnel, call the **24 Hour Emergency Telephone Number: EVLRP/CO<sub>2</sub> Control Room** (505) 391-3152

## EMERGENCY CALL LIST: State Officials

#### **Regulatory Agencies**

New Mexico Oil Conservation Commission P. O. Box 1980 Hobbs, New Mexico 88240-1980	Office: (505) 393-6161
<u>New Mexico Environmental Improvement Board</u> 1190 St. Francis Drive Santa Fe, New Mexico 87504	Office: (505) 827-0042
<u>New Mexico Environment Department</u>	Office: (505) 393-4302
<u>New Mexico One Call</u>	Office: (800) 321-2537 Fax: (800) 260-0950

#### **EMERGENCY CALL LIST:** Local Officials

**Local Emergency Calls:** 

Law Enforcement Agencies New Mexico State Police P. O. Box 1980 Hobbs, New Mexico 88240-1980

Hobbs: (505) 392-5588

<u>New Mexico Environment Department</u>

Office: (505) 393-4302

## **EMERGENCY CALL LIST: Support Services**

Note: This is also the distribution list for East Vacuum CO<sub>2</sub> Reinjection/EVLRP Reaction Type Contingency Plan

**New Mexico Environmental Improvement Board** 1190 St. Francis Drive Santa Fe, New Mexico 87504

#### Lt. Jerry Cottrell

New Mexico State Police P. O. Box 1069 Hobbs, New Mexico 88240

W. N. Braswell, M.D. 1801 Dal Paso Hobbs, New Mexico 88240

## **Lovington Fire Department**

Perry Williams, Fire Chief 213 S. Love Street Lovington, New Mexico 88260

#### **Lovington Emergency Medical Service**

213 S. Love Street Lovington, New Mexico 88260

#### Lea Regional Hospital

Lovington Highway Hobbs, New Mexico 88240 Notification of Offset Operators East Vacuum CO<sub>2</sub> Reinjection/EVLRP Revised March 1, 2005

ChevronTexaco 56 Texas Camp Road Lovington, NM 88260

Marathon Oil Company 2350 W Marland Hobbs, NM 88240

Oxy USA, Inc P.O. Box 50250 Midland, TX 79710

Arco Oil & Gas Company P.O. Box 1710 Hobbs, NM 88240

Chesapeake Operating 5014 Carlsbad Highway Hobbs, NM 88240 ExxonMobil 717 West Sanger Hobbs, NM 88240

Shell Western E & P P.O. Box 1950 Hobbs, NM 88240

BP Amoco 1017 West Stanolind Road Hobbs, NM 88240

Yates Petroleum Company 105 South 4<sup>th</sup> Street Artesia, NM 88210

## VI. Public Media Relations

The **Public Information Officer** becomes the ConocoPhillips on-scene contact (once designated by the Phillips On-Scene Incident Commander).

Confers with Houston Office's Human Relations Representative, who is responsible for assisting in the coordination of local public relations duties.

Answer media questions honestly and <u>only with facts,</u> do not speculate about the cause, amount of damage, or the potential impact of the incident of the community, company, employees, or environment. (This information will be formally determined in the incident investigation.)

If you are comfortable answering a question or if you are unsure of the answer, use terms such as the following:

- "I do not know. I will try to find out."
- I am not qualified to answer that question, but I will try to find someone who can."
- "It is under investigation."

#### Note:

Do Not Say "No Comment." (This implies a cover-up.)

**Do Not Disclose Names of Injured or Dead!** Confer with the Houston Office's Human Relations Representative, who is responsible for providing that information.

## Alert and/or Evacuate People Within the Exposure Area

Public Notification – If the escape of gas could result in a hazard to area residents, the general public, or employees, the person <u>first</u> observing the leak should take <u>immediate</u> steps to cause notification of any nearby residents as noted in Section IX: Plat of Radius of Exposure. The avoidance of injury or loss of life should be of prime consideration and given top priority in all cases. The map in Section IX indicates areas of public dwellings or public areas, which are in the radius of exposure covered by this Reaction Contingency Plan. If the incident is of such magnitude, or at such location as to create a hazardous situation, local authorities will be requested to assist in the evacuation and roadblocks of the designated area until the situation can be returned to normal. If such evacuation procedure is implemented or public roads require blockage (refer to Section IX), the applicable New Mexico Oil Conservation Commission and the New Mexico Environment Department will be notified immediately.

Note: Bilingual employees may be needed to assist in notification of residents.

2. Evacuation Procedures – Evacuation will proceed upwind from the source of the release of  $H_2S$ . Extreme caution should be exercised in order to avoid any depressions or low-lying areas in the terrain. The public area within the radius of exposure should be evacuated in a southwesterly and southeasterly direction so as to avoid the prevailing southern wind direction.

Roadblocks and the staging area should be established as shown on the Radius of Exposure area should be established as show on the Radius of Exposure Map in Section IX, modified as necessary for current wind conditions.

At all times, note the wind direction before evacuation procedures begin. Listed below are the annual percentiles of prevailing wind directions in the Permian Basin Area:

Due South	24%
Southeast	15%
Due North	12%
Northeast	11%
Southeast	10%
Northwest	10%
Due East	8%
Due West	8%
Calm	3%

**Note:** In all situations, consideration should be given to wind direction and weather conditions.  $H_2S$  is heavier than air and can settle in low spots. Shifts in wind direction can also change the location of possible hazardous areas.

## X. FORMS & REPORTS

- I. Incident Log
- II. Preliminary Emergency Information Sheet
- III. Emergency Drill Report
- IV. Onshore Hazardous Material Spill/Release Report Form
- V. Immediate Report of Occupational Injury or Illness Report of Accident-Public Contractor" Report of Loss or Damage to Company Property
- VI. Vehicle Accident Report

Submit I copy to Appropriate District Office <u>DISTRICT I</u> P.O. Box 1980, Hobbs, NM 88241-1980 <u>DISTRICT II</u> P.O. Drawer DD, Artesia, NM 88211-0719 <u>DISTRICT III</u> 1000 Rio Brazos Rd., Aztec, NM 87410 State or Mexico Energy, Minerals and Natural Resources Department OIL CONSERVATION DIVISION P.O. Box 2088 Santa Fe, New Mexico 87504-2088

H<sub>2</sub>S REPORTING FORM

OPERATOR Phillips Petroleum Company

.

<u>East Vacuum Unit - CO Reinjection/EVLRP</u> (Pool, Plant, or Facility Name)

ADDRESS 4001 Penbrook, Odessa, TX 79762

ſ	Lease, Plant or Facility	Well No.	Sampling Point (Tank, Separator, etc.)	Location UL-S-T-R	Name of Tester	Test Method	Test Date	H <sub>2</sub> S Concentration (Report in PPM Volume if Available
	Facility		Plant Inlet	A&B S33 17S, 351 Lea County	Laborato Services	ry Tutweilei	9/18/96	12,243 ppm
			- · · ·					

REMARKS:	:
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Signature_	David Un	ger/per attachment				
Printed Name and Title Production Tech.						
Date 9/1	8/96	Telephone No. (915) 368-1461				

With Rule 118

### Laboratory Services, Inc.

4016 Flesta Drive Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR:	ConocoPhillips Attention: Mr. Lee Owens HC 60 Box 450 Lovington, New Mexico 88260		SAMPLE: IDENTIFICATION: Plant Inlet	
			COMPANY: LEASE:	ConocoPhillips
			PLANT:	E. Vacuum CO2 Plant
SAMPLE DATA:	DATE SAMPLED: ANALYSIS DATE:	8/14/03 10:45 am 8/14/03	GAS (XX)	

SAMPLED BY: ANALYSIS BY: Vickie Biggs

**Rolland Perry** 

P.02

**REMARKS:** 

03 FRI

ANALYSIS DATE: PRESSURE - PSIG

SAMPLE TEMP. °F ATMOS. TEMP. °F

H2S = 11,743 PPM

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#### COMPONENT ANALYSIS

78

COMPONENT		MOL PERCENT	GPM
Undragon Cultida	(1100)	1 174	
Hydrogen Suinde	(F123) (NO)	1.700	
Nitrogen	(12)	1,720	
Carbon Dioxide	(002)	75.080	
Methane	(C1)	8.771	1 000
Ethane	(C2)	4.645	1.239
Propané	(C3)	3.671	1.009
I-Butane	(IC4)	0.489	0.160
N-Butane	(NC4)	1.380	0.434
I-Pentane	(IC5)	0.463	0.169
N-Pentane	(NC5)	0.519	0.188
Hexane Plus	(C6+)	1.076	0.467
		100.000	8.666
BTU/CU.FT DRY	422		MOLECULAR WT. 41.5813
AT 14.650 DRY	421		
AT 14.650 WET	413		
AT 14 73 DRY	429		
AT 14.73 WET	416		
SPECIFIC GRAVITY CALCULATED MEASURED	- 1.434		

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P.P.H. RADIUS DF EXPOSURE ROAD BLOCK STAGING AREA