

GW - 021

H₂S

CONTINGENCY

PLAN



New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

Brett F. Woods, Ph.D.
Acting Cabinet Secretary

Daniel Sanchez
Acting Division Director
Oil Conservation Division



March 1, 2011

Mr. David Edwards
OXY USA
5 Greenway Plaza, Suite 15.040
Houston, TX 77046

Dear Mr. Edwards:

Re: OXY Indian Basin Gas Plant (GW-021) Oil and Gas Facilities/Operations that may Vent and/or Flare H₂S Gas

The New Mexico Oil Conservation Division (OCD) is writing to operators of the above-referenced types of facilities or operations that may have New Mexico Environmental Department (NMED) - Air Quality Bureau (AQB) Oil and Gas type Permits. The purpose of this communication is to inform operators of such facilities regarding OCD Rules that may be applicable to gas plant operators and/or oil and gas facilities/operations in the hope that it provides some clarification regarding the applicability of these rules, and to ultimately increase overall compliance

In New Mexico, the OCD Rules that pertain to Hydrogen Sulfide (H₂S) Gas are provided at § 19.15.11 et seq. NMAC (Hydrogen Sulfide Gas). The OCD Oil and Gas Rules that address "No-Flare" and the OCD Form C-129 process are provided at § 19.15.7.37 et seq. NMAC (Application for Exception to No-Flare). Gas plants have gas gathering pipelines with meters connected to operators who then either sell or vent casinghead gas into the gas gathering pipelines that feed into the plants. The OCD Rules that pertain to "Casinghead Gas" are provided at § 19.15.18.12 et seq. NMAC (Production Operating Practices).

This letter was precipitated by a recent event where a gas plant operator shut-in a "gas gathering pipeline." This "shutting-in" of the pipeline impacted approximately thirty individually-metered operators who may have continued operating instead of "shutting-in" their well(s). In spite of the fact that approximately thirty operators were impacted, the OCD observed that only one of those thirty operators contacted the OCD via Form C-129 as required under the OCD Rules to obtain approval of their application for an "exception to no-flare." (The operator initially had contacted the OCD to request approval to vent H₂S gas into the air rather than shut-in the well.) The OCD has serious public safety concerns when operators do not properly shut-in their wells when gas gathering pipelines and/or meters are shut-in, especially where the wells are near populated and/or agricultural areas due to the potential for loss of life from toxic gas.

In subsequent communications with gas plant operators who flare gas, the OCD discovered that the operators were under the impression that if their facility has an NMED- AQB Construction Permit which includes a provision to flare/emit gas, then this is all that is needed to operate in New Mexico. This is actually only partially correct because operators are also required to comply with the requirements set out in the OCD Rules regarding

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Mr. Edwards
OXY USA
March 1, 2011
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flaring and venting. For example, in the situation where a gas plant operator has notified connected well operators of a gas-gathering pipeline shut-down, each of those well operators is required to shut-in its well(s) or to obtain OCD District Supervisor approval to flare via an OCD C-129 Form. Operators who do not comply are illegally venting and/or flaring gas under OCD Rules.

In addition, gas plants and/or oil and gas operators may be required to satisfy OCD § 19.15.11 *et seq.* NMAC (Hydrogen Sulfide Gas) Contingency Plan requirements for facilities and wells in cases where 100 ppm or greater H₂S concentrations may impact public areas. OCD records indicate that DCP Midstream LP does currently have an H₂S Contingency Plan (CP) on file with the OCD. If you do not have an approved CP under § 19.15.11 *et seq.* NMAC (Hydrogen Sulfide Gas) for your gas plant yet, please submit your CP to the OCD Environmental Bureau in Santa Fe on or before August 11, 2011. *(The OCD notes that it is aware of some operators who have recently submitted CPs to the OCD that are currently under review. Please advise if this is the case for OXY USA.)*

The OCD recognizes that when multiple sets of Rules, Regulations and Statutes apply, it can sometimes be tricky to definitively determine which requirements apply, to whom and in what circumstances. Operators must, however, take all care to ensure that they are at all times operating in compliance with all applicable state, federal and/or local rules and regulations. In this instance, this means that operators are subject not only to the requirements imposed by the NMED-AQB permitting structure, but also to those set forth in the OCD Rules.

We hope that this communication has helped to clarify the issue regarding the applicability of the OCD Rules in these situations, regardless of the existence of a valid NMED-AQB permit. Please contact Carl Chavez of my staff at (505) 476-3490 if you have questions or need assistance with the CP. The OCD looks forward to bringing your facility into compliance with OCD Rules if it is not currently already in compliance. Thank you for your cooperation in this matter.

Sincerely,



Daniel Sanchez,
Compliance & Enforcement Manager

xc: Richard Goodyear, NMED- AQB
OCD Environmental Bureau
OCD District Offices

Chavez, Carl J, EMNRD

From: Mark_Treesh@oxy.com
Sent: Wednesday, March 31, 2010 10:11 PM
To: Chavez, Carl J, EMNRD
Cc: Dade, Randy, EMNRD; VonGonten, Glenn, EMNRD; Jon_Hamill@oxy.com; Marty_Johnson@oxy.com; Alonzo_Hernandez@oxy.com; scott_hodges@oxy.com; Brent_Moore@oxy.com
Subject: RE: Oxy Indian Basin Gas Plant (GW-021) C-141 H2S Contingency Plan
Attachments: Southwest-NM EAP Rev 3.pdf

Dear Mr. Chavez:

Oxy has taken your comments into consideration and revised our Emergency Action Plan (EAP) to meet OSHA regulations, NMOCD rules, API RP 55 recommendations, and Oxy requirements to ensure employees, contractors, and stakeholders are adequately protected from potential H2S exposures within our area of operations. Please refer to Oxy's comments in RED from your original considerations in the email correspondence below.

Thank you for your time as we look forward to continuing our strong relationship with the NMOCD. Please do not hesitate to contact Jon Hamill at (575) 628-4134, HES Superintendent or myself at your convenience in regard to Oxy's submittal.

Sincerely,

Mark Treesh
Production Coordinator
Indian Basin Gas Plant
Office: 575-628-4112
Cell: 575-200-8010

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Tuesday, March 02, 2010 11:59 AM
To: Treesh, Mark E
Cc: Dade, Randy, EMNRD; VonGonten, Glenn, EMNRD; Hamill, Jon R; Johnson, Marty E; Hernandez, Alonzo
Subject: RE: Oxy Indian Basin Gas Plant (GW-021) C-141 H2S Contingency Plan

Mr. Treesh, et al.:

The New Mexico Oil Conservation Division has reviewed your H2S Contingency Plan (CP) submittal, which is inclusive of applicable Oxy Facilities, compressor stations, etc. where the New Mexico H2S Regulations apply. In general the OCD notices that the submittal is generic in nature and provides a good starting point for adding more site-specific complementary information to satisfy the OCD's H2S Regulations. Consequently, the OCD requests the following be incorporated into your CP:

- 1) A facility map (U.S.G.S. 7.5 Minute topographic map) to scale displaying the layout of each facility, units (i.e., SRU, Acid Gas Compressor, Amine Systems, etc.) with the point source and any wind socks, monitors or detectors w/ detection levels for each facility, road barricade locations, escape routes, safety zone(s), emergency shut off locations near public areas where H2S is > 100 ppm, signage around facilities, road barricades, actuation stations, etc. This should help with development of site-specific emergency response plans for each applicable facility. Warning signs displaying "Poison Gas" shall be positioned along the fenceline and observable by the public. Per NMOCD 19.15.11.9B(2)(c) there is no reference to developing a U.S.G.S. 7.5 map. All that is required by Oxy according to the rule is to "provide maps and drawings that depict the ROE". Oxy believes the attached ROE map in the EAP adequately meets this requirement.

- 2) Sulfur dioxide characteristics were not specified as required in the regulations. Sulfur dioxide characteristics are on page 19-21 of the Oxy EAP.
- 3) The table on page 43 should include a column for the maximum escape rates used in the Pasquill-Gifford Equations to calculate the ROEs provided in the table and for OCD verification. Remove facilities that are not subject to H2S Regulations from the table. The table is not required according to NMOCD 19.15.11.9 B and thus was omitted from the plan.
- 4) A local emergency telephone list with phone numbers to the LEPC, State Police, nearby hospital, etc. LEPC's, state police, and nearby hospitals are located on page 24-26 of the EAP.
- 5) Training for emergency response personnel (pg. 55) shall include 40-hour Hazwoper and the annual 8 hour refresher course thereafter. Our local emergency response personnel are the local fire departments and applicable LEPC's (see page 26). Refer to page 21-22 on training & drill requirements. See page 24 for applicable Oxy 40-hour HAZWOPER trained personnel. (Note: All Oxy personnel receive Level III 24hr and annual 8hr refresher).
- 6) Facility operation descriptions for each Oxy facility where the H2S Contingency Plan applies. Descriptions of facilities are not required under the NMOCD Plan Contents of 19.15.11.9 B.
- 7) What is the alarm setting that Oxy will use? Also, the Oxy alarm activation setting (should be at maximum 10 ppm) shall be stipulated that triggers activation of the emergency response plan. Oxy is proposing 100 ppm, (pg. 41) but by the time alarms go off, this level appears to be set too high as 10 ppm provides a safety factor. Oxy utilizes 10ppm alarm for H2S presence identification. The NMOCD rules state that the EAP is not required to be activated until 100 ppm is reached. Refer to page 23 for the Activation Level.
- 8) The IBGP radio (Pg. 37) shall be present at each H2S Contingency Plan facility with a backup radio and tested weekly, and daily when possible, to ensure that the alarm system is operable, etc. Radios and radio testing is not required to accompany the EAP, according to the NMOCD Plan Contents of 19.15.11.9 B.
- 9) A detailed list per facility of the actual equipment types (i.e., eye washes, wind socks, SCBAs, APRs, etc.) and numbers available in the event of an emergency is needed (pg. 54). See pg 18, 36, and 38 for availability and location of safety equipment required by NMOCD 19.15.11.9 B (a).
- 10) Reference to API RP-55 was not made anywhere in the submittal. Refer to pg 13 for the specific API RP 55 reference and the entire Attachment A "H2S Contingency Plan" that follows API RP 55.

I have attached the OCD H2S Regulations and have highlighted in red the citations in the regulations where Oxy's initial submittal does not appear to adequately address the regulations and form the basis for the requests cited above.

Please submit your updated CP within 30 days of receipt of this e-mail message or by COB on April 1, 2010.

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
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(Pollution Prevention Guidance is under "Publications")

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From: Mark_Treesh@oxy.com [mailto:Mark_Treesh@oxy.com]
Sent: Wednesday, February 17, 2010 3:47 PM
To: Chavez, Carl J, EMNRD
Cc: Dade, Randy, EMNRD; VonGonten, Glenn, EMNRD; Jon_Hamill@oxy.com; Marty_Johnson@oxy.com; Alonzo_Hernandez@oxy.com
Subject: RE: Oxy Indian Basin Gas Plant (GW-021) C-141 H2S Contingency Plan

Mr. Chavez,

Good afternoon. Attached you will find the updated Oxy Midcontinent Emergency Response Plan for Southwest New Mexico. In addition, the ROE map for the Indian Basin Gas Plant as well as several other field facilities is also attached. The H2S contingency plan for the Oxy Indian Basin Gas Plant is contained in the Emergency action plan attachment starting on page 34.

Please let myself or Jon Hamill (copied on this email) know if there are any other questions or concerns.

Thank you for your patience

Mark Treesh
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From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Tuesday, February 02, 2010 7:18 AM
To: Treesh, Mark E
Cc: Dade, Randy, EMNRD; VonGonten, Glenn, EMNRD
Subject: FW: Oxy Indian Basin Gas Plant (GW-021) C-141 H2S Contingency Plan

Mr. Treesh:

Good morning. This is a reminder that your H2S Contingency Plan for the above subject facility is due February 17, 2010.

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
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(Pollution Prevention Guidance is under "Publications")

From: Chavez, Carl J, EMNRD
Sent: Tuesday, November 17, 2009 10:27 AM
To: 'Mark_Treesh@oxy.com'
Cc: Dade, Randy, EMNRD; Ezeanyim, Richard, EMNRD; VonGonten, Glenn, EMNRD
Subject: RE: Oxy Indian Basin Gas Plant (2RP-22-0) C-141 Acid Gas Compressor Shutdown Due to Low Lube Oil Flow Shutdown to Cylinders

Mr. Treesh:

The New Mexico Oil Conservation Division (OCD) has completed its review of your e-mail submittals.

The C-141 corrective actions taken hopefully will correct the reoccurring problem.

The Emergency Response Plan for Southwest New Mexico (Eddy, Lea, Chavez & Roosevelt Counties) does not appear to specifically address OCD § 19.15.11 NMAC (Hydrogen Sulfide Gas- see attached regulations) regulatory requirements for each facility. While the OCD commends OXY for developing a generic plan (Pages 41-42 attempting to display all OXY facility area of exposures, etc., which are not discernible from the figure and appear generic in nature), it appears that either a new generic plan focusing on OCD's Hydrogen Sulfide Gas Regulations is needed with site-specific Contingency Plan (CP) pages with maps to scale for every facility that may have 100 ppm or greater H₂S gas releases (see attached regulations).

Please take a moment to review the OCD regulations and contact me to discuss how OXY may develop one generic plan for all applicable facilities in New Mexico that will satisfy § 19.15.11 NMAC or an individual CP for each facility that the regulations applies to in New Mexico. The OCD requests that you submit a H₂S CP for the Oxy Indian Basin Gas Plant within 90 days of receipt of this e-mail. In addition, OXY may desire to develop one generic CP with site specific pages that display the required information for each applicable facility.

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
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(Pollution Prevention Guidance is under "Publications")

From: Mark_Treesh@oxy.com [mailto:Mark_Treesh@oxy.com]
Sent: Friday, November 13, 2009 7:14 PM
To: Chavez, Carl J, EMNRD
Cc: Dade, Randy, EMNRD; Ezeanyim, Richard, EMNRD
Subject: RE: Oxy Indian Basin Gas Plant (2RP-22-0) C-141 Acid Gas Compressor Shutdown Due to Low Lube Oil Flow Shutdown to Cylinders

Mr. Chavez,

As requested attached are:

- 1] The OXY-Midcontinent Emergency Response Plan (ERP) for southwest New Mexico. The H₂S contingency plant is included in the ERP with maps of the Indian Basin area including the plant showing radius of exposures and the nearest public residences on page 41 and 42.
- 2] An amended C-141 that contains an improved description of the problem and events leading up to the release and the actions we took to remedy the problem and to limit the probability of recurrence.

I apologize in the slight delay in getting you this response as I have been experiencing internet / email problems throughout the day.

Mark Treesh
Production Coordinator
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From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Thursday, November 05, 2009 5:05 PM
To: Treesh, Mark E
Cc: Dade, Randy, EMNRD; Ezeanyim, Richard, EMNRD
Subject: Oxy Indian Basin Gas Plant (2RP-22-0) C-141 Acid Gas Compressor Shutdown Due to Low Lube Oil Flow Shutdown to Cylinders

Mr. Mark Treesh:

Good afternoon. The Oil Conservation Division (OCD) is in receipt of your C-141 Form for a 90.67 MCF release that occurred on 10/31/2009 at 4:42 p.m. The OCD has received prior C-141s indicating a similar description for cause of the release ("acid gas compressor shutdown due to low lube oil flow shutdown to cylinders").

You indicated in a telephone call that when the compressor shuts down 98% of the gas is flared with a sulfur dioxide emission. In addition, a release form is submitted to the NMED for air quality monitoring purposes.

I have attached the C-141 Form for reference.

Based on the final C-141 Form that was submitted, the OCD requests the following:

- 1) Copy of your H2S Contingency Plan (CP) as required by 19.15.11 NMAC (Hydrogen Sulfide Gas). The CP should have a map to help assess public health threats from the releases that have been occurring.
- 2) Amend the C-141 Form to describe the cause of the problem and remedial action taken, in this case, to fix the problem or steps taken to remedy the situation and prevent these releases from re-occurring.

The OCD hopes that the problem with the compressor is fixed to prevent these "Major Releases" from occurring in the future. Please resubmit a recompleted C-141 Form and CP to me by close of business next Friday, November 13, 2009.

Please contact me if you have questions. Thank you.

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(Pollution Prevention Guidance is under "Publications")

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OXY MID-CONTINENT

EMERGENCY ACTION PLAN

SOUTHWEST-NEW MEXICO

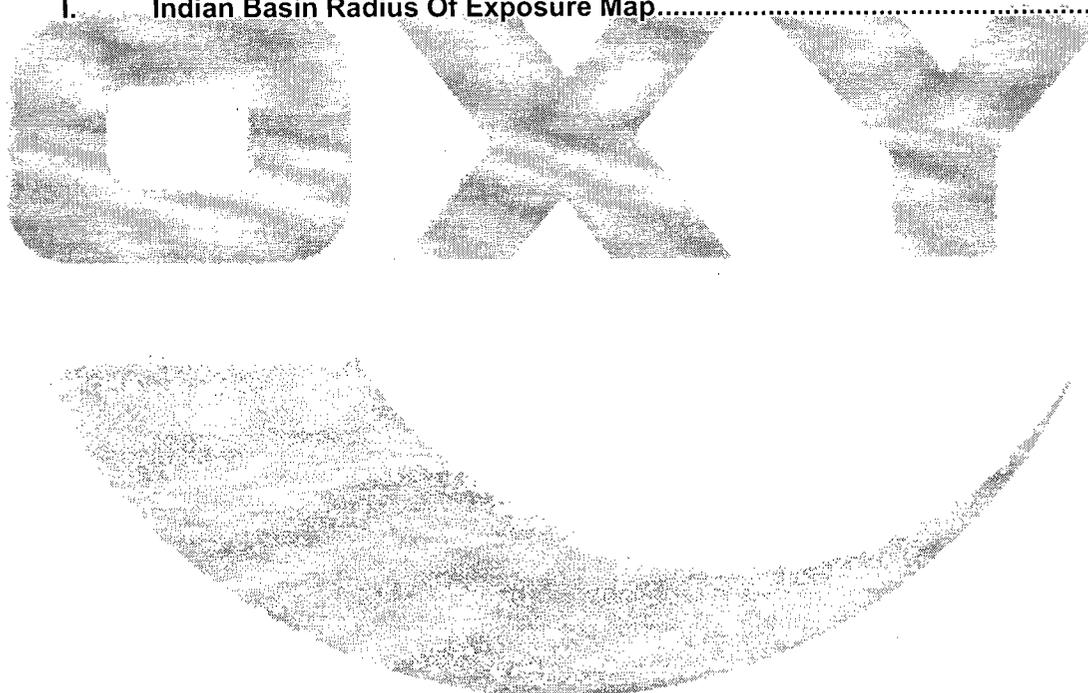
This document includes Eddy, Lea, Chavez and Roosevelt Counties in New Mexico for Indian Basin Gas Plant and Production Well Facilities

REVISION NUMBER	DESCRIPTION OF CHANGE	WRITTEN BY	APPROVED BY	EFFECTIVE DATE
3	Reorganization of Material to better match regulations as well as addition of missing information	M. Treesh		3/31/2010

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I. PURPOSE

This Emergency Action Plan is intended to provide prior planning and guidance in responding to emergency incidents. The primary considerations in its development are personnel and public safety, protection of company and public property and protection of the environment.

The New Mexico Indian Basin Gas Plant and Production Areas of the Southwest Mid-Continent team is responsible and accountable for the implementation, evaluation, and maintenance of this Emergency Action Plan in accordance with Oxy Mid-Continent's safety guidelines as well as 29 CFR 1910.38.

II. SCOPE

This plan addresses varied emergency situations that may occur in the Oxy Mid-Continent Southwest-NM Operating Area, and it recognizes that flexibility and the use of the organization's knowledge and experience is critical to safe resolution of emergency incidents. Response actions outlined in the plan provide a framework that may be placed into operation without confusion. This will promote quick and decisive actions while protecting the safety of personnel and the public.

III. EMERGENCY ACTION PLAN

A. Emergency Reporting Procedure

In all cases of emergencies notification of any of the following types of emergencies should follow the OXY-Mid-Cont Southwest (Carlsbad) Incident Notification Flow Chart. See attachment - **OXY-Mid-Cont Southwest (Carlsbad) Incident Notification Flowchart**

1. Fires or Explosions

It is the intent of Oxy Mid-Continent that employees will fight fires only in their "incipient" stage of fire fighting, utilizing hand held fire extinguishers. All Team Members will be given annual training in the use of equipment available for fire fighting and/or fire containment.

Any Oxy Mid-Continent employee who helps to coordinate fire department responses must be utilizing appropriate Personal Protective Equipment (PPE) as specified by the Production Coordinator, HES Specialist, or the Unified Command.

The responding fire department will have primacy when they have received a call from an Oxy Mid-Continent representative requesting assistance in controlling a fire on any Oxy Mid-Continent property. The responding fire department's actions, coordinated with the Production Coordinator or the Unified Command, will be to contain and extinguish the fire.

The following steps shall be followed by Oxy Mid-Continent employees after discovery of a fire:

- a) The Individual who discovers a fire shall:
 - (1) Make a decision whether to attempt to fight the fire or call for help
 - (2) Notify the Production Coordinator for the area, after controlling an incipient stage fire

If the fire is not in its incipient stage,

- b) All Personnel shall:
 - (1) Initiate an emergency shutdown
If possible,
 - (2) Operate the valves necessary to shut in or divert gas to flare as they exit the facility, but only if they can do so without incurring undue risks
 - (3) Evacuate the area
 - (4) Call the Production Coordinator for that area or one of the Management Members listed on the Emergency Telephone List

- c) The Production Coordinator or Management Member called shall assign duties to assigned personnel to:

- (1) Call the fire department
- (2) Call the appropriate employees
- (3) Notify regulatory agencies
- (4) Authorize re-entry to the area

2. Personal Injury or Death

If a personal injury or death occurs on Oxy Mid-Continent property the following steps shall be taken:

- a) Call for assistance
- b) Prompt medical treatment for the victim shall be administered. This is the responsibility of all trained individuals. Treatment of injured persons is to be concentrated toward life threatening conditions (A, B, C's) such as:
 - (1) Airway Obstructions
 - (2) Breathing
 - (3) Circulation and Spinal injured persons

Do not move the victim unless the injured is in a hazardous environment or situation that is an imminent danger to the victim or responders

- c) Summon an ambulance for any injury that appears to be serious

3. Spills

a) Oil and Produced Water Spills

In the event of an oil or produced water spill the following steps shall be taken:

- (1) The individual who discovers the spill shall:
 - (a) Immediately notify the appropriate Production Coordinator for the area the spill has occurred
 - (b) Assess the situation
 - (c) Safely stop the source of the spill from an area identified as non-hazardous from a toxic or IDLH concentration

NOTE: If the condition of the area is unknown, all incident scenes shall be treated as IDLH

- (2) The Production Coordinator shall:

- (a) Proceed to the spill site to direct control and containment activities
- (b) Assess the need for additional assistance and equipment
- (c) Immediately contact the HES Specialist if additional assistance and equipment is needed

b) Chemical Spills

In the event of a chemical spill the following steps shall be taken:

- (1) The individual discovering the spill shall:
 - (a) Contact the appropriate Production Coordinator for the area that the spill has occurred
 - (b) Attempt identification of the material spilled with the proper PPE

Upon proper identification of the chemical,

- (2) The Production Coordinator shall:
 - (a) Contact the local HES Specialist,
 - (b) Consult the Material Safety Data Sheet (MSDS) and/or DOT Emergency Response Guidebook for hazardous chemical characteristics and proper handling procedures

After proper handling procedures have been identified, control and containment of the spill shall begin.

If the incident is to be regulated by HAZWOPER guidelines, then all site activities must be directed by the Production Coordinator or HES Specialist.

If HAZWOPER does not apply,

- (3) The Production Coordinator shall
 - (a) Proceed to the spill site and direct control and containment activities
 - (b) Determine the need for additional assistance and equipment
 - (c) Immediately contact the HES Specialist if any additional assistance or equipment is needed

NOTE: CHEMTREC (800-424-9300) may be contacted with any questions and/or direction concerning appropriate responses or chemical hazards

4. Bomb Threat

In the event of a bomb threat the following steps shall be taken:

- a) The individual receiving the call, on or off site, should:
 - (1) Try to get as much information as possible from the caller
 - (2) Immediately contact the Production Coordinator for the area
- b) The Production Coordinator shall:
 - (1) Notify Corporate Security at (281) 366-2594 and follow the directions given
 - (2) Consider evacuation of the plant/location
 - (3) Deem necessary whether road-blocks may need to be set up at the plant entrances and road intersections
 - (4) Inform Police or Sheriff's Department
 - (5) Inform Fire Department
 - (6) Contact the Houston Hotline for technical assistance and communication support
 - (7) Organize search efforts with the assistance of the local law enforcement agencies

If a bomb is actually located or a bombing does occur,

- (8) Contact the Alcohol, Tobacco & Firearms Commission
- (9) Notify Public Affairs and the area Operation Manager
- (10) Work with the media and initiate documentation efforts

5. Hazardous Gas Release

In the event of a hazardous gas release the Hazardous Gas Release Contingency Plan will be activated. See attachment - **Hazardous Gas (H2S) Release Contingency Plan**

6. Natural Disasters

a) **TORNADOES**

If a tornado is sighted,

- (1) The Individual sighting the tornado should:
 - (a) Notify other persons in the area by radio and/or mobile phone
 - (b) Contact Production Coordinator
 - (c) If the individual has had "spotter" training through the National Weather Service, contact the County Sheriff's Office to report funnel clouds or tornadoes
 - (d) Seek cover in a low-lying area away from power lines (i.e. ditch or culvert), or cover in an internal room with no windows

After the tornado has passed,

- (2) The Production Coordinator shall:
 - (a) Coordinate accounting of all employees
 - (b) Evaluate damage assessments and make appropriate notifications

NOTE: The Emergency Action Plan will remain in effect until operations return to normal.

b) **EARTHQUAKES**

If an earthquake occurs,

- (1) The Production Coordinator shall:
 - (a) Account for all employees
 - (b) Evaluate for damage
 - (c) Keep the Emergency Action Plan in effect until the emergency is over and operations are returned to normal

7. Non-Oxy Emergencies

It is possible that an OXY employee could discover a potentially hazardous leak from a pipeline or other facility not operated by OXY. Leaks could be reported to OXY personnel but upon investigation, turn out to be from someone else's facility. In such instances, the OXY employee(s) involved should lend assistance without unduly endangering

themselves. Generally, such assistance would include the following actions:

- a) Immediately notify OXY supervisors or HES personnel of involvement in "Non-OXY" emergency
- b) Alert and/or assist any person apparently in immediate danger without entering a toxic or IDLH atmosphere
- c) Notify the appropriate Public Safety Personnel of the location and nature of the emergency and assistance as needed
- d) Notify the Operator of the facility if the identity can be determined. See Attachment - **Pipeline and Other Companies Contact List**
- e) Continue to lend assistance, such as manning road barricades, until relieved by employees of the Operator or Public Safety Personnel

B. Emergency Evacuation Procedure

1. Activate Emergency Evacuation Procedure

When an emergency evacuation is deemed necessary the following steps shall be taken:

- a) Contact the first available designated Supervisor on the call list
- b) Notify the Supervisor of the circumstances and whether or not immediate assistance is needed
- c) Activate Emergency Evacuation Alarm
- d) Initiate a facility ESD / BD if necessary
- e) Obtain the facility sign-in sheet
- f) Proceed to the designated muster area
- g) The Supervisor shall:
 - (1) Notify (or arrange for notification of) other supervisors and other appropriate personnel (including public officials) on the call list
 - (2) Make recommendations to public officials regarding blocking unauthorized access to the unsafe area and assist as appropriate
 - (3) Make recommendations to public officials regarding the evacuation of the public and assist as appropriate
 - (4) Notify, as required, state and local officials and the National Response Center to comply with release reporting requirements
 - (5) Monitor the ambient air in the area of exposure (after following abatement measures) to determine when it is safe for re-entry

2. Activation of Evacuation Alarm

This procedure shall be performed when an emergency evacuation has been initiated. The following steps will be performed from a Whelen encoder located either in the Indian Basin Gas Plant control room or the main office foyer.

- a) Press the "PA" button then the "Send" button
- b) Announce the preferred muster area location over the public address system using the public address radio mic.
- c) Press the "Clear" button then the "Send" button
- d) Press the "WAIL" button then the "Send" button

The evacuation alarm will sound for 30 seconds and then deactivate.

3. Location of Muster Areas

- a) Indian Basin Gas Plant

The primary muster area is located across the road from the main office, near the Wilson Warehouse. If this primary location is deemed unsafe for assembly due to the close proximity of the incident site, wind direction, or other reason; an alternative (secondary) muster area has been designated southeast of the plant near the scrap metal storage area (beyond the horizontal storage bullet tanks). If this area is also deemed unsafe for any reason, another muster area will be announced over the PA speaker.

- b) Carlsbad Field

Muster areas will be decided during the prejob safety meeting. In lieu of a safety meeting the practice of moving uphill and upwind of the release will be followed.

C. Critical Operations Procedures prior to Evacuation

This section is not applicable to the Indian Basin Gas Plant nor the Carlsbad Field operations because there are no critical operations in need manning prior to an evacuation.

D. Procedures to account for all employees after evacuation

At the designated muster area following an evacuation the Production Coordinator shall designate one of the Oxy employees to take a head count of all persons suspected to be in the area of the incident including Oxy and contract employees as well as any visitors. At the Indian Basin Gas Plant the facility sign in sheet that was collected prior to evacuation will be used to facilitate the head count. Oxy employees and contractors/visitors should muster in separate groups to aid in a swift head count. Personnel unaccounted for will be reported to the Production Coordinator as soon as possible.

If missing persons are identified Rescue procedures shall be initiated.

E. Rescue or Medical Duty Procedures

1. Medical Duty Procedures

In the event someone is injured, loses consciousness, or becomes suddenly ill, at least one employee currently certified in first aid and CPR shall be summoned by the responding employee. When the extent of the injury is unknown, the person should not be moved unless he/she is in danger of further injury or illness.

The first aid/CPR certified employee shall:

- a) Summon the Carlsbad EMS if they decide it appropriate
- b) Remain with the injured or ill person and administer care until the ambulance arrives.

If the injured employee suddenly loses consciousness or is found unconscious, high levels of hydrogen sulfide gas in the area shall be assumed and Rescue procedures shall be initiated.

2. Rescue Procedures

After an evacuation head count identifies missing persons the Production Coordinator shall:

- a) Designate a team of two persons that will be sent to search and rescue the missing persons only if it can be done safely and with appropriate personal protective equipment
- b) Designate a backup team of two employees to remain on standby until the rescue is completed.
- c) Rescuers shall remain within eyesight of one another and in radio contact with the muster area at all times.

The responding employee(s) shall:

- d) Attempt to contact another person and inform them of the emergency so he/she can summon help if they are alone on location.
- e) Don a self-contained breathing apparatus (SCBA) and any other appropriate personal protective equipment prior to rescue. Rescue by two persons with two standby persons is preferred.
- f) Transport the unconscious person to fresh air and examine for breathing and pulse.
- g) Perform rescue breathing or CPR if appropriate. Appropriate personal protective equipment shall be used by the caregiver. (See the Blood-borne Pathogens Program for details.)
- h) Any person overcome by hydrogen sulfide gas should be seen by a physician as soon as possible.

The Production Coordinator or designee shall investigate the incident immediately to ensure that a hazardous atmosphere no longer exists.

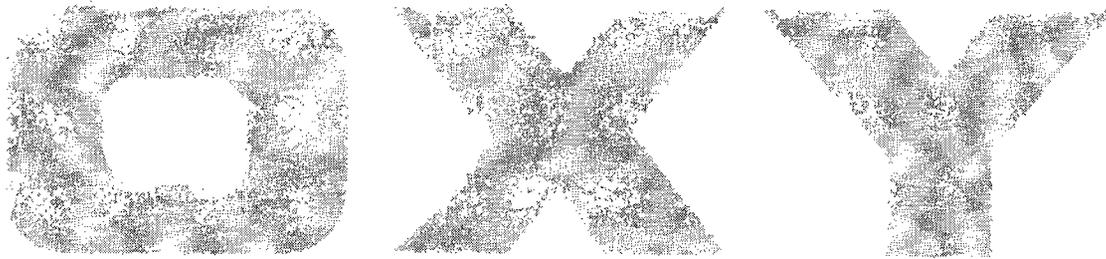
Appropriate accident forms and notifications shall be completed. The New Mexico OSHA office in Santa Fe shall be notified within 48 hours in the event of a fatality or catastrophe (hospitalization of five or more individuals). See the Emergency Call List.

F. Employee Contacts

The following people may be contacted for more information on this plan and all employees' roles and responsibilities in this plan.

1. Plan Information Contacts

- a) Production Coordinators
- b) HES Supervisor
- c) HES Specialists



IV. ATTACHMENTS

A. Hazardous Gas (H₂S) Release Contingency Plan

1. Plan Scope

This plan has been developed for use to alert and protect the public with due consideration of API RP 55 and in accordance with Subsection B of 19.15.11.9 NMAC.

2. Emergency Procedures

a) Personnel Responsibilities

(1) Production Coordinator

The Production Coordinator serves as the Incident Commander and will direct the actions of all team members on-site and initiate an evacuation as necessary to the designated mustering point. The Production Coordinator will determine when an emergency is considered over and operations have returned to normal. The Production Coordinator will take a leadership role in establishing a Unified Command with civil authorities, local responders, and community response officials. The Production Coordinator will also be responsible for all direct contact with the news media and for all other documentation. Primary responsibility is to notify or delegate all Oxy Mid-Continent and contract personnel as well as civil authorities required for emergency response to the situation.

(2) HES Representatives

The HES Representative serves as the Safety Officer in the ICS structure. The primary responsibility of the local HES Representative is to notify the appropriate regulatory agencies whenever environmental concerns and regulations dictate. Additionally, the HES Representative is responsible to provide clean-up directions and requirements for spill remediation, to include disposal guidelines. The HES Representative is responsible for assessing the hazards of the situation, advising the Production Coordinator of those hazards and appropriate responses, to ensure the safety of response personnel. HES Representative will take the lead in assisting the Unified Command in establishing "Hot" and "Cold" zones as dictated by the incident. The HES Representative should coordinate all required regulatory agency and Houston Office notification in the event of serious injury or death. HES Representative should assist in acquiring and deploying the appropriate Personal Protective Equipment

(PPE) as needed. After returning to normal operations, the HES Representative should critique the outcome of the incident and coordinate the investigation and post-appraisal of the incident. HES Representative should perform all other duties as requested by the Production Coordinator or HES Manager.

(3) Logistics Section Chief

The Logistics Section Chief (LSC) is responsible for assisting the Incident Commander by arranging all aspects of field logistical support. The LSC must accommodate not only OXY responders but also municipal or other industrial responders as requested by the Production Coordinator or OMCSC. Because there may be limited logistical support capabilities at the location, it is recommended the LSC rely heavily on the OXY Crisis Team Logistical Manager in Houston. The Logistical Manager's staff has multiple contracts and processes already in place to assist in such issues as food, lodging, vehicles, aircraft, etc. The following is an abbreviated list and recommended sequence to ensure the LSC is able to achieve his/her responsibilities.

- (a) Initiate both victim and emergency responder "personnel accountability systems" upon arrival to the incident scene.
- (b) Establish and maintain a communication tool between the Production Coordinator and the OXY Crisis Team Operations Manager in Houston.
- (c) Assist in media interactions and establish the "OXY Point of Contact" for media inquiries.
- (d) Initiate and maintain an incident documentation system to ensure all activities are captured and a summary report will be available.
- (e) Begin supplying logistical support to the incident scene, staging operations, and local areas as soon as practical.
- (f) Coordinate site security capabilities with the Production Coordinator, OMCCS, HES Specialist, and responding municipalities.

(4) Media Contact:

The Designated Media Contact is assigned to the Logistics Section and will function through the LSC. The Media Contact will work very closely with the Incident Commander, OMCSC, and the Oxy Public Affairs Representative. See attachment - **Media Relations**. Initial Priorities for the Media Contact will include the following:

- (a) Establish themselves as the onsite Media Contact for all media inquiries.
- (b) Work with the Public Affairs to establish and distribute an initial press release as soon as feasible and with an announced time of when additional updates would be available.
- (c) Either assist the Incident Commander or personally conduct all initial media interviews until relieved by a member of the External Affairs group.
- (d) Assist in all other functions of the Logistics Section as requested by the LSC or Incident Commander.

(5) Other Employees:

All other personnel should stand by and wait for instructions from the Incident Commander. Once accounted for, Southwest - NM employees may be called upon by the LSC to provide logistical support in many different directions. These may include:

- (a) Contacting vendors for supplies
- (b) Contacting local company support groups for assistance to the general public
- (c) Providing onsite logistical support to the responders "staging area" where others wait to assist in the actual response efforts
- (d) Escorting vendors to remote locations as a guide
- (e) Blocking roads and assisting with evacuations.

b) Immediate Action Plan (per Paragraph 7.6 of API RP 55)

Upon discovering or recognizing a potentially hazardous H₂S release OXY employees should immediately implement the following immediate action plan:

- (1) Alert and account for facility personnel
 - (a) Move away from the source and get away from the affected area
 - (b) Don appropriate personal protective equipment
 - (c) Alert other affected personnel
 - (d) Assist personnel in distress
 - (e) Proceed to the designated emergency Muster Area
 - (f) Account for on-site personnel by reference to Control Room sign in log or by other means

The primary muster area for the Indian Basin Gas Plant is located across the road from the main office, near the

Wilson Warehouse. If this primary location is deemed unsafe for assembly due to the close proximity of the incident site, wind direction, or other reason; an alternative (secondary) muster area has been designated southeast of the plant near the scrap metal storage area (beyond the horizontal storage bullet tanks). If this area is also deemed unsafe for any reason, another muster area will be announced over the Public Address speaker.

(2) Take immediate measures to control the presence of or potential of H₂S discharge and to eliminate possible ignition sources. Emergency Shutdown Procedures should be initiated as deemed necessary to correct or control the specific situation. When the required action cannot be accomplished in time to prevent exposing operating personnel or the public to hazardous concentration of H₂S proceed to the following steps, as appropriate for the site specific conditions.

(a) Alert the public (directly or through appropriate government agencies) that may be subjected to an atmosphere exceeding 30 ppm of H₂S

Alerting of any residences in affected area will be initiated by OXY personnel designated by Production Coordinator or Incident Commander by the following methods:

- (i) Telephone
- (ii) Direct contact at residence
- (iii) Utilization of public agencies

Phone list and addresses of neighboring land owners are included in the Emergency Action Plan. See attachment - **Area Neighboring Land Owner Contact List**

(b) Block access points to the area (intersections, etc.) at a determined radius of the incident

(c) Initiate evacuation operations

(d) Contact the first available designated supervisor on the call list

(e) Notify the supervisor of the circumstances and whether or not immediate assistance is needed

NOTE: The supervisor should notify (or arrange for notification of) other supervisors and other appropriate personnel (including public officials) on the call list.

- (f) Make recommendations to public officials regarding blocking unauthorized access to the unsafe area and assist as appropriate
- (g) Make recommendations to public officials regarding the evacuation of the public and assist as appropriate
- (h) Notify, as required, state and local officials and the National Response Center to comply with release reporting requirements
- (i) Monitor the ambient air in the area of exposure (after following abatement measures) to determine when it is safe for re-entry

c) Contact Information

A contact list of local emergency responders, public agencies, and local government is included in this plan. See attachment - **Emergency Contact Lists**

d) Locations of potentially affected public areas and public roads for:

- (1) Indian Basin Gas Plant
County Road 401 from Grey Oak Rd (CR403) to Ponderosa Pine Rd (CR402).
- (2) East Indian Basin Central Tank Battery
County Road 401 approximately 1/5 mile west and 1/2 mile east of intersection with White Pine Rd (CR28) as well as 1/5 mile of White Pine Rd (CR28) to the north.

e) Proposed evacuation routes description

- (1) Indian Basin Gas Plant
If located east of the facility on CR401 proceed east to SH137 to evacuate the area. If located West of the facility on CR401 proceed to Ponderosa Pine Rd. Take Ponderosa Pine Rd. north to the intersection of Grey Oak Rd. Grey Oak Rd. can then be taken to the east back to CR401 which can be used to evacuate the area via White Pine Rd or SH137.
- (2) East Indian Basin Central Tank Battery
If located east of the facility on CR401 proceed east to SH137 to evacuate the area. If located west of the facility on CR401 proceed west to CR404. On CR404 proceed south to SH137. Finally, proceed north on SH137 to evacuate the area.

f) Locations of road blocks

(1) Indian Basin Gas Plant

Road blocks will be placed approximately 1 and ½ miles west and 1 mile east of the facility on CR401

(2) East Indian Basin Central Tank Battery

Road blocks will be placed approximately ½ mile west and east of the facility on CR401 and approximately ½ mile north of the facility on White Pine Rd (CR28)

- g) The public shall be notified of a release effecting public areas, either through direct telephone notification using telephone number lists or by means of mass notification and reaction plans.

Local area land owners phone numbers are located in the **Area Neighboring Land Owner Contact List**.

Availability and location of necessary safety equipment and supplies.

- (1) The safety equipment available at field facilities is listed in an attachment of the Emergency Action Plan and are clearly marked in the field facilities. See attachment - **Safety Equipment**

- (2) The safety equipment available at the Indian Basin Gas Plant are listed in an attachment of the Emergency Action Plan. See attachment - **Safety Equipment** The locations of safety is displayed on the Indian Basin Gas Plant Plot Plan. See attachment - **Indian Basin Gas Plant Plot Plan**.

3. Characteristics of Hydrogen Sulfide (H₂S) and Sulfur Dioxide (SO₂)

a) Physical Properties and Physiological Effects of Hydrogen Sulfide (H₂S)

(1) Physical Data

- (a) Chemical Name: Hydrogen Sulfide
- (b) CAS Number: 7783-06-4
- (c) Synonyms: Sulfureted hydrogen, hydrosulfuric acid, dihydrogen sulfide
- (d) Chemical Family: Inorganic sulfide
- (e) Chemical Formula: H₂S
- (f) Normal Physical State: Colorless Gas, slightly heavier than air
- (g) Vapor Density (specific gravity) at 59°F (15° C) and 1 atmosphere = 1.189
- (h) Auto ignition Temperature: 500°F (260° C)
- (i) Boiling Point: -76.4°F (-60.2° C)
- (j) Melting Point: -117°F (-82.9° C)
- (k) Flammable Limits: 4.3 – 46 percent vapor by volume in air.
- (l) Solubility: Soluble in water and oil; solubility decreases as the fluid temperature increases.
- (m) Combustibility: Burns with a blue flame to produce Sulfur Dioxide (SO₂)
- (n) Odor and Warning Properties: Hydrogen Sulfide has an extremely unpleasant odor, characteristic of rotten eggs, and is easily detected at low concentrations, however, due to rapid onset of olfactory fatigue and paralysis (inability to smell) **ODOR SHALL NOT BE USED AS A WARNING MEASURE.**

(2) Exposure Limits

The American Conference of Governmental Industrial Hygienists (ACGIH) recommends a Threshold Limit Value (TLV) of 10 ppm (8-hour TWA) and a short term exposure limit (STEL) of 15 ppm averaged over 15 minutes. (Action Level) Exposure at the STEL should not be repeated more than 4 times a day with at least 60 minutes between successive exposures in this range.

(3) Physiological Effects

Inhalation at certain concentrations can lead to injury or death. The 300 ppm is considered by the ACGI as Immediately Dangerous to Life and Health (IDLH) Hydrogen Sulfide is an extremely toxic, flammable gas that may be encountered in the production of gas well gas, high-sulfur content crude oil, crude oil fractions, associated gas, and waters. Since hydrogen sulfide is heavier than air, it can collect in low places. It is colorless and has a foul, rotten egg odor. In low concentrations, H₂S can be detected by its characteristic odor; however smell cannot be relied on to forewarn of dangerous concentrations because exposure to high concentrations (greater than 100 ppm) of the gas rapidly paralyzes the sense of smell due to paralysis of the olfactory nerve. A longer exposure to lower concentrations has a similar desensitizing effect on the sense of smell. It should be well understood that the sense of smell will be rendered ineffective by hydrogen sulfide, which can result in the individual failing to recognize the presence of dangerously high concentrations. Exposure to hydrogen sulfide causes death by poisoning the respiratory system at the cellular level. Symptoms from repeated exposure to low concentrations usually disappear after not being exposed for a period of time. Repeated exposure to low concentrations that do not produce effects initially may eventually lead to irritation if the exposures are frequent.

(4) Respiratory Protection

Respiratory protection shall be worn above the action level.

b) Physical Properties and Physiological Effects of Sulfur Dioxide (SO₂)

(1) Physical Data

- (a) Chemical Name: Sulfur Dioxide
- (b) CAS Number: 7446-09-05
- (c) Synonyms: Sulfurous acid anhydride, sulfurous oxide, sulfur oxide
- (d) Chemical Family: Inorganic
- (e) Chemical Formula: SO₂
- (f) Normal Physical State: Colorless Gas, slightly heavier than air
- (g) Boiling Point: 148°F
- (h) Flammable Limits: Non-flammable (produced by burning hydrogen sulfide)

- (i) Solubility: Soluble in water and oil; solubility decreases as the fluid temperature increases
- (j) Odor and Warning Properties: Sulfur Dioxide has a pungent odor associated with burning sulfur. It produces a suffocating effect and produces sulfurous acid on membranes of the nose and throat

(2) Exposure Limits

The American Conference of Governmental Industrial Hygienist recommends 2 ppm as an 8-hour TWA. Threshold Limit Value and the 5 ppm as a STEL, averaged over 15 minutes for sulfur dioxide

(3) Physiological Effects

Acute Toxicity: Inhalation at certain concentrations can lead to injury or death. 100 ppm is considered by the ACGIH as Immediately Dangerous to Life and Health

(4) Respiratory Protection

Respiratory protection shall be worn above the action level.

4. Maps and Drawings

Maps of areas of exposure and public areas and public roads within the area of exposure are included in the Emergency Action Plan. See attachment - **Indian Basin Radius of Exposure Map**

5. Training and Drills

- a) All OXY personnel shall be trained on the Emergency Response Plan and procedures annually. This training will include:
 - (1) The importance of each role of the emergency responders and the effects that each person has during an emergency will be stressed.
 - (2) An emphasis of the needs for emergency preparedness through the use of drills and other exercises that simulate an emergency in which personnel perform or demonstrate their duties.
 - (3) All non-Supervisory Oxy Mid-Continent Southwest employees are trained to 24hr HAZWOPER Technician level.
- b) Drills and other exercises will consists of:
 - (1) Table-top or classroom discussions or

- (2) Realistic drills in which equipment is deployed, communications equipment tested and "victims" evacuated to the hospital with simulated injuries.

Public officials will be informed and preferably involved in these exercises. Review and critiques of the drills or exercises will be conducted after completed to identify any potential improvement opportunities for the plan. The plan will be periodically reviewed and updated anytime its provisions or coverage change.

Documentation of the training, attendance, drills and reviews will be kept onsite in the HES files.

- c) Training of residents is not appropriate on the proper protective measures to be taken in the event of a release because no residents live near any area of exposure
- d) Briefing of public officials is also not appropriate on issues such as evacuation or shelter-in-place plans because no public will be evacuated in the event of a release

6. Coordination with State Emergency Plans

Under certain conditions, as provided for in the New Mexico Hazardous Materials Emergency Response Plan (HMERP), the New Mexico State Police responding to the emergency may elect to assume the position of Incident Commander or they may establish a Unified Command of which the Production Coordinator may be a key member.

Under the Unified Command scenario, the Production Coordinator shall cooperate with other involved emergency responders, such as the New Mexico State Police, local Fire Department, City Police, Sheriff's Office, NMOCD or other appropriate public emergency response agencies to manage the effective and safe response to the emergency situation.

7. Activation Levels of Hydrogen Sulfide Contingency Plan

- a) Sources of potentially hazardous volumes of H₂S gas in the Oxy Southwest-NM operations include:
 - (1) Oil and gas producing wells and operations
 - (2) Indian Basin Gas Plant
 - (3) Fluid gathering and handling facilities (satellites and batteries)
 - (4) Gas gathering systems (pipelines)
 - (5) Water Disposal systems

Leaks from these sources could create an H₂S exposure area. Whether such Radius' of Exposure (ROE) would be hazardous would depend upon their location and size. The size of the ROEs for 500 and 100 ppm from each source is calculated to determine the exposure potential. These calculations are based on the

escape rates as defined by New Mexico Hydrogen Sulfide (H₂S) standard for existing and new operations (Paragraph (1) of Subsection D of 19.15.11.7 NMAC). The H₂S concentrations were determined using applicable American Society for Testing and Materials (ASTM) or Gas Processors Association (GPA) standards or another method approved by the NMOCD. Radius of Exposure (ROE) were calculated using the Pasquill-Gifford derived equation as defined by Paragraphs (1) and (2) of Subsection K of 19.15.11.7 NMAC. The calculated ROEs for the OXY facilities and wells covered by this plan are illustrated on the ROE map. See attachment **Indian Basin Radius of Exposure Map**.

b) Activation Level

The Hydrogen Sulfide (H₂S) Contingency Plan shall be activated when the release creates a concentration of hydrogen sulfide of greater than:

- (1) 100 ppm in any public area,
- (2) 500 ppm at any public road, or
- (3) 100 ppm ROE is greater than 3000 feet from the site of the release

All Oxy employees carry personal H₂S monitors and have access to multifunction gas monitors that alarm at 10 ppm which provides a safety factor that will give time for Oxy employees to identify a source of a release before the activation of the H₂S contingency plan is necessary.

B. HAZWOPER Trained Personnel

HAZWOPER TRAINED PERSONNEL		
NAME	TITLE	HAZWOPER LEVEL
Jerry "Bubba" Harrison	Operations Production Coordinator	Level V (40 hr)
Van Barton	Operations Production Coordinator	Level V (40 hr)
Mark Treesh	Plant Production Coordinator	Level V (40 hr)
Jon Hamill	HES Supervisor	Level V (40 hr)
Marty Johnson	HES Specialist	Level V (40 hr)
Rick Kerby	HES Specialist	Level V (40 hr)
Kelton Beard	HES Specialist	Level V (40 hr)

C. Emergency Contact Lists

1. Emergency Service Outside Support Contact List

a) Medical

MEDICAL			
HOSPITAL NAME	ADDRESS	CITY	PHONE NUMBER
Carlsbad Medical Center	2430 W. Pierce	Carlsbad, NM	888-262-9111
Artesia General Hospital	702 N. 13 th St	Artesia, NM	575-748-3333
Eastern New Mexico Medical Center	405 W. Country Club Rd	Roswell, NM	575-622-8170
Nor-Lea General Hospital	1600 N. Main Street	Lovington, NM	575-396-6611
Lea Regional Medical Center	5419 Lovington Hwy	Hobbs, NM	575-492-5000
University Medical Center	602 Indiana	Lubbock, TX	806-775-8200
Brownfield Regional Medical Center	705 E. Felt	Brownfield, TX	806-637-3551
Covenant Health Systems	4000 24 th Street	Lubbock, TX	806-725-0000
Covenant Medical Center	2615 19 th Street	Lubbock, TX	806-725-1011

b) Ambulance

AMBULANCE	
CITY	PHONE NUMBER
Hobbs, New Mexico	911 or 575-397-9352
Lovington, New Mexico	911 or 575-396-2359
Carlsbad, New Mexico	911 or 575-885-2111
Loving, New Mexico	911 or 575-885-2111
Jal, New Mexico	911 or 575-395-2221

c) Air Ambulance

AIR AMBULANCE	
AEROCARE (Methodist Hospital) - Lubbock, Texas Aerocare will respond to a call from any OXY personnel. ETA Lubbock to Hobbs 42 minutes.	800-627-2376
Southwest Medevac – Las Cruces, New Mexico	888- 538-6498

d) Law Enforcement

(1) Police

POLICE	
CITY	PHONE NUMBER
Artesia, New Mexico	911 or 575-746-2704
Carlsbad, New Mexico	911 or 575-885-2111
Eunice, New Mexico	911 or 575-394-2112
Hobbs, New Mexico	911 or 575-397-9265
Jal, New Mexico	911 or 575-395-2501
Lovington, New Mexico	911 or 575-396-2811

(2) Sheriff

SHERIFF	
CITY/COUNTY	PHONE NUMBER
Eddy County Sheriff- Carlsbad	911 or 575-887-7551
Eddy County Sheriff-Artesia	911 or 575-746-2704
Lea County Sheriff – Eunice	911 or 575-396-3611
Lea County Sheriff – Hobbs	911 or 575-396-3611
Lea County Sheriff – Lovington	911 or 575-396-3611

(3) State Highway Patrol

STATE HIGHWAY PATROL	
CITY	PHONE NUMBER
Artesia, New Mexico	575-746-2704
Carlsbad, New Mexico	575-885-3137
Hobbs, New Mexico	575-392-5588

e) Fire Department

FIRE DEPARTMENT	
CITY	PHONE NUMBER
Hobbs, New Mexico	911 or 575-397-9308
Lovington, New Mexico	911 or 575-396-2359
Carlsbad, New Mexico	911 or 575-885-2111
Loving, New Mexico	911 or 575-745-3600
Lakewood, New Mexico	911 or 575-746-5050
Jal, New Mexico	911 or 575-395-2221
Loco Hills, New Mexico (Sonny Hope, Fire Chief)	911 or 575-365-6510
Artesia, New Mexico	911 or 575-746-5001

f) Government Agencies

GOVERNMENT AGENCIES	
AGENCY	PHONE NUMBER
Air Quality Bureau, Santa Fe, NM	575-827-1494
Bureau of Land Management, Carlsbad	575-234-5972
Bureau of Land Management, Hobbs	575-397-9308
Bureau of Land Management, Roswell	575-393-3612
Bureau of Land Management, Santa Fe	505-988-6030
LEPC (Lea County) – Jerry Reynolds	575-393-2870
LEPC (Chaves County) – Teresa Barncastle	575-624-6500
LEPC (Eddy County) – Joel Arnwine	575-887-7553
LEPC (Roosevelt County) – Kieth Wattenbarger	575-356-4408
National Response Center	800-424-8802
NM Environmental Department, Santa Fe	505-827-9329
New Mexico Oil Conservation Division, Artesia	575-748-1283
New Mexico Oil Conservation Division, Hobbs	575-393-6161
New Mexico Oil Conservation Division, Santa Fe	575-471-1068
NM State Environmental Response Center	505-827-9222
NMOCD Environmental Bureau, Santa Fe	505-827-2855
Occupational Safety & Health Admin. (OSHA)	806-746-7681
Public Affairs (Gene Montgomery)	281-552-1111

g) Airports

AIRPORTS	
CITY	PHONE NUMBER
Lea County Airport – Carlsbad Hwy	575-393-4943
Lea County Lovington Airport	575-396-9911
Lubbock International Airport	806-762-6411
Midland International Airport	432-563-2033
Cavern City Airport, Carlsbad	575-887-3060

h) Poison Control

POISON CONTROL	
STATE	PHONE NUMBER
POISON CONTROL CENTER – New Mexico	800-432-6866
POISON CONTROL CENTER – Texas	800-764-7664

i) CHEMTREC

CHEMTREC	
CHEMTREC Call CHEMTREC for questions concerning response or chemical hazards in the event of a chemical spill.	800-424-9300

j) Chemical Companies

- (1) Champion Technologies

CHAMPION TECHNOLOGIES 24 HOUR EMERGENCY	
CHAMPION TECHNOLOGIES 24 HOUR EMERGENCY	281-431-2561 or 575-390-4791 (Jeromie Pickering)

2. Area Neighboring Land Owner Contact List

AREA NEIGHBORING LAND OWNER CONTACT LIST			
LOCATION DESCRIPTION	CONTACT NAME	ADDRESS	PHONE NUMBER
4TK (Boles Ranch)	Mark and Sandi Wilkie	1073 Marathon Rd.	575-457-2022
Forrest Lee Ranch	Dean Lee	Near NIBU 24	575-457-2301
Gissler Ranch	Joe and Janet Cox	344 Ponderosa Pine	575-457-2438
Gregory's	Wayne Gregory	617 Queens Highway	575-457-2245
Howell Ranch	Richard Howell		575-457-2602
Kincaid Ranch	Gene Kincaid	2802 Legion	575-887-6918
Kincaid Ranch	Hugh Kincaid	2911 Ocotillo Canyon	575-885-9458
Kincaid Ranch	Jim Marbauch	1762 Queens Hwy	575-457-2233
Old Jones Ranch	Rick Lasiter	Rock House	575-457-2108
Schafer Ranch	Stacey Biebelle	646 Queens Hwy	575-457-2360
Wilbanks Ranch	Kevin and Laurie Wilbanks		575-457-2003

3. Corporate Contact List

a) Security

CORPORATE SECURITY CONTACT LIST	
Hugo Moreno Must be notified to assist in providing site security for all major emergencies and spills or response for any bomb threats or terrorist activities.	Office 713-215-7157 Home 281-778-8111 Cell/pager 713-817-3322 Fax 713-215-7538

b) Media Relations

All inquiries/requests for information from the media and the public should be referred to the OXY-Southwest Operations Manager or MCBU-Operations Manager. Media relations are prohibited from entering the incident scene and must stay outside the perimeter. Below is the list of OXY-Houston Public Affairs that the PIO must liaison with:

MEDIA RELATIONS CONTACT LIST					
Preference	Name	Title	Office	Home	Cell
Primary	Richard Kline	OPC, VP Public Affairs	310-443-6249	N/A	213-713-1111

4. Contractor Support Contact List

a) Electric Service Companies

ELECTRIC SERVICE COMPANIES		
COMPANY NAME		PHONE NUMBER
Wood Group – Artesia, NM		575-746-4614
Schlumberger – Midland, TX		432-557-4437
Deans Electric – Artesia, NM		575-748-3400
Caveman Electric – Carlsbad, NM	Carlsbad Phone	575-885-4730
	Cell Phone	575-706-2138
Dixie Electric – Hobbs, NM		575-393-4466
TESSCO – Carlsbad, NM	Carlsbad Phone	575-236-6266
	Cell Phone	575-389-2543

b) Water Service and Vacuum Trucks Contact List

WATER SERVICE AND VACUUM TRUCKS CONTACT LIST	
Key Energy Trucking – Carlsbad	575-390-1838
Key Energy Trucking – Hobbs	575-397-4994
Nabors – Carlsbad	575-885-3372
Nabors – Hobbs	575-392-2577
I & W – Artesia	800-748-1972
Gandy's	575-396-4948

c) Roustabout/Dirt Work Equipment Contact List

ROUSTABOUT/DIRT WORK CONTACT LIST	
RWI – Hobbs	575-393-5305
Lay's Roustabout	575-631-1234
Mesquite	575-887-4847

d) Welders Contact List

WELDERS CONTACT LIST	
RWI – Hobbs	575-393-5305

e) Safety Equipment Contact List

SAFETY EQUIPMENT CONTACT LIST	
Total Safety – Hobbs	575-392-2973
American Safety – Hobbs	575-393-8830
Indian Fire & Safety – Hobbs	575-393-3093
Indian Fire & Safety – Artesia	575-746-4660
Safety Environmental Solutions, Inc. – Hobbs	575-397-0510

f) Pipeline and Other Companies Contact List

PIPELINE AND OTHER COMPANIES CONTACT LIST		
COMPANY	NAME	PHONE NUMBER
Occidental Petroleum	Pat Bowen	575-457-2621
Yates Petroleum	Junior Orquiz (David Ortega, Relief)	575-365-8556
Latigo	Hobbs Office	575-391-9291
Duke Energy	Carlsbad Office Dee Wanda Johnson	575-234-6400 575-706-2022 575-910-4725
Phillips Pipeline		800-766-8690
Enterprise (aka El Paso)	Cliff Compton Courtney	575-302-3030 575-706-2270
Navajo Refining	Gart Woods Kent Mirney Pipeline Trucking Dispatch	575-365-4537 575-365-4689 575-365-4537 575-746-4628 575-746-5274 800-748-3315
Agave	Jason Fuentes Robert Morehead	575-365-8939 575-365-4840
Frontier	Jerry Wright	575-361-0154
Apache	David Raymond	575-910-3283 575-441-3264
Chevron	Randy Boles Kenneth Angel	575-390-7232 575-631-2912
Shell	Dispatcher	800-657-7264
NM One Call	Dispatcher	800-321-2537

D. Incident Classification

1. Definitions

Oxy Mid-Continent recognizes two levels of incidents (OOGC 60.400.110) that are defined below:

a) Significant Incident

Health, Environment and Safety (HES) incident associated with an Oxy operation that includes one or more of the following:

- (1) Employee/Contractor/Third Party occupational fatality;
- (2) Employee/Contractor/Third Party occupational injury or illness requiring overnight hospitalization (other than for observation);
- (3) Any fatality, injury, or illness to a member of the public;

- (4) Incidents causing injuries to multiple personnel (greater than first aid) and involving Oxy equipment, facilities, operations, construction or transportation;
- (5) Loss or damage to Oxy, contractor or third party equipment or property valued at \$100,000 or greater;
- (6) Any incident whereby Oxy's portion of the cost of fines, penalties, settlements, remediation and/or emergency response is likely to be greater than \$100,000;
- (7) HES related issues giving rise to significant adverse impact (or the potential for such adverse impact) on Oxy's image or goodwill, or
- (8) Any HES related actions by a government agency, court of law, or third party that results in interference with production and is likely to produce an annual loss of earnings of \$1,000,000 or more.

b) Important Incident

An HES incident associated with an Oxy operation that includes one or more of the following:

- (1) A spill, release, discharge of a substance, or any event that is reportable to any governmental agency or exceeds the local regulations and/or performance standard. (Each Oxy operation shall develop performance standards for reportable quantities of substances used in the operations that are at least as stringent as local laws/regulations);
- (2) Public/Government Action – any written HES related action instituted against Oxy which includes: citation, civil actions, complaints, notices of violation (NOV), consent orders, decrees, injunctions or claims that may result in significant liabilities or judicial proceedings;
- (3) United States Government Agency inspections (for U.S. operations only) – any notice or contact by, or appearance of, an agent from the Occupation Safety and Health Administration (OSHA) or the Environmental Protection Agency (EPA) (Federal or State) for the intended purpose of conducting a site or facility inspection;
- (4) Recordable Injury or Illness – any injury or illness involving employees or contractors which would be recordable under criteria provided in the Record Keeping Guidelines for Occupational Injuries & Illnesses, U.S. Department of Labor, Bureau of Labor Statistics, September 1986.
- (5) Loss or damage to Oxy, contractor or third party equipment or property values at less than \$100,000 but greater than \$25,000.

c) Near Miss/Accident Prevention Opportunity (APO)

A Near Miss/Accident Prevention Opportunity (APO) is defined as any undesired event which, under slightly different circumstances, could have resulted in a significant or important accident/incident.

2. Notification and Reporting Requirements

a) Significant Incident

The following steps outline the notification expectations for incidents classified as significant incidents. The Production Coordinator will ensure the appropriate notification has taken place.

Immediate is defined as the earliest practical time once the incident has been brought under control or is being managed by someone other than the individual conducting the notification process.

Do not risk additional personal injury, increased public exposure or compound property damage by attempting to notify while still responding to a Major incident.

- (1) Immediate notification by fax or phone to the Production Coordinator,
- (2) Immediate notification by fax or phone to the HES Specialist(s),
- (3) Immediate notification by fax or phone to the Mid-Continent SW HES Supervisor,
- (4) Immediate notification by fax or phone to the Mid-Continent HES Manager,
- (5) An Exhibit A will be initiated and forwarded within 24 hours to the Production Coordinator, the HES Specialist(s), the Mid-Continent SW HES Supervisor and the HES Database Coordinator.
- (6) An investigation team will be appointed and initiated within 24 hours of the incident. Distribution of the resulting incident investigation report will be the same as the distribution of the Exhibit A. The HES Database Coordinator will enter the report into the database after reviewed by the HES Manager or his designee. If the Production Coordinator determines potential litigation is a factor, the Production Coordinator should contact the HES Manager or his designee prior to appointing the investigation team.

NOTE: It is the responsibility of the HES Supervisor, the HES Manager, or his designee to determine if regulatory notifications are required and to ensure they are completed concerning injury and illness reporting.

b) Important Incident

The following steps identify the notification requirements for Important Incidents. If there is a question as to whether an incident should be classified as Significant or Important, please follow the notification guidance provided for Significant Incidents. The following notifications should include some details about the incident including but not limited to Who, What, When, and the current situation or diagnosis. Electronic notification by email or fax is acceptable provided confirmation of receipt is achieved.

- (1) Notification within two hours to the Production Coordinator,
- (2) Notification within two hours to the HES Specialist(s),
- (3) Notification within two hours to the Mid-Continent SW HES Supervisor,
- (4) An Exhibit A will be initiated and forwarded within 24 hours to the Production Coordinator, the area HES Specialist(s), the area HES Supervisor and the HES Database Coordinator.
- (5) An investigation team will be appointed and initiated within 24 hours of the incident. Distribution of the resulting incident investigation report will be the same as the distribution of the Exhibit A. The HES Database Coordinator will enter the report into the database after review by the HES Manager or his designee. If the Production Coordinator determines potential litigation is a factor, the PC should contact the HES Manager or his designee prior to appointing the investigation team.

c) Near Miss / Accident Prevention Opportunity (APO)

Notification requirements will be achieved through the Accident Prevention Opportunity Program. The APO Form will be completed and forwarded to the local Plant / Operations Production Coordinator, HES Specialist and HES Supervisor. The HES Data Base System Coordinator will assist the HES Specialist with inputting the incident information into the electronic incident database.

E. Check Lists

1. Fire or Explosion Check List

- a) Team Member discovering fire gives location and nature of fire.
- b) Activate the Emergency Action Plan if deemed necessary.
- c) All Team Members, visitors and contract personnel evacuate to the mustering area and be accounted for to receive assignments.

- d) Call hospital and advise of the situation to enable them to activate their emergency action plans in readiness for any injuries that might be incurred.

2. Spill Response Check List

- a) Notify appropriate Team Leader / Supervisor in charge.
- b) Stop source of spill, if deemed safe and qualified to do so. (Level III Hazwoper or above required)
- c) Team Leader / Supervisor directs control and containment.
- d) Team Leader contacts Flood Technician / HES Specialist.
- e) Refer to MSDS and /or DOT Emergency Response Guidebook for proper handling procedures
- f) Refer to written Oxy Procedures for Acid & Caustic Spills.

OXY

3. **Bomb Threat Check List**

a) FILL OUT COMPLETELY IMMEDIATELY AFTER BOMB THREAT

BOMB THREAT CHECK LIST					
Date					
Name of Company					
Name & Position of Person taking call					
Telephone Number call came in on					
When is the bomb set to explode?					
Where is the bomb located?					
What does the bomb look like?					
What type of bomb is it?					
What will cause the bomb to explode?					
Did the caller place the bomb?					
Why did the caller place the bomb?					
What is the caller's name and address?					
Caller's:	Sex		Age		Race
Length of the call?					
DESCRIPTION OF CALLER'S VOICE (Check all that apply)					
<input type="checkbox"/>	Calm	<input type="checkbox"/>	Laughing	<input type="checkbox"/>	Lisp
<input type="checkbox"/>	Disguised	<input type="checkbox"/>	Angry	<input type="checkbox"/>	Crying
<input type="checkbox"/>	Accent	<input type="checkbox"/>	Excited	<input type="checkbox"/>	Normal
<input type="checkbox"/>	Deep	<input type="checkbox"/>	Slow	<input type="checkbox"/>	Distinct
<input type="checkbox"/>	Loud	<input type="checkbox"/>	Slurred	<input type="checkbox"/>	Clearing
<input type="checkbox"/>	Nasal	<input type="checkbox"/>	Stutter	<input type="checkbox"/>	Deep Breathing
<input type="checkbox"/>	Familiar				
If voice is familiar, whom did it sound like?					
BACKGROUND SOUNDS					
<input type="checkbox"/>	Street Noises	<input type="checkbox"/>	House Noises	<input type="checkbox"/>	Factory Noises
<input type="checkbox"/>	Machinery	<input type="checkbox"/>	Crockery	<input type="checkbox"/>	Motor
<input type="checkbox"/>	Voices	<input type="checkbox"/>	Office	<input type="checkbox"/>	PA System
<input type="checkbox"/>	Static	<input type="checkbox"/>	Other Noises		
THREAT LANGUAGE					
<input type="checkbox"/>	Well-Spoken	<input type="checkbox"/>	Foul Language	<input type="checkbox"/>	Incoherent
<input type="checkbox"/>	Irrational	<input type="checkbox"/>	Taped	Message Read by Threat Maker	
COMMENTS & REMARKS (in detailed description)					

F. Safety Equipment

The following safety equipment is available at Oxy facilities or carried by Oxy employees for use during emergencies:

- a) PPE – Gloves, Safety Glasses, Goggles, Shields, Hard Hat, Ear Plugs
- b) Personal H2S Monitor
- c) First Aid Kits
- d) SCBA (Self Contained Breathing Apparatus)
- e) Personal Work Unit
- f) Air Bottle Trailers
- g) NORM Meters and Safety Wear
- h) Multi Gas Detectors
- i) Fire Extinguishers
- j) Chemical Handling Equipment
- k) Confined Space Entry Monitoring Trailer
- l) Electronic Line Finders
- m) MSDS Sheets
- n) Wind Socks
- o) Signage
- p) Fixed Alarm Systems
- q) Radios

G. OXY-Mid-Cont Southwest (Carlsbad) Incident Notification Flowchart

H. Indian Basin Gas Plant Plot Plan

I. Indian Basin Radius of Exposure Map



OXY-Mid-Cont Southwest (Carlsbad) Incident Notification Flowchart

Updated
03/16/10

911
or
Carlsbad Police Department
(575)895-2111 ext 0
Eddy County Sheriff's Dept.
(575)887-7554

**SUPERVISOR
ON LOCATION**

1st Call
Depending on Severity

2nd Call

1st Call

HES

Indian Basin Gas Plant
Mark Treesh
Cell (575)200-8010
Office (575)628-4112
Home (575)628-8128
Clint Kirkes
Cell (575)365-5518
Office (575)628-4113
Home (575)365-5518

**Carlsbad
Field Operations**
Van Barton
Cell (575)706-7671
Office (575)628-4111
Home (575)706-3269
Jerry (Bubba) Harrison
Cell (575)365-5863
Office (575)628-4110
Home (575)746-6754

Marty Johnson (IBGP)
Cell (575)499-5652
Office (575)628-4122
Home (575)725-5188

Rick Kerby (Field)
Cell (575)390-8639
Office (575)628-4120
Home (575)887-9094

Kelton Beaird (Field)
Cell (575)390-1903
Office (575)628-4121
Home (575)318-9256

**Southwest
OPERATIONS MANAGER**
Scott Hodges
Cell (432)238-4405
Office (432)685-5807

**Southwest
HES SUPERINTENDENT**
Jon Hamill
Cell (575)706-6011
Office (575)628-4134
Home (970)270-3536

**Mid-CONTINENT
MANAGER OF OPERATIONS**
J.T. (Tommy) McKenzie
Cell (713)560-8034
Office (713)366-5176
Home (713)560-8034

**Mid-CONTINENT
GENERAL MANAGER**
Bill Roby
Cell (713)204-0250
Office (713)215-7841
Home (832)437-4593

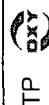
**Mid-CONTINENT
HES MANAGER**
Greg Hardin
Cell (713)560-8037
Office (713)366-5324
Home (281)343-8452

**Mid-CONTINENT
HES LEAD**
Alonzo Hernandez
Cell (970)985-6055
Office (970)263-3609
Home (970)986-8831

100 SERIES AIR IS DRY CHINA
 200 SERIES DOWELL LITE
 300 SERIES PALTON

SEE COMMENTS FOR:
 ADDRESS CORRECTIONS, DATE 1/16/04
 ADDRESS CORRECTIONS, DATE 1/16/04

OPERATIONAL REFERENCE: 10/16/04



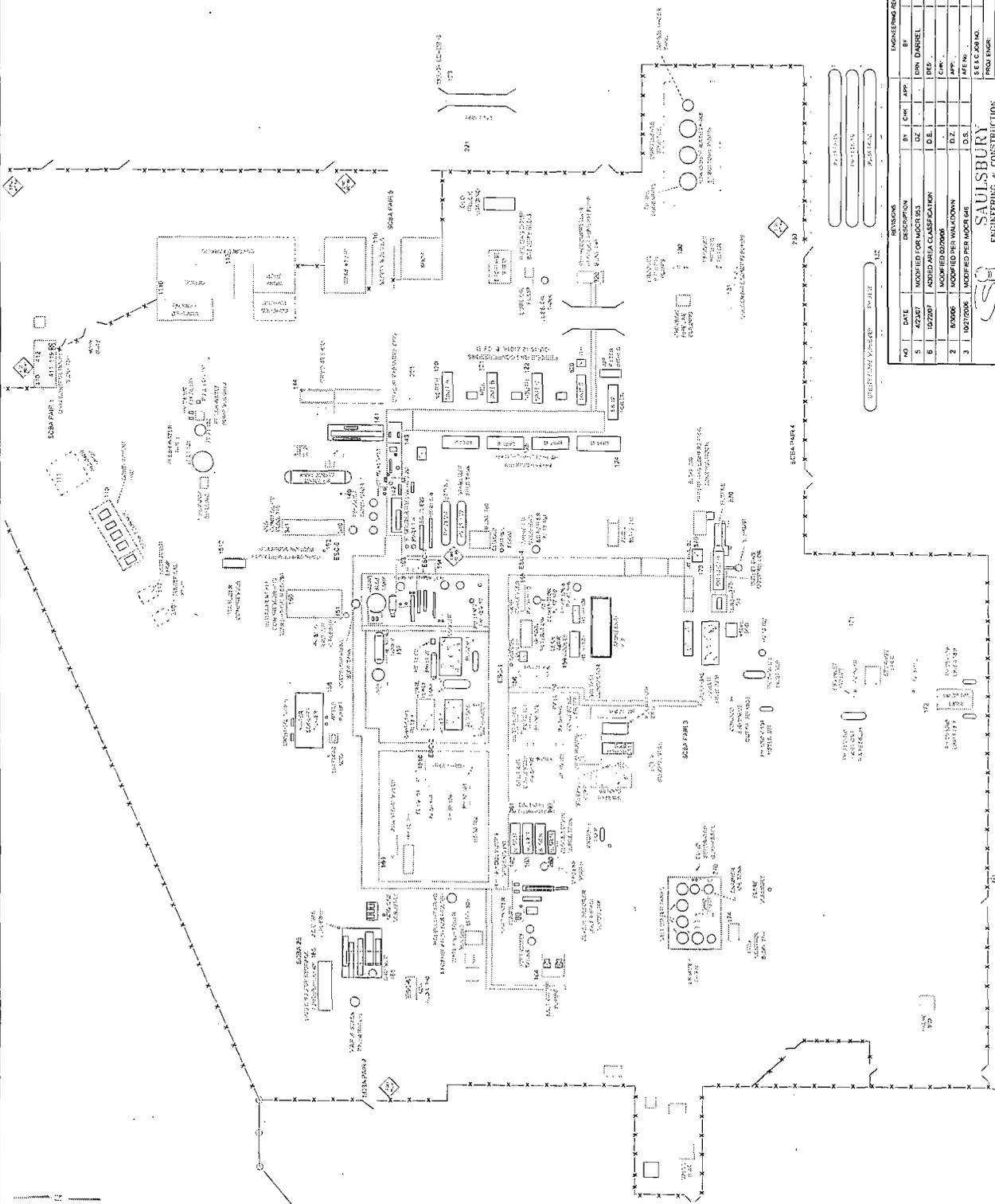
OXY USA WTP
 INDIAN GAS PLANT
 PLOT PLAN



SAULSBURY
 ENGINEERING & CONSTRUCTION
 A SUCCESSFUL INDUSTRIES COMPANY

REVISIONS		ENGINEERING RECORD	
NO.	DATE	DESCRIPTION	BY
5	4/28/07	MODIFIED FOR MODC93	DMN, DANRELL
6	10/27/07	ADDED AREA CLASSIFICATION	D.E.
2	09/09/06	MODIFIED PER WALKDOWN	D.Z.
3	08/27/06	MODIFIED PER WALKDOWN	D.E.

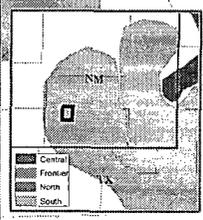
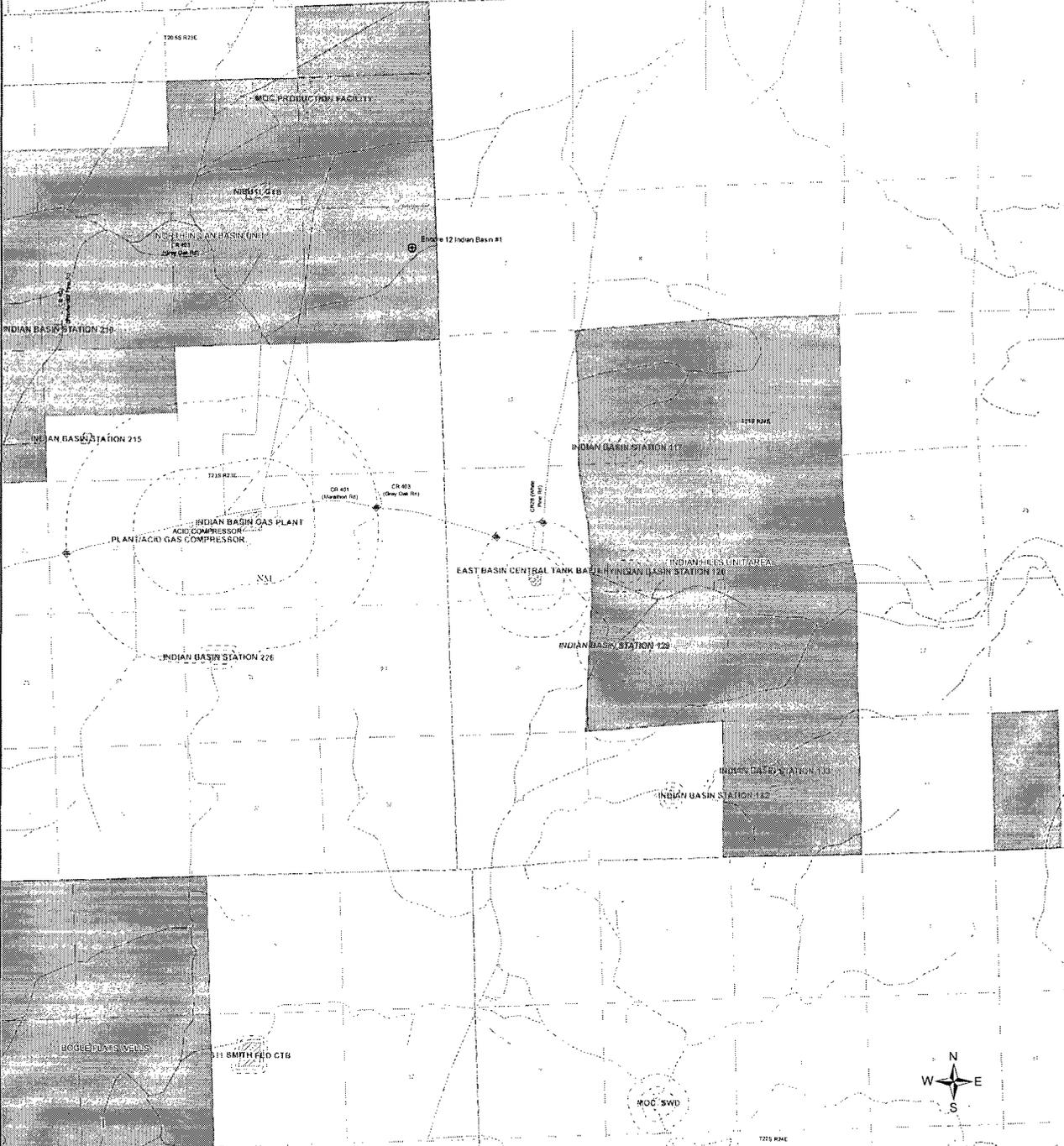
PROJECT NO.	4801	DATE	11/16/04
SCALE	1"=40'-0"	PROJECT NO.	D-5886-C03-101
DATE	11/16/04	PROJECT NO.	6



ID	NAME	100_R0E	500_R0E
0	INDIAN BASIN STATION 219	347	189
1	INDIAN BASIN STATION 210	25	12
2	INDIAN CTB	17	4
3	STATE COM CTB	101	44
4	PLANTACIO GAS COMPRESSOR	4824	2350
5	INDIAN BASIN STATION 117	467	300
6	311 SMITH FED CTB	278	128
7	MOC SWD	529	434
8	INDIAN BASIN STATION 215	25	10
9	EAST BASIN CENTRAL TANK BATTERY	2018	931
10	INDIAN BASIN STATION 112	119	144
11	INDIAN BASIN STATION 120	408	308
12	INDIAN BASIN STATION 132	408	184
13	INDIAN BASIN STATION 129	1254	873
14	INDIAN BASIN GAS PLANT	4640	2122
15	INDIAN HILLS CTB COM 7 SWD	124	97
16	MOC PRODUCTION FACILITY	390	178

LEGEND

- INDIAN BASIN STATIONS
- INDIAN BASIN FACILITIES
- INDIAN HILLS CTB
- INDIAN BASIN GAS PLANT
- INDIAN BASIN CENTRAL TANK BATTERY
- INDIAN BASIN CTB
- INDIAN BASIN STATE COM CTB
- INDIAN BASIN 311 SMITH FED CTB
- INDIAN BASIN MOC SWD
- INDIAN BASIN BOQUELON WELLS
- INDIAN BASIN INDIAN HILLS CTB
- INDIAN BASIN EAST BASIN CENTRAL TANK BATTERY
- INDIAN BASIN PLANTACIO GAS COMPRESSOR
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21772010	ORIGINAL ISSUE ROE MAP
31692010	UPDATES ON SITES AND ADDED RD. KING'S
Occidental Petroleum Ltd.	
INDIAN BASIN FACILITIES	
ROE MAP	
NEW MEXICO & TEXAS	
MANZANITA TECHNICAL	
Company: Occidental Petroleum Ltd.	Scale: 1:50,000
Date: 2/29/2010	Sheet: 21772010
Drawn: M. J. HERSCHER	Checked: M. J. HERSCHER
Location: Indian Basin, New Mexico & Texas	Author: Manzanita Technical

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, March 02, 2010 11:59 AM
To: 'Mark_Treesh@oxy.com'
Cc: Dade, Randy, EMNRD; VonGonten, Glenn, EMNRD; Jon_Hamill@oxy.com; Marty_Johnson@oxy.com; Alonzo_Hernandez@oxy.com
Subject: RE: Oxy Indian Basin Gas Plant (GW-021) C-141 H2S Contingency Plan
Attachments: 19.15.11 NMAC Verification of Compliance 3-2-2010.doc

Mr. Treesh, et al.:

The New Mexico Oil Conservation Division has reviewed your H2S Contingency Plan (CP) submittal, which is inclusive of applicable Oxy Facilities, compressor stations, etc. where the New Mexico H2S Regulations apply. In general the OCD notices that the submittal is generic in nature and provides a good starting point for adding more site-specific complementary information to satisfy the OCD's H2S Regulations. Consequently, the OCD requests the following be incorporated into your CP:

- 1) A facility map (U.S.G.S. 7.5 Minute topographic map) to scale displaying the layout of each facility, units (i.e., SRU, Acid Gas Compressor, Amine Systems, etc.) with the point source and any wind socks, monitors or detectors w/ detection levels for each facility, road barricade locations, escape routes, safety zone(s), emergency shut off locations near public areas where H2S is > 100 ppm, signage around facilities, road barricades, actuation stations, etc. This should help with development of site-specific emergency response plans for each applicable facility. Warning signs displaying "Poison Gas" shall be positioned along the fenceline and observable by the public.
- 2) Sulfur dioxide characteristics were not specified as required in the regulations.
- 3) The table on page 43 should include a column for the maximum escape rates used in the Pasquill-Gifford Equations to calculate the ROEs provided in the table and for OCD verification. Remove facilities that are not subject to H2S Regulations from the table.
- 4) A local emergency telephone list with phone numbers to the LEPC, State Police, nearby hospital, etc.
- 5) Training for emergency response personnel (pg. 55) shall include 40 hour Hazwoper and the annual 8 hour refresher course thereafter.
- 6) Facility operation descriptions for each Oxy facility where the H2S Contingency Plan applies.
- 7) What is the alarm setting that Oxy will use? Also, the Oxy alarm activation setting (should be at maximum 10 ppm) shall be stipulated that triggers activation of the emergency response plan. Oxy is proposing 100 ppm, (pg. 41) but by the time alarms go off, this level appears to be set too high as 10 ppm provides a safety factor.
- 8) The IBGP radio (Pg. 37) shall be present at each H2S Contingency Plan facility with a backup radio and tested weekly, and daily when possible, to ensure that the alarm system is operable, etc.
- 9) A detailed list per facility of the actual equipment types (i.e., eye washes, wind socks, SCBAs, APRs, etc.) and numbers available in the event of an emergency is needed (pg. 54).
- 10) Reference to API RP-55 was not made anywhere in the submittal.

I have attached the OCD H2S Regulations and have highlighted in red the citations in the regulations where Oxy's initial submittal does not appear to adequately address the regulations and form the basis for the requests cited above.

Please submit your updated CP within 30 days of receipt of this e-mail message or by COB on April 1, 2010.

Please contact me if you have questions. Thank you.

Carl J. Chávez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/ocd/index.htm>
(Pollution Prevention Guidance is under "Publications")

From: Mark_Treesh@oxy.com [mailto:Mark_Treesh@oxy.com]
Sent: Wednesday, February 17, 2010 3:47 PM
To: Chavez, Carl J, EMNRD
Cc: Dade, Randy, EMNRD; VonGonten, Glenn, EMNRD; Jon_Hamill@oxy.com; Marty_Johnson@oxy.com; Alonzo_Hernandez@oxy.com
Subject: RE: Oxy Indian Basin Gas Plant (GW-021) C-141 H2S Contingency Plan

Mr. Chavez,

Good afternoon. Attached you will find the updated Oxy Midcontinent Emergency Response Plan for Southwest New Mexico. In addition, the ROE map for the Indian Basin Gas Plant as well as several other field facilities is also attached. The H2S contingency plan for the Oxy Indian Basin Gas Plant is contained in the Emergency action plan attachment starting on page 34.

Please let myself or Jon Hamill (copied on this email) know if there are any other questions or concerns.

Thank you for your patience

Mark Treesh
Production Coordinator
Indian Basin Gas Plant
Office: 575-628-4112
Cell: 575-200-8010

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Tuesday, February 02, 2010 7:18 AM
To: Treesh, Mark E
Cc: Dade, Randy, EMNRD; VonGonten, Glenn, EMNRD
Subject: FW: Oxy Indian Basin Gas Plant (GW-021) C-141 H2S Contingency Plan

Mr. Treesh:

Good morning. This is a reminder that your H2S Contingency Plan for the above subject facility is due February 17, 2010.

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
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E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/ocd/index.htm>
(Pollution Prevention Guidance is under "Publications")

From: Chavez, Carl J, EMNRD
Sent: Tuesday, November 17, 2009 10:27 AM
To: 'Mark_Treesh@oxy.com'
Cc: Dade, Randy, EMNRD; Ezeanyim, Richard, EMNRD; VonGonten, Glenn, EMNRD
Subject: RE: Oxy Indian Basin Gas Plant (2RP-22-0) C-141 Acid Gas Compressor Shutdown Due to Low Lube Oil Flow Shutdown to Cylinders

Mr. Treesh:

The New Mexico Oil Conservation Division (OCD) has completed its review of your e-mail submittals.

The C-141 corrective actions taken hopefully will correct the reoccurring problem.

The Emergency Response Plan for Southwest New Mexico (Eddy, Lea, Chavez & Roosevelt Counties) does not appear to specifically address OCD § 19.15.11 NMAC (Hydrogen Sulfide Gas- see attached regulations) regulatory requirements for each facility. While the OCD commends OXY for developing a generic plan (Pages 41-42 attempting to display all OXY facility area of exposures, etc., which are not discernible from the figure and appear generic in nature), it appears that either a new generic plan focusing on OCD's Hydrogen Sulfide Gas Regulations is needed with site-specific Contingency Plan (CP) pages with maps to scale for every facility that may have 100 ppm or greater H2S gas releases (see attached regulations).

Please take a moment to review the OCD regulations and contact me to discuss how OXY may develop one generic plan for all applicable facilities in New Mexico that will satisfy § 19.15.11 NMAC or an individual CP for each facility that the regulations applies to in New Mexico. The OCD requests that you submit a H2S CP for the Oxy Indian Basin Gas Plant within 90 days of receipt of this e-mail. In addition, OXY may desire to develop one generic CP with site specific pages that display the required information for each applicable facility.

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
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(Pollution Prevention Guidance is under "Publications")

From: Mark_Treesh@oxy.com [mailto:Mark_Treesh@oxy.com]
Sent: Friday, November 13, 2009 7:14 PM
To: Chavez, Carl J, EMNRD
Cc: Dade, Randy, EMNRD; Ezeanyim, Richard, EMNRD
Subject: RE: Oxy Indian Basin Gas Plant (2RP-22-0) C-141 Acid Gas Compressor Shutdown Due to Low Lube Oil Flow Shutdown to Cylinders

Mr. Chavez,

As requested attached are:

1] The OXY-Midcontinent Emergency Response Plan (ERP) for southwest New Mexico. The H2S contingency plant is included in the ERP with maps of the Indian Basin area including the plant showing radius of exposures and the nearest public residences on page 41 and 42.

2] An amended C-141 that contains an improved description of the problem and events leading up to the release and the actions we took to remedy the problem and to limit the probability of recurrence.

I apologize in the slight delay in getting you this response as I have been experiencing internet / email problems throughout the day.

Mark Treesh
Production Coordinator
Indian Basin Gas Plant
Office: 575-628-4112
Cell: 575-200-8010

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Thursday, November 05, 2009 5:05 PM
To: Treesh, Mark E
Cc: Dade, Randy, EMNRD; Ezeanyim, Richard, EMNRD
Subject: Oxy Indian Basin Gas Plant (2RP-22-0) C-141 Acid Gas Compressor Shutdown Due to Low Lube Oil Flow Shutdown to Cylinders

Mr. Mark Treesh:

Good afternoon. The Oil Conservation Division (OCD) is in receipt of your C-141 Form for a 90.67 MCF release that occurred on 10/31/2009 at 4:42 p.m. The OCD has received prior C-141s indicating a similar description for cause of the release ("acid gas compressor shutdown due to low lube oil flow shutdown to cylinders").

You indicated in a telephone call that when the compressor shuts down 98% of the gas is flared with a sulfur dioxide emission. In addition, a release form is submitted to the NMED for air quality monitoring purposes.

I have attached the C-141 Form for reference.

Based on the final C-141 Form that was submitted, the OCD requests the following:

- 1) Copy of your H₂S Contingency Plan (CP) as required by 19.15.11 NMAC (Hydrogen Sulfide Gas). The CP should have a map to help assess public health threats from the releases that have been occurring.
- 2) Amend the C-141 Form to describe the cause of the problem and remedial action taken, in this case, to fix the problem or steps taken to remedy the situation and prevent these releases from re-occurring.

The OCD hopes that the problem with the compressor is fixed to prevent these "Major Releases" from occurring in the future. Please resubmit a recompleted C-141 Form and CP to me by close of business next Friday, November 13, 2009.

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
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Website: <http://www.emnrd.state.nm.us/ocd/index.htm>
(Pollution Prevention Guidance is under "Publications")

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Confidentiality Notice: This e-mail, including all attachments is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender and destroy all copies of this message.
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TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 11 HYDROGEN SULFIDE GAS

19.15.11.1 ISSUING AGENCY: Energy, Minerals and Natural Resources Department, Oil Conservation Division.
[19.15.11.1 NMAC - N, 12/1/08]

19.15.11.2 SCOPE: 19.15.11 NMAC applies to a person subject to the division's jurisdiction, including a person engaged in drilling, stimulating, injecting into, completing, working over or producing an oil, gas or carbon dioxide well or a person engaged in gathering, transporting, storing, processing or refining of oil, gas or carbon dioxide. 19.15.11 NMAC does not exempt or otherwise excuse surface waste management facilities the division permits pursuant to 19.15.36 NMAC from more stringent conditions on the handling of hydrogen sulfide required of such facilities by 19.15.36 NMAC or more stringent conditions in permits issued pursuant to 19.15.36 NMAC, nor shall the facilities be exempt or otherwise excused from the requirements set forth in 19.15.11 NMAC by virtue of permitting under 19.15.36 NMAC.
[19.15.11.2 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.3 STATUTORY AUTHORITY: 19.15.11 NMAC is adopted pursuant to the Oil and Gas Act, NMSA 1978, Section 70-2-6, Section 70-2-11 and Section 70-2-12.
[19.15.11.3 NMAC - N, 12/1/08]

19.15.11.4 DURATION: Permanent.
[19.15.11.4 NMAC - N, 12/1/08]

19.15.11.5 EFFECTIVE DATE: December 1, 2008, unless a later date is cited at the end of a section.
[19.15.11.5 NMAC - N, 12/1/08]

19.15.11.6 OBJECTIVE: To require oil and gas operations be conducted in a manner that protects the public from exposure to hydrogen sulfide gas.

[19.15.11.6 NMAC - N, 12/1/08]

19.15.11.7 DEFINITIONS:

A. "ANSI" means the American national standards institute.

B. "Area of exposure" means the area within a circle constructed with a point of escape at its center and the radius of exposure as its radius.

C. "Dispersion technique" is a mathematical representation of the physical and chemical transportation characteristics, dilution characteristics and transformation characteristics of hydrogen sulfide gas in the atmosphere.

D. "Escape rate" means the maximum volume (Q) that is used to designate the possible rate of escape of a gaseous mixture containing hydrogen sulfide, as set forth in 19.15.11 NMAC.

(1) For existing gas facilities or operations, the escape rate is calculated using the maximum daily rate of the gaseous mixture produced or handled or the best estimate thereof. For an existing gas well, the escape rate is calculated using the current daily absolute open flow rate against atmospheric pressure or the best estimate of that rate.

(2) For new gas operations or facilities, the escape rate is calculated as the maximum anticipated flow rate through the system. For a new gas well, the escape rate is calculated using the maximum open-flow rate of offset wells in the pool or reservoir, or the pool or reservoir average of maximum open-flow rates.

(3) For existing oil wells, the escape rate is calculated by multiplying the producing gas/oil ratio by the maximum daily production rate or the best estimate of the maximum daily production rate.

(4) For new oil wells, the escape rate is calculated by multiplying the producing gas/oil ratio by the maximum daily production rate of offset wells in the pool or reservoir, or the pool or reservoir average of the producing gas/oil ratio multiplied by the maximum daily production rate.

(5) For facilities or operations not mentioned, the escape rate is calculated using the actual flow of the gaseous mixture through the system or the best estimate of the actual flow of the gaseous mixture through the system.

E. "GPA" means the gas processors association.

F. "LEPC" means the local emergency planning committee established pursuant to the Emergency Planning and Community Right-To-Know Act, 42 U.S.C. section 11001.

G. "NACE" means the national association of corrosion engineers.

H. "Potentially hazardous volume" means the volume of hydrogen sulfide gas of such concentration that:

(1) the 100-ppm radius of exposure includes a public area;

(2) the 500-ppm radius of exposure includes a public road; or

(3) the 100-ppm radius of exposure exceeds 3000 feet.

I. "Public area" means a building or structure that is not associated with the well, facility or operation for which the radius of exposure is being calculated and that is used as a dwelling, office, place of business,

church, school, hospital or government building, or a portion of a park, city, town, village or designated school bus stop or other similar area where members of the public may reasonably be expected to be 19.15.11 NMAC

<http://www.nmcpr.state.nm.us/nmac/parts/title19/19.015.0011.htm>[1/16/2009 4:18:08 PM] present.

J. “Public road” means a federal, state, municipal or county road or highway.

K. “Radius of exposure” means the radius constructed with the point of escape as its starting point and its length calculated using the following Pasquill-Gifford derived equation, or by such other method as the division may approve:

(1) for determining the 100-ppm radius of exposure: $X = [(1.589)(\text{hydrogen sulfide concentration})(Q)](0.6258)$, where “X” is the radius of exposure in feet, the “hydrogen sulfide concentration” is the decimal equivalent of the mole or volume fraction of hydrogen sulfide in the gaseous mixture and “Q” is the escape rate expressed in cubic feet per day (corrected for standard conditions of 14.73 psi absolute and 60 degrees fahrenheit);

(2) for determining the 500-ppm radius of exposure: $X = [(0.4546)(\text{hydrogen sulfide concentration})(Q)](0.6258)$, where “X” is the radius of exposure in feet, the “hydrogen sulfide concentration” is the decimal equivalent of the mole or volume fraction of hydrogen sulfide in the gaseous mixture and “Q” is the escape rate expressed in cubic feet per day (corrected for standard conditions of 14.73 psi absolute and 60 degrees fahrenheit);

(3) for a well being drilled, completed, recompleted, worked over or serviced in an area where insufficient data exists to calculate a radius of exposure but where hydrogen sulfide could reasonably be expected to be present in concentrations in excess of 100 ppm in the

gaseous mixture, a 100-ppm radius of exposure equal to 3000 feet is assumed.

[19.15.11.7 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.8 REGULATORY THRESHOLD:

A. Determination of hydrogen sulfide concentration.

(1) Each person shall determine the hydrogen sulfide concentration in the gaseous mixture within wells, facilities or operations either by testing (using a sample from each well, facility or operation); testing a representative sample; or using process knowledge in lieu of testing. If the person uses a representative sample or process knowledge, the concentration derived from the representative sample or process knowledge shall be reasonably representative of the hydrogen sulfide concentration within the well, facility or operation.

(2) The person shall conduct the tests used to make the determination referred to in Paragraph (1) of Subsection A of 19.15.11.8 NMAC in accordance with applicable ASTM or GPA standards or by another division-approved method.

(3) If the person conducted a test prior to January 31, 2003 that otherwise meets the requirements of Paragraphs (1) and (2) of Subsection A of 19.15.11.8 NMAC, new testing is not required.

(4) If a change or alteration may materially increase the hydrogen sulfide concentration in a well, facility or operation, the person shall make a new determination in accordance with 19.15.11 NMAC.

B. Concentrations determined to be below 100 ppm. If the hydrogen sulfide concentration in a given well, facility or operation is less than 100 ppm, the person is not required to take further actions pursuant to 19.15.11 NMAC.

C. Concentrations determined to be above 100 ppm.

(1) If the person determines the hydrogen sulfide concentration in a given well, facility or operation is 100 ppm or greater, then the person shall calculate the radius of exposure and comply with applicable requirements of 19.15.11 NMAC.

(2) If calculation of the radius of exposure reveals that a potentially hazardous volume is present, the person shall provide results of the hydrogen sulfide concentration determination and the calculation of the radius of exposure to the division. For a well, facility or operation, the person shall accomplish the determination, calculation and submission 19.15.11.8 NMAC requires before operations begin.

D. Recalculation. The person shall calculate the radius of exposure if the hydrogen sulfide concentration in a well, facility or operation increases to 100 ppm or greater. The person shall also recalculate the radius of exposure if the actual volume fraction of hydrogen sulfide increases by a factor of 25 percent in a well, facility or operation that previously had a hydrogen sulfide concentration of 100 ppm or greater. If calculation or recalculation of the radius of exposure reveals that a potentially hazardous volume is present, the person shall provide the results to the division within 60 days.

[19.15.11.8 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.9 HYDROGEN SULFIDE CONTINGENCY PLAN:

A. When required. If a well, facility or operation involves a potentially hazardous volume of hydrogen sulfide, the person shall develop a hydrogen sulfide contingency plan that the person will use to alert and protect the public in accordance with the Subsections B through I of 19.15.11.9 NMAC.

B. Plan contents:

(1) **API guidelines.** The person shall develop the hydrogen sulfide contingency plan with due consideration of paragraph 7.6 of the guidelines in the API publication Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide, RP-55, most recent edition, or with due consideration to another division-approved standard.

(2) **Required contents.** The hydrogen sulfide contingency plan shall contain information on the following subjects, as appropriate to the well, facility or operation to which it applies.

(a) **Emergency procedures.** The hydrogen sulfide contingency plan shall contain information on emergency procedures the person will follow in the event of a release and shall include, at a minimum, information concerning the responsibilities and duties of personnel during the emergency, an immediate action plan as described in the API document referenced in Paragraph (1) of Subsection B of 19.15.11.9 NMAC, and telephone numbers of emergency responders, public agencies, local government and other appropriate public authorities. The plan shall also include the locations of potentially affected public areas and public roads and shall describe proposed evacuation routes, locations of road blocks and procedures for notifying the public, either through direct telephone notification using telephone number lists or by means of mass

<http://www.nmcpr.state.nm.us/nmac/parts/title19/19.015.0011.htm>

[1/16/2009 4:18:08 PM] notification and reaction plans. The plan shall include information on the availability and location of necessary safety equipment and supplies.

(b) **Characteristics of hydrogen sulfide and sulfur dioxide.** The hydrogen sulfide contingency plan shall include a discussion of the characteristics of hydrogen sulfide and sulfur dioxide.

(c) **Maps and drawings.** The hydrogen sulfide contingency plan shall include maps and drawings that depict the area of exposure and public areas and public roads within the area of exposure.

(d) **Training and drills.** The hydrogen sulfide contingency plan shall provide for training and drills, including training in the responsibilities and duties of essential personnel and periodic on-site or classroom drills or exercises that simulate a release, and shall describe how the person will document the training, drills and attendance. The hydrogen sulfide contingency plan shall also provide for training of residents as appropriate on the proper protective measures to be taken in the event of a release, and shall provide for briefing of public officials on issues such as evacuation or shelter-in-place plans.

(e) **Coordination with state emergency plans.** The hydrogen sulfide contingency plan shall describe how the person will coordinate emergency response actions under the plan with the division and the New Mexico state police consistent with the New Mexico hazardous materials emergency response plan.

(f) **Activation levels.** The hydrogen sulfide contingency plan shall include the activation level and a description of events that could lead to a release of hydrogen sulfide sufficient to create a concentration in excess of the activation level.

C. Plan activation. The person shall activate the hydrogen sulfide contingency plan when a release creates a hydrogen sulfide concentration greater than the activation level set forth in the hydrogen sulfide contingency plan. At a minimum, the person shall activate the plan whenever a release may create a hydrogen sulfide concentration of more than 100 ppm in a public area, 500 ppm at a public road or 100 ppm 3000 feet from the site of release.

D. Submission.

(1) Where submitted. The person shall submit the hydrogen sulfide contingency plan to the division.

(2) When submitted. The person shall submit a hydrogen sulfide contingency plan for a new well, facility or operation before operations commence. The hydrogen sulfide contingency plan for a drilling, completion, workover or well servicing operation shall be on file with the division before operations commence and may be submitted separately or along with the APD or may be on file from a previous submission. A person shall submit a hydrogen sulfide contingency plan within 180 days after the person becomes aware or should have become aware that a public area or public road is established that creates a potentially hazardous volume where none previously existed.

(3) Electronic submission. A filer who operates more than 100 wells or who operates an oil pump station, compressor station, refinery or gas plant shall submit each hydrogen sulfide contingency plan in electronic format. The filer may submit the hydrogen sulfide contingency plan through electronic mail, through an Internet filing or by delivering electronic media to the division, so long as the electronic submission is compatible with the division's systems.

E. Failure to submit plan. A person's failure to submit a hydrogen sulfide contingency plan when required may result in denial of an application for permit to drill, cancellation of an allowable for the subject well or other enforcement action appropriate to the well, facility or operation.

F. Review, amendment. The person shall review the hydrogen sulfide contingency plan any time a subject addressed in the plan materially changes and make appropriate amendments. If the division determines that a hydrogen sulfide contingency plan is inadequate to protect public

safety, the division may require the person to add provisions to the plan or amend the plan as necessary to protect public safety.

G. Retention and inspection. The hydrogen sulfide contingency plan shall be reasonably accessible in the event of a release, maintained on file at all times and available for division inspection.

H. Annual inventory of contingency plans. On an annual basis, each person required to prepare one or more hydrogen sulfide contingency plans pursuant to 19.15.11 NMAC shall file with the appropriate local emergency planning committee and the state emergency response commission an inventory of the wells, facilities and operations for which plans are on file with the division and the name, address and telephone number of a point of contact.

I. Plans required by other jurisdictions. The person may submit a hydrogen sulfide contingency plan to the BLM or other jurisdiction require that meets the requirements of 19.15.11.9 NMAC to the division in satisfaction of 19.15.11.9 NMAC.

[19.15.11.9 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.10 SIGNS, MARKERS: For each well, facility or operation involving a hydrogen sulfide concentration of 100 ppm or greater, the person shall install and maintain signs or markers that conform with the current ANSI standard Z535.1-2002 (Safety Color Code), or some other division-approved standard. The sign or marker shall be readily readable, and shall contain the words "poison gas" and other information sufficient to warn the public that a potential danger exists. The person shall prominently post signs or markers at locations, including entrance points and road crossings, sufficient to alert the public that a potential danger exists.

[19.15.11.10 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.11 PROTECTION FROM HYDROGEN SULFIDE DURING DRILLING, COMPLETION, WORKOVER AND WELL SERVICING OPERATIONS:

A. API standards. The person shall conduct drilling, completion, workover and well servicing operations involving a hydrogen sulfide concentration of 100 ppm or greater with due consideration to the guidelines in the API publications Recommended Practice for Oil and Gas Well Servicing and Workover Operations Involving Hydrogen Sulfide, RP-68, and Recommended Practices for Drilling and Well Servicing Operations Involving Hydrogen Sulfide, RP-49, most recent editions, or some other division-approved standard.

B. Detection and monitoring equipment. Drilling, completion, workover and well servicing operations involving a hydrogen sulfide 19.15.11 NMAC

<http://www.nmcpr.state.nm.us/nmac/parts/title19/19.015.0011.htm>[1/16/2009 4:18:08 PM] concentration of 100 ppm or greater shall include hydrogen sulfide detection and monitoring equipment as follows.

(1) Each drilling and completion site shall have an accurate and precise hydrogen sulfide detection and monitoring system that automatically activates visible and audible alarms when the hydrogen sulfide's ambient air concentration reaches a predetermined value the operator sets, not to exceed 20 ppm. The operator shall locate a sensing point at the shale shaker, rig floor and bell nipple for a drilling site and the cellar, rig floor and circulating tanks or shale shaker for a completion site.

(2) For workover and well servicing operations, the person shall locate one operational sensing point as close to the well bore as practical. Additional sensing points may be necessary for large or long-term operations.

(3) The operator shall provide and maintain as operational hydrogen sulfide detection and monitoring equipment during drilling when

drilling is within 500 feet of a zone anticipated to contain hydrogen sulfide and continuously thereafter through all subsequent drilling.

C. Wind indicators. Drilling, completion, workover and well servicing operations involving a hydrogen sulfide concentration of 100 ppm or greater shall include wind indicators. The person shall have equipment to indicate wind direction present and visible at all times. The person shall install at least two devices to indicate wind direction at separate elevations that visible from all principal working areas at all times. When a sustained hydrogen sulfide concentration is detected in excess of 20 ppm at a detection point, the person shall display red flags.

D. Flare system. For drilling and completion operations in an area where it is reasonably expected that a potentially hazardous hydrogen sulfide volume will be encountered, the person shall install a flare system to safely gather and burn hydrogen-sulfide-bearing gas. The person shall locate flare outlets at least 150 feet from the well bore. Flare lines shall be as straight as practical. The person shall equip the flare system with a suitable and safe means of ignition. Where oncombustible gas is to be flared, the system shall provide supplemental fuel to maintain ignition.

E. Well control equipment. When the 100 ppm radius of exposure includes a public area, the following well control equipment is required.

(1) Drilling. The person shall install a remote-controlled well control system that is operational at all times beginning when drilling is within 500 vertical feet of the formation believed to contain hydrogen sulfide and continuously thereafter during drilling. The well control system shall include, at a minimum, a pressure and hydrogen-sulfide-rated well control choke and kill system including manifold and blowout preventer that meets or exceeds the specifications in API publications Choke and Kill Systems, 16C and Blowout Prevention Equipment Systems for Drilling Wells, RP 53 or other division-approved specifications. The person shall use mud-gas separators. The person

shall test and maintain these systems pursuant to the specifications referenced, according to the requirements of 19.15.11 NMAC, or as the division otherwise approves.

(2) Completion, workover and well servicing. The person shall install a remote controlled pressure and hydrogen-sulfide-rated well control system that meets or exceeds API specifications or other division-approved specifications that is operational at all times during a well's completion, workover and servicing.

F. Mud program. Drilling, completion, workover and well servicing operations involving a hydrogen sulfide concentration of 100 ppm or greater shall use a hydrogen sulfide mud program capable of handling hydrogen sulfide conditions and well control, including de-gassing.

G. Well testing. except with prior division approval, a person shall conduct drill-stem testing of a zone that contains hydrogen sulfide in a concentration of 100 ppm or greater only during daylight hours and not permit formation fluids to flow to the surface.

H. If hydrogen sulfide encountered during operations. If hydrogen sulfide was not anticipated at the time the division issued a permit to drill but is encountered during drilling in a concentration of 100 ppm or greater, the operator shall satisfy the requirements of 19.15.11 NMAC before continuing drilling operations. The operator shall notify the division of the event and the mitigating steps that the operator has or is taking as soon as possible, but no later than 24 hours following discovery. The division may grant verbal approval to continue drilling operations pending preparation of a required hydrogen sulfide contingency plan. [19.15.11.11 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.12 PROTECTION FROM HYDROGEN SULFIDE AT OIL PUMP STATIONS, PRODUCING WELLS, TANK

BATTERIES AND ASSOCIATED PRODUCTION FACILITIES, PIPELINES, REFINERIES, GAS PLANTS AND COMPRESSOR STATIONS:

A. API standards. A person shall conduct operations at oil pump stations and producing wells, tank batteries and associated production facilities, refineries, gas plants and compressor stations involving a hydrogen sulfide concentration of 100 ppm or greater with due consideration to the guidelines in the API publication Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide, RP-55, latest edition or some other division-approved standard.

B. Security. A person shall protect well sites and other unattended, fixed surface facilities involving a hydrogen sulfide concentration of 100 ppm or greater from public access by fencing with locking gates when the location is within 1/4 mile of a public area. For the purposes of Subsection B of 19.15.11.12 NMAC, a surface pipeline is not considered a fixed surface facility.

C. Wind direction indicators. Oil pump stations, producing wells, tank batteries and associated production facilities, pipelines, refineries, gas plants and compressor stations involving a hydrogen sulfide concentration of 100 ppm or greater shall have equipment to indicate wind direction. The person shall install wind direction equipment that is visible from all principal working areas at all times.

D. Control equipment. When the 100 ppm radius of exposure includes a public area, the following additional measures are required.

(1) The person shall install and maintain in good operating condition safety devices, such as automatic shut-down devices, to prevent hydrogen sulfide's escape. Alternatively, the person shall establish safety procedures to achieve the same purpose.

(2) A well shall possess a secondary means of immediate well control through the use of an appropriate christmas tree or downhole completion equipment. The equipment shall allow downhole accessibility (reentry) under pressure for permanent well control.

E. Tanks or vessels. The person shall chain each stair or ladder leading to the top of a tank or vessel containing 300 ppm or more 19.15.11

NMAC

<http://www.nmcpr.state.nm.us/nmac/parts/title19/19.015.0011.htm>[1/16/2009 4:18:08 PM] of hydrogen sulfide in the gaseous mixture or mark it to restrict entry. [19.15.11.12 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.13 PERSONNEL PROTECTION AND TRAINING: The person shall provide persons responsible for implementing a hydrogen sulfide contingency plan training in hydrogen sulfide hazards, detection, personal protection and contingency procedures.

[19.15.11.13 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.14 STANDARDS FOR EQUIPMENT THAT MAY BE EXPOSED TO HYDROGEN SULFIDE: Whenever a well, facility or

operation involves a potentially hazardous hydrogen sulfide volume, the person shall select equipment with consideration for both the hydrogen sulfide working environment and anticipated stresses and shall use NACE Standard MR0175 (latest edition) or some other division-approved standard for selection of metallic equipment or, if applicable, use adequate protection by chemical inhibition or other methods that control or limit hydrogen sulfide's corrosive effects.

[19.15.11.14 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.15 EXEMPTIONS: A person may petition the director or the director's designee for an exemption to a requirement of 19.15.11 NMAC. A petition shall provide specific information as to the circumstances that warrant approval of the exemption requested and how the person will protect public safety. The director or the director's

designee, after considering all relevant factors, may approve an exemption if the circumstances warrant and so long as the person protects public safety.

[19.15.11.15 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.16 NOTIFICATION OF THE DIVISION: The person shall notify the division upon a release of hydrogen sulfide requiring activation of the hydrogen sulfide contingency plan as soon as possible but no more than four hours after plan activation, recognizing that a prompt response should supersede notification. The person shall submit a full report of the incident to the division on form C-141 no later than 15 days following the release.

[19.15.11.16 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

HISTORY of 19.15.11 NMAC:

History of Repealed Material: 19.15.3 NMAC, Drilling (filed 10/29/2001) repealed 12/1/08.

NMAC History:

That applicable portion of 19.15.3 NMAC, Drilling (Section 118) (filed 10/29/2001) was replaced by 19.15.11 NMAC, Hydrogen Sulfide Gas, effective 12/1/08.

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, February 18, 2010 6:19 AM
To: 'Jon_Hamill@oxy.com'
Cc: Hill, Larry, EMNRD; Dade, Randy, EMNRD; 'Mark_Treesh@oxy.com'
Subject: RE: Oxy Indian Basin Gas Plant (GW-021) C-141 H2S Contingency Plan (Plan)

Mr. Hamill:

Good morning. Thank you for introducing yourself to the OCD. I have copied Mr. Larry "Buddy" Hill (Hobbs District Supervisor) and Mr. Randy Dade (Artesia District Supervisor) for networking purposes and in the event you are near their offices, please stop by and introduce yourself.

The OCD Environmental Bureau is currently reviewing Oxy's Plan to determine whether it meets H2S Regulations in New Mexico. An example of recent Gas Plant where the OCD approved a site-specific plan may be viewed at "GW-033" (<http://ocdimage.emnrd.state.nm.us/imaging/AEOrderFileView.aspx?appNo=pENV000GW00034>).

For OCD office locations and contact information, you may go to: <http://www.emnrd.state.nm.us/ocd/AboutUs.htm>.

The OCD looks forward to working cooperatively with Oxy to address the H2S Contingency Plan issues at relevant facilities. Please contact me if I may be of further assistance. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/ocd/index.htm>
(Pollution Prevention Guidance is under "Publications")

From: Jon_Hamill@oxy.com [mailto:Jon_Hamill@oxy.com]
Sent: Wednesday, February 17, 2010 9:35 PM
To: Chavez, Carl J, EMNRD
Subject: RE: Oxy Indian Basin Gas Plant (GW-021) C-141 H2S Contingency Plan

Mr. Chavez:

I hope this email finds you well. I am new to the area and was recently appointed as the Health, Environment, & Safety (HES) Supt. for the SE New Mexico and SW Texas properties for OXY. Please let me know if you have any questions with the plan or any other matters you may inquire. I look forward to having a good working relationship with you and the OCD, as we strive to operate safely and environmentally respectful within our community.

Thank you and I look forward to meeting you in the possibly near future.
--Jon

Regards,

Jon R. Hamill, GSP, OHST
HES Superintendent
Southwest, Mid-Continent Business Unit
OXY USA WTP LP / OXY USA INC
1502 West Commerce Drive
Carlsbad, NM 88220

Office: 575.628.4134
Cell: 575.706.6011
Fax: 713.985.4931
jon_hamill@oxy.com

From: Chavez, Carl J, EMNRD [<mailto:CarlJ.Chavez@state.nm.us>]
Sent: Wednesday, February 17, 2010 3:50 PM
To: Treesh, Mark E
Cc: Dade, Randy, EMNRD; VonGonten, Glenn, EMNRD; Hamill, Jon R; Johnson, Marty E; Hernandez, Alonzo
Subject: RE: Oxy Indian Basin Gas Plant (GW-021) C-141 H2S Contingency Plan

Mr. Treesh:

The OCD is in receipt of your H2S Contingency Plan and will get back with you soon.

Please contact me if you have questions. Thank you.

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Please let myself or Jon Hamill (copied on this email) know if there are any other questions or concerns.

Thank you for your patience

Mark Treesh
Production Coordinator
Indian Basin Gas Plant
Office: 575-628-4112
Cell: 575-200-8010

From: Chavez, Carl J, EMNRD [<mailto:CarlJ.Chavez@state.nm.us>]
Sent: Tuesday, February 02, 2010 7:18 AM
To: Treesh, Mark E

Cc: Dade, Randy, EMNRD; VonGonten, Glenn, EMNRD
Subject: FW: Oxy Indian Basin Gas Plant (GW-021) C-141 H2S Contingency Plan

Mr. Treesh:

Good morning. This is a reminder that your H2S Contingency Plan for the above subject facility is due February 17, 2010.

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
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To: 'Mark_Treesh@oxy.com'
Cc: Dade, Randy, EMNRD; Ezeanyim, Richard, EMNRD; VonGonten, Glenn, EMNRD
Subject: RE: Oxy Indian Basin Gas Plant (2RP-22-0) C-141 Acid Gas Compressor Shutdown Due to Low Lube Oil Flow Shutdown to Cylinders

Mr. Treesh:

The New Mexico Oil Conservation Division (OCD) has completed its review of your e-mail submittals.

The C-141 corrective actions taken hopefully will correct the reoccurring problem.

The Emergency Response Plan for Southwest New Mexico (Eddy, Lea, Chavez & Roosevelt Counties) does not appear to specifically address OCD § 19.15.11 NMAC (Hydrogen Sulfide Gas- see attached regulations) regulatory requirements for each facility. While the OCD commends OXY for developing a generic plan (Pages 41-42 attempting to display all OXY facility area of exposures, etc., which are not discernible from the figure and appear generic in nature), it appears that either a new generic plan focusing on OCD's Hydrogen Sulfide Gas Regulations is needed with site-specific Contingency Plan (CP) pages with maps to scale for every facility that may have 100 ppm or greater H2S gas releases (see attached regulations).

Please take a moment to review the OCD regulations and contact me to discuss how OXY may develop one generic plan for all applicable facilities in New Mexico that will satisfy § 19.15.11 NMAC or an individual CP for each facility that the regulations applies to in New Mexico. The OCD requests that you submit a H2S CP for the Oxy Indian Basin Gas Plant within 90 days of receipt of this e-mail. In addition, OXY may desire to develop one generic CP with site specific pages that display the required information for each applicable facility.

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Subject: RE: Oxy Indian Basin Gas Plant (2RP-22-0) C-141 Acid Gas Compressor Shutdown Due to Low Lube Oil Flow Shutdown to Cylinders

Mr. Chavez,

As requested attached are:

1] The OXY-Midcontinent Emergency Response Plan (ERP) for southwest New Mexico. The H2S contingency plan is included in the ERP with maps of the Indian Basin area including the plant showing radius of exposures and the nearest public residences on page 41 and 42.

2] An amended C-141 that contains an improved description of the problem and events leading up to the release and the actions we took to remedy the problem and to limit the probability of recurrence.

I apologize in the slight delay in getting you this response as I have been experiencing internet / email problems throughout the day.

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Sent: Thursday, November 05, 2009 5:05 PM
To: Treesh, Mark E
Cc: Dade, Randy, EMNRD; Ezeanyim, Richard, EMNRD
Subject: Oxy Indian Basin Gas Plant (2RP-22-0) C-141 Acid Gas Compressor Shutdown Due to Low Lube Oil Flow Shutdown to Cylinders

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You indicated in a telephone call that when the compressor shuts down 98% of the gas is flared with a sulfur dioxide emission. In addition, a release form is submitted to the NMED for air quality monitoring purposes.

I have attached the C-141 Form for reference.

Based on the final C-141 Form that was submitted, the OCD requests the following:

- 1) Copy of your H2S Contingency Plan (CP) as required by 19.15.11 NMAC (Hydrogen Sulfide Gas). The CP should have a map to help assess public health threats from the releases that have been occurring.
- 2) Amend the C-141 Form to describe the cause of the problem and remedial action taken, in this case, to fix the problem or steps taken to remedy the situation and prevent these releases from re-occurring.

The OCD hopes that the problem with the compressor is fixed to prevent these "Major Releases" from occurring in the future. Please resubmit a recompleted C-141 Form and CP to me by close of business next Friday, November 13, 2009.

Please contact me if you have questions. Thank you.

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OXY Mid-Continent

EMERGENCY RESPONSE PLAN

Southwest - NEW MEXICO

**This document includes Eddy, Lea, Chavez,
and Roosevelt Counties in New Mexico for
Indian Basin Gas Plant and Production Well
Facilities.**

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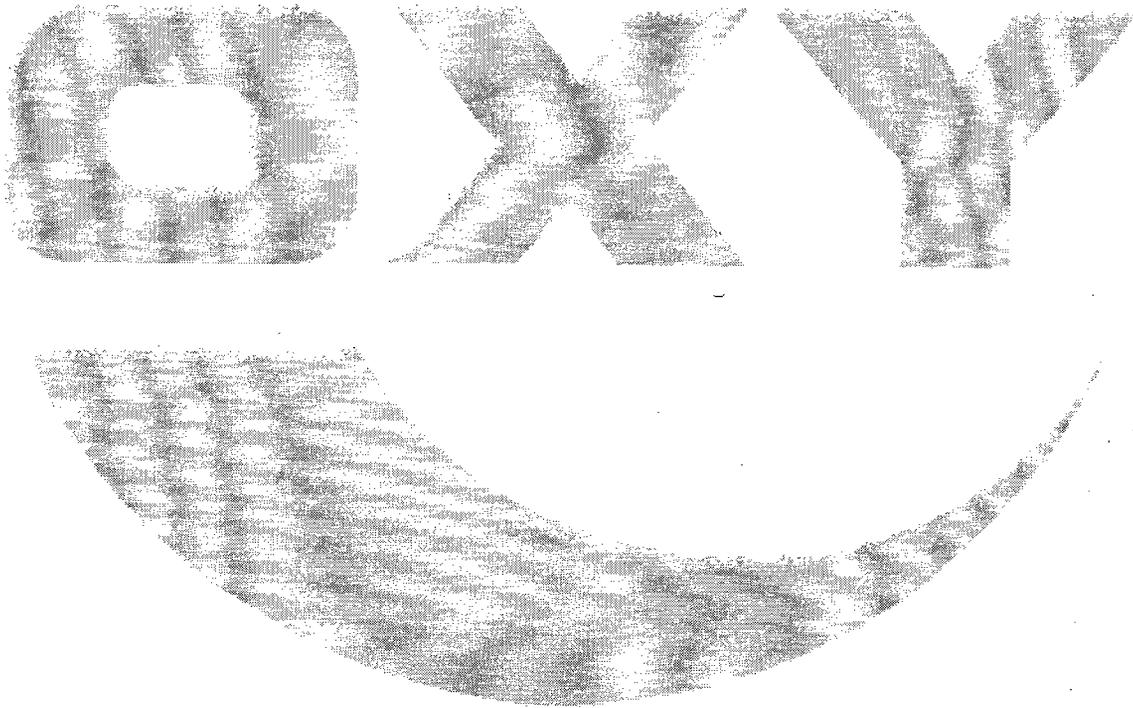
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PREFACE

An effective and viable Emergency Response Plan is intended to provide prior planning and guidance in responding to Emergency Incidents. The primary considerations in its development are personnel and public safety, protection of company and public property and protection of the environment.

Although the plan addresses varied emergency situations that may occur, it recognizes that flexibility and the use of the organization's knowledge and experience is critical to safe resolution of emergency incidents. Response actions outlined in the plan provide a framework that may be placed into operation without confusion. This will promote quick and decisive actions while protecting the safety of personnel and the public.

Every effort has been taken to minimize or eliminate all potentially hazardous situations and to avoid accidents due to equipment failure by the dedicated efforts of our people in maintaining a preventive maintenance program.

The New Mexico Indian Basin Gas Plant and Production Areas of the Southwest Mid-Continent team is responsible and accountable for the implementation, evaluation, and maintenance of this Emergency Response Plan in accordance with Oxy Mid-Continent's safety guidelines.

Mid-Continent SOUTHWEST-NM POLICY

The Mid-Continent, Southwest-NM team pledges to protect the health and safety of our employees, contractors, users of our products and the communities in which we operate. We recognize the challenge of fulfilling this pledge while accomplishing our other corporate goals. Each of us share this responsibility to ensure our long term success. To achieve our goals, we will:

- Commit to leadership by operating and growing our business in compliance with all known legal requirements and Oxy Mid-Continent's Health, Environmental, Safety and Regulatory operating guidelines.
- Safeguard our employees' health by promoting an accident free workplace, minimizing exposure to hazardous substances, and providing preventive health care systems.
- Promote the safe handling, use and disposal of our products by acquiring and communicating information thus educating our employees and customers.
- Minimize the environmental impact of our operations by promoting pollution prevention and environmental conservation.
- Anticipate, evaluate and manage risks by maintaining crisis management programs that emphasize prevention and effective emergency preparedness, response and recovery plans.
- Commit to continuous improvement by monitoring compliance with regulations and our internal guidelines while striving for Safety performance which compares favorably with industry leaders.
- Earn the public trust by communicating openly about our guidelines, programs and performance while advocating sound laws and regulations.

EMERGENCY RESPONSE AND EVACUATION

ACTIVATION OF EMERGENCY RESPONSE PLAN

Upon notification or discovery by anyone of a potential emergency situation:

1. Evaluate the Incident and Initial notifications should be made via Company radio and / or mobile phone.
2. Initiate the Emergency Response Plan.
3. Initiate Rescue and First Aid as the situation dictates.

The person at the emergency site will notify the **Plant / Operations Production Coordinator**, who will notify the first responder.

1. The Production Coordinator will be responsible for the delegation of assignments relative to notifying all company, contract, and emergency response personnel.
2. The **Production Coordinator** will notify and coordinate deployment of emergency equipment and any additional manpower as the situation dictates.
3. The **Production Coordinator**, or relief, remains on site until the emergency is over.

The **Production Coordinator** ensures repairs have been completed and ensures the operation has returned to normal, before releasing emergency team members.

PERSONNEL RESPONSIBILITIES

A. Company Team Member will be responsible for:

1. Notifying responsible party of incident location.
2. Containment, and repair of hazardous conditions as assigned by **Production Coordinator** and only those tasks they have been trained to perform.
3. Assisting civil authorities as requested by the **Production Coordinator**.
4. Coordinating with civil authorities, and the use of other expertise as needed relative to hazards.

B. Contract Personnel will immediately evacuate to the designated mustering area where they will be accounted for from the Job Permit / Control Room sign-in sheet.

Contractors will remain in the area to assist Oxy Mid-Continent team members and civil authorities as requested but only when it is safe to do so and when adequate training has been provided.

C. Civil Authorities (Law Enforcement, Fire, Emergency Medical Services) will be responsible for:

1. Establishing membership in a Unified Command structure hosted by the Oxy Mid-Continent **Production Coordinator**.
2. As directed by the **Production Coordinator** and the Unified Command, control site access by highway and air, re-route traffic outside vicinity of area, and provide escort services for response personnel into the area.
3. Perform all fire and vapor release control activities in coordination with the Unified Command.
4. Initiate public evacuation plans as instructed by the **Production Coordinator**.
5. Perform rescue or recovery activities with coordination from the Unified Command.
6. Provide medical assistance as dictated by the situation at hand.

EMERGENCY SHUTDOWN PROCEDURES

Any Oxy Mid-Continent employee has the discretionary authority to initiate a shutdown of the field or facility if assessment of the situation deems an immediate shutdown is necessary.

Often, during daylight hours, this decision would be deferred to the **Plant/Operations Production Coordinator** or the supervisor-in-charge;

However, this decision may be left up to the judgment of the employee involved when a Production Coordinator or Supervisor cannot be immediately contacted.

EMERGENCY RESPONSE ACTIONS

PRODUCTION COORDINATOR

The **Production Coordinator** will be responsible for all direct contact with the news media and for all other documentation. Primary responsibility is to notify or delegate all Oxy Mid-Continent and contract personnel as well as civil authorities required for emergency response to the situation.

Additionally, the PC will direct the actions of all team members on-site and initiate an evacuation as necessary to the designated mustering point. The PC will determine when an emergency is considered over and operations have returned to normal. The PC will take a leadership role in establishing a Unified Command with civil authorities, local responders, and community response officials.

PRODUCTION COORDINATOR ASSISTANT

The **PC Assistant**, to be named by the **Production Coordinator** at the time of the emergency, will assist and relieve the PC in any emergency action responsibilities as directed. The **PC Assistant** will help coordinate tactical decisions with the PC relative to resolving the incident, and will specialize in field activities surrounding operations, local planning, immediate logistics, and establishing safe operations for the community.

OTHER PERSONNEL

All **non-emergency personnel** should proceed to the mustering area and wait for instructions from the PC.

HES REPRESENTATIVES

The primary responsibility of the local **HES Representative** is to notify the appropriate regulatory agencies whenever environmental concerns and regulations dictate.

Additionally, the **HES Representative** is responsible to provide clean-up directions and requirements for spill remediation; to include disposal guidelines.

The **HES Representative** is responsible for assessing the hazards of the situation, advising the PC of those hazards and appropriate responses, to ensure the safety of response personnel.

HES Representative will take the lead in assisting the Unified Command in establishing "Hot" and "Cold" zones as dictated by the incident.

The **HES Representative** should coordinate all required regulatory agency and Houston Office notification in the event of serious injury or death.

HES Representative should assist in acquiring and deploying the appropriate Personal Protective Equipment (PPE) as needed.

After returning to normal operations, the **HES Representative** should critique the outcome of the incident and coordinate the investigation and post-appraisal of the incident.

HES Representative should perform all other duties as requested by the PC or HES Manager.

COMMAND CENTER

In the event that the incident permits the safe use of the office, the conference room in the office will be utilized as the **Command Center** during emergency situations. This location was chosen because there is access to multiple phone lines, wireless internet, wired computer lines, fax machine and information resources. The building is equipped as follows:

1. Office supplies and forms are available in office supply rooms.
2. Computers and mail terminals are available but are inoperable during a power loss.
3. In the event the office requires evacuation and a mobile Emergency Command Center is set up, all communications with civil authorities shall be conducted via mobile phone.

Civil Authority Personnel will report to the mobile **Command Center** for further instructions. Communications with Oxy Mid-Continent Southwest Team Members or other locations will be conducted with mobile phones, radios, or company "walkie-talkie" radios.

HAZWOPER TRAINED PERSONNEL

Jerry "Bubba" Harrison	Operations Production Coordinator	Level V
Van Barton	Operations Production Coordinator	Level V
Mark Treesh	Plant Production Coordinator	Level V
Marty Johnson	HES Specialist	Level V
Rick Kerby	HES Specialist	Level V
Kelton Beard	HES Specialist	Level V

SOUTHWEST- NM FIRST CONTACT EMERGENCY TELEPHONE LIST

OXY MID-CONTINENT HOTLINE	713-935-7210
CAPROCK ANSWERING SERVICE	575-393-3021
CARLSBAD OFFICE	575-628-4100
ARTESIA ANSWERING SERVICE	575-746-4302

TEAM LEADERS AND HES

Van Barton <i>Operations Production Coordinator</i>	Office Mobile Home Radio Call	575-628-4111 575-706-7671 575-706-3269 103
Jerry (Bubba) Harrison <i>Operations Production Coordinator</i>	Office Mobile Home Radio Call	575-628-4183 575-365-5863 575-746-6754 101
Mark Treesh <i>Plant Production Coordinator</i>	Office Mobile Home	575-628-4112 575-200-8010 575-628-8128
Alonzo Hernandez <i>Mid Continent HES Lead</i>	Office Mobile Home	970-263-3609 970-985-0687 970-434-9048
Jon Hamill <i>Mid Continent - SW HES Supervisor</i>	Office Mobile Home	970-263-3645 575-706-6011
Marty Johnson <i>HES Specialist</i>	Office Mobile Home	575-628-4122 575-499-5652 575-725-5188
Rick Kerby <i>HES Specialist</i>	Office Mobile Home Radio Call	575-628-4120 575-390-8639 575-887-9094 102
Kelton Beaird <i>HES Specialist</i>	Office Mobile Radio Call	575-628-4121 575-390-1903 104

**SOUTHWEST - NM TEAM
EMERGENCY TELEPHONE LIST**

HES SUPPORT PERSONNEL

Jon Hamill <i>Mid Continent – SW HES Supervisor</i>	Office Mobile Home	970-263-3645 575-706-6011
Marty Johnson <i>HES Specialist</i>	Office Mobile Home	575-628-4122 575-499-5652 575-725-5188
Rick Kerby <i>HES Specialist</i>	Office Mobile Home	575-628-4120 575-390-8639 575-887-9094
Kelton Beard <i>HES Specialist</i>	Office Mobile Home	575-628-4121 575-390-1903 575-318-9256

OXY MID-CONTINENT HOUSTON / GRAND JUNCTION OFFICE

J.T. (Tommy) McKenzie <i>Asset Manager Houston</i>	Office	713-366-5176
Scott Hodges <i>SW Ops Manager Midland</i>	Office Mobile	432-685-5807 432-238-4405
Greg Hardin <i>HES Manager Houston</i>	Office Mobile	713-366-5324 713-560-8037
Alonzo Hernandez <i>HES Superintendent Grand Junction</i>	Office Mobile Home	970-263-3609 970-985-6055 970-434-9048

EMERGENCY SERVICES OUTSIDE SUPPORT PHONE NUMBERS

MEDICAL

HOSPITAL NAME	ADDRESS	CITY	PHONE NUMBER
Carlsbad Medical Center	2430 W. Pierce	Carlsbad, NM	888-262-9111
Artesia General Hospital	702 N. 13 th St	Artesia, NM	575-748-3333
Eastern New Mexico Medical Center	405 W. Country Club Road	Roswell, NM	575-622-8170
Nor-Lea General Hospital	1600 N. Main Street	Lovington, NM	575-396-6611
Lea Regional Medical Center	5419 Lovington Hwy.	Hobbs, NM	575-492-5000
University Medical Center	602 Indiana	Lubbock, TX	806-775-8200
Brownfield Regional Medical Center	705 E. Felt	Brownfield, TX	806-637-3551
Covenant Health Systems	4000 24th Street	Lubbock, TX	806-725-0000
Covenant Medical Center	2615 19th Street	Lubbock, TX	806-725-1011

AMBULANCE

Hobbs, New Mexico	911 or 575-397-9352
Lovington, New Mexico	911 or 575-396-2359
Carlsbad, New Mexico	911 or 575-885-2111
Loving, New Mexico	911 or 575-885-2111
Jal, New Mexico	911 or 575-395-2221

AIR AMBULANCE

AEROCARE (Methodist Hospital) Lubbock, Texas – <i>Aerocare will respond to a call from any OXY personnel. <u>ETA Lubbock to Hobbs 42 minutes.</u></i>	800-627-2376
Southwest Medevac – Las Cruces	888- 538-6498

LAW ENFORCEMENT 911

POLICE

CITY	PHONE NUMBER
Artesia, New Mexico	911 or 575-746-2704
Carlsbad, New Mexico	911 or 575-885-2111
Eunice, New Mexico	911 or 575-394-2112
Hobbs, New Mexico	911 or 575-397-9265
Jal, New Mexico	911 or 575-395-2501
Lovington, New Mexico	911 or 575-396-2811

SHERIFF

CITY/COUNTY	PHONE NUMBER
Eddy County Sheriff- Carlsbad	911 or 575-887-7551
Eddy County Sheriff-Artesia	911 or 575-746-2704
Lea County Sheriff - Eunice	911 or 575-396-3611
Lea County Sheriff - Hobbs	911 or 575-396-3611
Lea County Sheriff - Lovington	911 or 575-396-3611

STATE HIGHWAY PATROL

CITY	PHONE NUMBER
Artesia, New Mexico	575-746-2704
Carlsbad, New Mexico	575-885-3137
Hobbs, New Mexico	575-392-5588

FIRE DEPARTMENT

CITY	PHONE NUMBER
Hobbs, New Mexico	911 or 575-397-9308
Lovington, New Mexico	911 or 575-396-2359
Carlsbad, New Mexico	911 or 575-885-2111
Loving, New Mexico	911 or 575-745-3600
Lakewood, New Mexico	911 or 575-746-5050
Jal, New Mexico	911 or 575-395-2221
Loco Hills, New Mexico (Sonny Hope, Fire Chief)	911 or 575-365-6510
Artesia, New Mexico	911 or 575-746-5001

GOVERNMENT AGENCIES

AGENCY	PHONE NUMBER
Air Quality Bureau, Santa Fe, NM	575-827-1494
Bureau of Land Management, Carlsbad	575-234-5972
Bureau of Land Management, Hobbs	575-397-9308
Bureau of Land Management, Roswell	575-393-3612
Bureau of Land Management, Santa Fe	505-988-6030
LEPC - David Hooten	575-397-9231
National Response Center	800-424-8802
NM Environmental Department, Santa Fe	505-827-9329
New Mexico Oil Conservation Division, Artesia	575-748-1283
New Mexico Oil Conservation Division, Hobbs	575-393-6161
New Mexico Oil Conservation Division, Santa Fe	575-471-1068
NM State Environmental Response Center	505-827-9222
NMOCD Environmental Bureau, Santa Fe	505-827-2855
Occupational Safety & Health Admin. (OSHA)	806-746-7681
Public Affairs (Gene Montgomery)	281-552-1111

AIRPORTS

CITY	PHONE NO.
Lea County Airport - Carlsbad Hwy	575-393-4943
Lea County Lovington Airport	575-396-9911
Lubbock International Airport	806-762-6411
Midland International Airport	432-563-2033
Cavern City Airport, Carlsbad	575-887-3060

POISON CONTROL CENTER – New Mexico	800-432-6866
POISON CONTROL CENTER – Texas	800-764-7664

CHEMTREC**	800-424-9300
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**** Call CHEMTREC for questions concerning response or chemical hazards in the event of a chemical spill.**

NALCO/EXXON 24 HR EMERGENCY	800-462-5378 800-IM-ALERT
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BAKER PETROLITE 24 HR EMERGENCY	800-231-3606
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SOUTHWEST-NM OPERATIONAL PERSONNEL

EMPLOYEE	In-house Ext.	Location	Cell Phone	Title
Artesia Tower Building	4175	Artesia		Tower
Juarez, Ray (Centurion)		Artesia	575-631-3408	Pipeline Specialist
Ballard, Winston	4119	C-100	575-361-8000	Well Analyst
Barton, Van	4111	C-100	575-706-7671	Operations Team Leader
Beaird, Kelton	4121	C-100	575-390-1903	HES Specialist
Carlsbad OTL Fax Line	4126	C-100		Fax
Carlsbad Office 2nd Line Conf	4152	C-100		Conference Room
Carlsbad Office Conference	4150	C-100		Conference Room
Carlsbad Office Lobby	4105	C-100		Lobby
Carlsbad Office Main Fax Line	4125	C-100		Fax
Burkham, Tiffney	4116	C-100		Administrative Support
Hobbs, Tammy	4115	C-100	575-746-7441	Administrative Support
Jarrin, Marco	4134	C-100	575-706-8179	Automation Specialist
Kajiki, Elizabeth	4118	C-100		Administrative Support
Kerby, Rick	4120	C-100	575-390-8639	HES Specialist
Kilgore, Deborah	4117	C-100	575-200-7238	Administrative Support
Maldonado, Oscar	4131	C-100	806-789-8524	Measurement Tech
Odom, Warren – Carlsbad	4195	C-100	806-789-9271	IT Tech
OTL Conference Room	4151	C-100		Conference Room
Telecom/Server Room	4135	C-100		Server Romm
Webster, John	4132	C-100	575-706-9249	Electrical/Automation
Willson, Stan	4133	C-100	575-706-7471	Electrical/Automation
Brewer, Tim	4142	C-200	575-706-0757	Equipment Tech
Bryant, Jay	4140 or 4141	C-200	806-893-7192	W/O Comp. Specialist
Burnett, Johnny	4140 or 4141	C-200	432-664-9178	W/O Comp. Specialist
Campbell, BJ	4136 or 4139	C-200	575-706-0030	Production Tech
Canada, Don	4136 or 4139	C-200	575-513-2564	Production Tech
Cardenas, Rudy	4140 or 4141	C-200	806-638-4364	W/O Comp. Specialist
Carlsbad Office Bldg 200 Fax	4127	C-200		Fax
Catt, Lonnie	4140 or 4141	C-200	575-706-2988	W/O Comp. Specialist
Clifton, Reggie	4140 or 4141	C-200	806-215-0080	W/O Comp. Specialist

Cole, Kevin	4136 or 4139	C-200	575-706-4275	Production Tech
Engineers Office in Carlsbad	4145	C-200		Engineers
Bolend, Dale	4136 or 4139	C-200		Contract Production Tech
Fairweather, Suzanne	4136 or 4139	C-200	575-200-7248	Contract Production Tech
Foster, John	4136 or 4139	C-200	575-706-1768	Contract Production Tech
Frye, Russ	4143	C-200	575-390-1119	Equipment Tech
Garcia, Amalio	4140 or 4141	C-200	806-759-8447	W/O Comp. Specialist
Hernandez, Lonnie	4136 or 4139	C-200	575-513-2565	Production Tech
Hines, Tom	4136 or 4139	C-200	575-706-7673	Production Tech
Huckaby, Jerry	4136 or 4139	C-200	575-390-0920	Production Tech
Huff, Jim	4136 or 4139	C-200	575-706-9613	Contract Production Tech
Kinnibrugh, Tracy	4136 or 4139	C-200	575-513-0777	Contract Production Tech
Marquez, Alex	4136 or 4139	C-200		Contract Production Tech
Montes, Raul "Junior"	4136 or 4139	C-200	575-605-3345	Contract Production Tech
Moya, Rick	4144	C-200	575-390-1096	Construction Specialist
Oden, Bryan	4140 or 4141	C-200	806-215-4497	W/O Comp. Specialist
OET Office in Carlsbad	4147	C-200		Trucking
Pfaff, Max	4136 or 4139	C-200	575-706-0639	Production Tech
Project Room in Carlsbad	4146	C-200		
Rangel, Jathan	4136 or 4139	C-200	575-746-7570	Contract Production Tech
Shearman, David	4136 or 4139	C-200	575-513-2566	Production Tech
Standard, Gary	4136 or 4139	C-200	575-706-1770	Contract Production Tech
Vowell, Mike	4140 or 4141	C-200	575-365-7682	W/O Comp. Specialist
Walker, Billy	4136 or 4139	C-200	575-626-2464	Contract Production Tech
Calmon Tower	4160	Calmon		Tower
Calmon Yard	4161	Calmon		Calmon Yard
Barnett, Jimmy	4101	IBGP	575-703-5625	Plant Operator
Berdoza, Javier	4196	IB Field	575-365-5040	Production Tech
Bowen, Pat	4186	IBGP	575-365-8411	Plant Tech
Buffington, Bobby	4197	IB Field	575-365-4040	Production Tech
Cain, Kyle	4101	IBGP	575-200-5356	Plant Operator
Campbell, Rodney	4101	IBGP	575-200-5521	Plant Operator
Control Room	4101	IBGP		Control Room
Dubeau, Stacy	4185	IBGP	575-302-9378	Administrative Support
ET/AT Office	4139	IBGP		Electrical/Automation

Guest Office	4188	IBGP		Guest
Hamilton, Brady	4197	IB Field	575-365-4531	Production Tech
Harrison, Jerry "Bubba"	4183	IB Field	575-365-5863	Construction Specialist
Johnson, Marty	4122	IBGP	575-499-5652	HES Specialist
Ivy, Jack	4184	IB Field	575-365-8442	Equipment Tech
Kirkes, Clint	4113	IBGP	575-365-5518	Plant Specialist
Malone, Wendell	4101	IBGP	575-365-7464	Plant Operator
Martinez, Ricco	4101	IBGP	575-725-0295	Plant Operator
Morgan, Steven "Sharky"	4138	IB Field	575-513-2320	Automation Tech
Norris, John	4198	IB Field	575-746-7709	Production Tech
Phone Attendant	4102	IB Field		Computer
Plant #1	4180	IBGP		Plant
Plant #2	4181	IBGP		Plant
Pulice, Christopher	4182	IBGP	575-365-5585	Electrical Tech
Rivera, Richard	4148	IB Field	575-200-5031	Equipment Tech
Rouse, David	4101	IBGP		Plant Operator
Salmon, Tito	4196	IB Field	575-365-4471	Production Tech
Spicer, Wesley	4101	Gas Plant	806-632-2459	Plant Operator
Tech Room	4193	IB Field		
Tech Room	4194	IB Field		
Treesh, Mark	4112	IBGP	575-200-8010	Plant Production Coord.
Velasquez, Dario	4187	IBGP	575-200-6495	Automation Specialist
Waldrip, Jacob	4188	IBGP	575-200-7454	Automation Specialist
Williams, Charlie	4198	IB Field	575-365-8441	Production Tech
Wilson Office	4170	IB		
Wilson Office	4171	IB		
Wilson Office - Fax Line	4178	IB		Fax
Bryan, Billy		Hobbs	575-706-7655	Production Tech
Hobbs Office	4166	Hobbs		
Hobbs Office	4167	Hobbs		
Odom, Warren - Hobbs	4195	Hobbs	806-789-9271	IT Tech
Rivas, Mickey	4136 or 4139	Hobbs	575-706-8362	Production Tech
Ross, Kevin	4136 or 4139	Hobbs	575-390-1147	Production Tech
Summers, Tony	4136 or 4139	Hobbs	575-706-5714	Production Tech
Anaya, Juan	4136 or 4139	IB Mountain	575-706-8181	Production Tech

Bock, Justin	4136 or 4139	IB Mountain	575-706-4502	Production Tech
Depue, Billy	4136 or 4139	IB Mountain	575-706-5992	Production Tech
Eastside Doghouse Main Line	4165	IB Mountain		IB Mountain
Franco, Inez	4136 or 4139	IB Mountain	575-706-4374	Production Tech
Klein, Tim	4136 or 4139	IB Mountain	575-200-9833	Production Tech
Nolen, Richard	4136 or 4139	IB Mountain	575-706-0064	Production Tech
Sanchez, Ben	4136 or 4139	IB Mountain	575-706-5768	Production Tech
Smith, Brady	4136 or 4139	IB Mountain	575-706-8995	Production Tech
Stephens, Mark	4136 or 4139	IB Mountain	575-706-8358	Production Tech
Westside Doghouse - Tower	4162	IB Mountain		Tower
Westside Doghouse Fax Line	4168	IB Mountain		Fax
Westside Doghouse Main	4163	IB Mountain		IB Mountain
Westside Doghouse Second	4164	IB Mountain		IB Mountain
Westside Doghouse Third Line	4172	IB Mountain		IB Mountain
Wilson Office - PolyCom	4179	IB Mountain		IB Mountain
Longoria, Lay			575-631-1234	Roustabout Foreman
Rojas, Rudy			575-631-0263	Roustabout Foreman

AREA NEIGHBORING RESIDENTS

LOCATION DESCRIPTION	CONTACT NAME	ADDRESS	PHONE NUMBER
4TK (Boles Ranch)	Mark and Sandi Wilkie	1073 Marathon Rd.	575-457-2022
Forrest Lee Ranch	Dean Lee	Near NIBU 24	575-457-2301
Gissler Ranch	Joe and Janet Cox	344 Ponderosa Pine	575-457-2438
Gregory's	Wayne Gregory	617 Queens Highway	575-457-2245
Howell Ranch	Richard Howell		575-457-2602
Kincaid Ranch	Gene Kincaid	2802 Legion	575-887-6918
Kincaid Ranch	Hugh Kincaid	2911 Ocotillo Canyon	575-885-9458
Kincaid Ranch	Jim Marbauch	1762 Queens Hwy	575-457-2233
Old Jones Ranch	Rick Lasiter	Rock House	575-457-2108
Schafer Ranch	Stacey Biebelle	646 Queens Hwy	575-457-2360
Wilbanks Ranch	Kevin and Laurie Wilbanks		575-457-2003

CORPORATE SECURITY

Hugo Moreno	Office Home Cell/pager Fax	713-215-7157 281-778-8111 713-817-3322 713-215-7538
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*****Must be notified to assist in providing site security for all major emergencies and spills or response for any bomb threats or terrorist activities.***

CONTRACTOR SUPPORT

ELECTRIC SERVICE COMPANIES

Wood Group – Artesia	575-746-4614
Schlumberger	432-557-4437
Deans Electric – Artesia	575-748-3400
Caveman Electric – Carlsbad Phone Cell Phone	575-885-4730 575-706-2138
Dixie Electric – Hobbs	575-393-4466
TESSCO – Carlsbad Phone Cell Phone	575-236-6266 575-389-2543

WATER SERVICE AND VACUUM TRUCKS

Key Energy Trucking – Carlsbad	575-390-1838
Key Energy Trucking – Hobbs	575-397-4994
Nabors – Carlsbad	575-885-3372
Nabors – Hobbs	575-392-2577
I & W – Artesia	800-748-1972
Gandy's	575-396-4948

ROUSTABOUT

RWI – Hobbs	575-393-5305
Lay's Roustabout	575-631-1234
Mesquite	575-887-4847

DIRT WORK EQUIPMENT

RWI – Hobbs	575-393-5305
Lay's Roustabout	575-631-1234
Mesquite	575-887-4847

WELDERS

RWI – Hobbs	575-393-5305
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SAFETY EQUIPMENT

Total Safety – Hobbs	575-392-2973
American Safety – Hobbs	575-393-8830
Indian Fire & Safety – Hobbs	575-393-3093
Indian Fire & Safety – Artesia	575-746-4660
Safety Environmental Solutions, Inc. – Hobbs	575-397-0510

PIPELINE AND OTHER COMPANIES

Occidental Petroleum	Pat Bowen	575-457-2621
Yates Petroleum	Junior Orquiz (David Ortega, Relief)	575-365-8556
Latigo	Hobbs Office	575-391-9291
Duke Energy	Carlsbad Office Dee Wanda Johnson	575-234-6400 575-706-2022 575-910-4725
Phillips Pipeline		800-766-8690
Enterprise (aka El Paso)	Cliff Compton Courtney	575-302-3030 575-706-2270
Navajo Refining	Gart Woods Kent Mirney Pipeline Trucking Dispatch	575-365-4537 575-365-4689 575-365-4537 575-746-4628 575-746-5274 800-748-3315
Agave	Jason Fuentes	575-365-8939
Frontier	Jerry Wright	575-361-0154
Shell	Dispatcher	800-657-7264

APPENDIX A - INCIDENT CLASSIFICATION

DEFINITIONS

Oxy Mid-Continent recognizes two levels of incidents (OOGC 60.400.110) that are defined below.

Significant Incident – Health, Environment and Safety (HES) incident associated with an Oxy operation that includes one or more of the following:

- 1) Employee/Contractor/Third Party occupational *fatality*;
- 2) Employee/Contractor/Third Party occupational injury or illness requiring *overnight hospitalization (other than for observation)*;
- 3) Any fatality, injury, or illness to a member of the *public*;
- 4) Incidents causing injuries to *multiple personnel (greater than first aid)* and involving Oxy equipment, facilities, operations, construction or transportation;
- 5) Loss or damage to Oxy, contractor or third party equipment or property valued at **\$100,000 or greater**;
- 6) Any incident whereby Oxy's portion of the cost of fines, penalties, settlements, remediation and/or emergency response is likely to be **greater than \$100,000**;
- 7) HES related issues giving rise to *significant adverse impact* (or the potential for such adverse impact) on Oxy's image or goodwill; or
- 8) Any HES related actions by a government agency, court of law, or third party that results in interference with production and is likely to produce an annual loss of earnings of **\$1,000,000 or more**.

Important Incident – an HES incident associated with an Oxy operation that includes one or more of the following:

- 1) A spill, release, discharge of a substance, or any event that is reportable to any governmental agency or exceeds the local regulations and/or performance standard. (*Each Oxy operation shall develop performance standards for reportable quantities of substances used in the operations that are at least as stringent as local laws/regulations*);
- 2) **Public/Government Action** – any written HES related action instituted against Oxy which includes: *citation, civil actions, complaints, notices of violation (NOV), consent orders, decrees, injunctions or claims that may result in significant liabilities or judicial proceedings*;

- 3) United States Government Agency inspections (for U.S. operations only) – any notice or contact by, or appearance of, an agent from the Occupation Safety and Health Administration (OSHA) or the Environmental Protection Agency (EPA) (*Federal or State*) for the intended purpose of conducting a site or facility inspection;
- 4) **Recordable Injury or Illness** – any injury or illness involving employees or contractors which would be recordable under criteria provided in the *Record Keeping Guidelines for Occupational Injuries & Illnesses, U.S. Department of Labor, Bureau of Labor Statistics, September 1986.*
- 5) Loss or damage to Oxy, contractor or third party equipment or property values at **less than \$100,000 but greater than \$25,000.**

NEAR MISS / ACCIDENT PREVENTION OPPORTUNITY (APO) – any undesired event which, under slightly different circumstances, could have resulted in a significant or important accident/incident.

NOTIFICATION AND REPORTING REQUIREMENTS

SIGNIFICANT INCIDENT

The following steps outline the notification expectations for incidents classified as significant incidents. The **Plant / Operations Production Coordinator** will ensure the appropriate notification has taken place.

Immediate is defined as the earliest practical time once the incident has been brought under control or is being managed by someone other than the individual conducting the notification process. (Do not risk additional personal injury, increased public exposure or compound property damage by attempting to notify while still responding to a Major incident.)

- 1) Immediate notification by fax or phone to the **Production Coordinator,**
- 2) Immediate notification by fax or phone to the **HES Specialist(s),**
- 3) Immediate notification by fax or phone to the **Mid-Continent SW HES Supervisor,**
- 4) Immediate notification by fax or phone to the **Mid-Continent HES Manager.**
- 5) An Exhibit A will be initiated and forwarded **within 24 hours** to the **Production Coordinator,** the **HES Specialist(s),** the **Mid-Continent SW HES Supervisor** and the **HES Database Coordinator.**

6) An investigation team will be appointed and initiated **within 24 hours** of the incident. Distribution of the resulting incident investigation report will be the same as the distribution of the Exhibit A. The HES Database Coordinator will enter the report into the database after reviewed by the HES Manager or his designee. If the Production Coordinator determines potential litigation is a factor, the PC should contact the HES Manager or his designee prior to appointing the investigation team.

Note: It is the responsibility of the **HES Supervisor, the HES Manager, or his designee** to determine if regulatory notifications are required and to ensure they are completed concerning injury and illness reporting.

IMPORTANT INCIDENT

The following steps identify the notification requirements for Important Incidents. If there is a question as to whether an incident should be classified as Significant or Important, please follow the notification guidance provided for Significant Incidents. The following notifications should include some details about the incident including but not limited to Who, What, When, and the current situation or diagnosis. Electronic notification by email or fax is acceptable provided confirmation of receipt is achieved.

- 1) Notification within two hours to the **Production Coordinator,**
- 2) Notification within two hours to the **HES Specialist(s)**
- 3) Notification within two hours to the **Mid-Continent SW HES Supervisor,**
- 4) An Exhibit A will be initiated and forwarded **within 24 hours** to the **Production Coordinator,** the area **HES Specialist(s),** the area **HES Supervisor** and the **HES Database Coordinator.**
- 5) An investigation team will be appointed and initiated **within 24 hours** of the incident. Distribution of the resulting incident investigation report will be the same as the distribution of the Exhibit A. The **HES Database Coordinator** will enter the report into the database after review by the **HES Manager** or his designee. If the Production Coordinator determines potential litigation is a factor, the PC should contact the HES Manager or his designee prior to appointing the investigation team.

NEAR MISS / ACCIDENT PREVENTION OPPORTUNITY (APO)

Notification requirements will be achieved through the Accident Prevention Opportunity Program. The APO Form will be completed and forwarded to the local **Plant / Operations Production Coordinator, HES Specialist and HES Supervisor.** The HES Data Base System Coordinator will assist the HES Specialist with inputting the incident information into the electronic incident database.

APPENDIX B - TYPES OF EMERGENCIES / RESPONSE ACTIONS

Emergency responses have been developed for each of the following situations. It should be understood that this list is not all-inclusive, but the overall plan will assist in addressing similar incidents:

FIRES OR EXPLOSIONS

Fire Fighting Philosophy - It is the intent of Oxy Mid-Continent that employees will fight fires only in their "*incipient*" stage of fire fighting, utilizing hand held fire extinguishers. Fixed monitors will be used for cooling or protecting exposures if necessary. All Team Members will be given *annual* training in the use of equipment available for fire fighting and/or fire containment.

Any **Oxy Mid-Continent employee** who helps to coordinate fire department responses must be utilizing appropriate Personal Protective Equipment (PPE) as specified by either the **Production Coordinator, HES Specialist,** or the Unified Command.

The responding fire department will have primacy when they have received a call from an Oxy Mid-Continent representative requesting assistance in controlling a fire on any Oxy Mid-Continent property. Their actions, coordinated with the **Production Coordinator** or the Unified Command, will be to contain and extinguish the fire.

EMERGENCY COMMUNICATIONS

A fire or explosion that cannot be immediately extinguished, or a potentially large fire hazard, should be communicated by mobile phone or radio.

**** Radio priority is then given to individuals directly involved with the incident.**

EMERGENCY RESPONSE ACTION

The **first** priority of each Oxy Mid-Continent employee and contractor in a major fire situation is to determine the location and condition of personnel.

If it is apparent that any personnel are missing or injured, a preliminary search and rescue should be initiated by the **Production Coordinator**.

However, employees who have not been specifically trained to do so, must **never** enter a hazardous area or "*hot zone*". These types of rescues or recoveries are the responsibility of the responding civil authorities and municipal support agencies.

NORMAL WORKING HOURS

The individual who discovers a fire must make a decision whether to attempt to fight the fire or call for help. Immediately call for help, state the **location**, and state the **nature** of the fire.

The **Production Coordinator** will be responsible for assigning duties including calling the fire department, the appropriate employees, regulatory agencies, and authorizing entry to the area.

NIGHT SHIFTS, WEEKENDS, HOLIDAYS

During these abnormal operating hours, there is a minimal amount of personnel on site. Therefore, implement the following procedures. As always, the primary consideration is given to the ***safety of all individuals and care for the injured.***

After controlling an incipient stage fire, notify the **Plant / Operations Production Coordinator**.

If the fire is not manageable, the individual encountering the fire should call the fire department and request assistance. The individual then calls the **Plant / Operations Production Coordinator** or one of the Management Members listed on the **Emergency Telephone List**.

All personnel should evacuate the area and initiate an *emergency shut down*, if deemed necessary. Permission to re-enter the area is given only by the **Plant / Operations Production Coordinator**. If possible, employees should operate the valves necessary to shut in or divert gas to flare as they exit the facility but only if they can do so without incurring undue risks.

RESPONSIBILITIES

Plant / Operations Production Coordinator:

Responsible for equipment being in its proper location, ensuring the team conducts appropriate drills, and ensures maintenance of equipment is occurring as scheduled.

The **Plant / Operations Production Coordinator** is responsible for coordinating immediate control of the incident and determining that the conditions are back to normal.

FIRE OR EXPLOSION CHECK LIST

- Team Member** discovering fire gives location and nature of fire.
- Activate the **Emergency Action Plan** if deemed necessary.
- All Team Members, visitors and contract personnel **evacuate** to the mustering area and be accounted for to receive assignments.
- Call hospital** and advise of the situation to enable them to activate their emergency action plans in readiness for any injuries that might be incurred.

PERSONAL INJURY OR DEATH

After making a call for assistance, prompt medical treatment for the victim should be administered. This is the responsibility of all trained individuals. Treatment of injured persons is to be concentrated toward life threatening conditions such as:

Airway Obstructions, Breathing, Circulation and Spinal (A, B, C's) injured persons.

Do not move the victim unless the injured is in a hazardous environment or situation that is an imminent danger to the victim or responders.

An ambulance shall be summoned for any injury that appears to be serious.

SPILLS

OIL AND PRODUCED WATER SPILLS

In the event of an oil or produced water spill, the individual should immediately notify the appropriate **Team Leader / Supervisor** in charge. This individual should assess the situation and safely stop the source of the spill, if possible.

“*Safely*” is defined as: an area identified as non-hazardous from a toxic or IDLH concentration. If unknown, all incident scenes must be treated as IDLH.

The **Team Leader / Supervisor** in charge should proceed to the spill site to direct control and containment activities. The **Team Leader / Supervisor** should assess the need for additional assistance and equipment. After assessing the spill site, the **Team Leader / Supervisor** should immediately contact the **Plant / Operations Production Coordinator** and **HES Specialist**.

CHEMICAL SPILLS

In the event of a chemical spill, the **individual discovering the spill** should contact the appropriate **Team Leader / Supervisor**.

The individual discovering the release should not attempt any identification, control, or containment without the proper personal protective equipment (PPE).

Upon proper identification of the chemical, the **Team Leader / Supervisor** should contact the local **HES Specialist**, consult the *Material Safety Data Sheet (MSDS)* and / or *DOT Emergency Response Guidebook* for hazardous chemical characteristics and proper handling procedures. After proper handling procedures have been identified, control and containment shall begin.

If the incident is to be regulated by HAZWOPER guidelines, then all site activities must be directed by the **Production Coordinator / HES Specialist**.

If HAZWOPER does not apply, the **Team Leader / Supervisor** in charge should proceed to the spill site and direct control and containment activities. The **Team Leader** should determine the need for additional assistance and equipment. Upon assessment, the **Team Leader** should immediately contact the **HES Specialist**.

CHEMTREC (800-424-9300) may be contacted with any questions and / or direction concerning appropriate responses or chemical hazards.

SPILL RESPONSE CHECKLIST

- Notify** appropriate **Team Leader / Supervisor** in charge.
- Stop** source of spill, if deemed safe and qualified to do so. (Level III Hazwoper or above required)
- Team Leader / Supervisor** directs **control and containment**.
- Team Leader** contacts **Flood Technician / HES Specialist**.
- Refer to **MSDS** and / or **DOT Emergency Response Guidebook** for proper handling procedures.
- Refer to written **Oxy Procedures** for Acid & Caustic Spills.

BOMB THREAT

In the event of a bomb threat, the individual receiving the call, on or off site, should try to get as much information as possible from the caller.

The individual receiving the call should immediately contact the **Team Leader / Supervisor** in charge who will then notify **Corporate Security** at **(281) 366-2594**.

Evacuation of the plant / location should be considered at this time.

Road-blocks may need to be set up at the *plant entrances* and *road intersections* as deemed necessary.

The **Production Coordinator** in charge should make all appropriate contacts.

The **Production Coordinator** should:

- Realize that every bomb threat is serious.
- Notify **Corporate Security** and follow the directions given.

Inform Police / Sheriff's Department.

Inform Fire Department

Contact the Houston Hotline for technical assistance and communication support.

Organize search efforts with the assistance of the local law enforcement agencies.

If a bomb is actually located or a bombing does occur the Alcohol, Tobacco & Firearms Commission shall be notified. They are qualified to respond to an emergency of this nature.

The **Production Coordinator** shall notify **Public Affairs** and the area **Operation Vice-President**.

The **Production Coordinator** will work with the media and initiate documentation efforts.

BOMB THREAT CHECKLIST

Date: _____

Name of Company: _____

Name & Position of Person taking call: _____

Telephone Number call came in on: _____

FILL OUT COMPLETELY IMMEDIATELY AFTER BOMB THREAT

When is the bomb set to explode?	
Where is the bomb located?	
What does the bomb look like?	
What type of bomb is it?	
What will cause the bomb to explode?	
Did the caller place the bomb?	
Why did the caller place the bomb?	
What is the caller's name and address?	
Caller's: Sex _____ Age _____ Race _____	
Length of the call?	

DESCRIPTION OF CALLER'S VOICE (Check all that apply)

- | | | | |
|----------------------------------|-----------------------------------|---|------------------------------------|
| <input type="checkbox"/> Calm | <input type="checkbox"/> Laughing | <input type="checkbox"/> Lisp | <input type="checkbox"/> Disguised |
| <input type="checkbox"/> Angry | <input type="checkbox"/> Crying | <input type="checkbox"/> Raspy | <input type="checkbox"/> Accent |
| <input type="checkbox"/> Excited | <input type="checkbox"/> Normal | <input type="checkbox"/> Deep | <input type="checkbox"/> Deep |
| <input type="checkbox"/> Slow | <input type="checkbox"/> Distinct | <input type="checkbox"/> Ragged | <input type="checkbox"/> Loud |
| <input type="checkbox"/> Slurred | <input type="checkbox"/> Clearing | <input type="checkbox"/> Rapid | <input type="checkbox"/> Nasal |
| <input type="checkbox"/> Throat | <input type="checkbox"/> Stutter | <input type="checkbox"/> Deep Breathing | <input type="checkbox"/> Familiar |

If voice is familiar, whom did it sound like? _____

BACKGROUND SOUNDS:

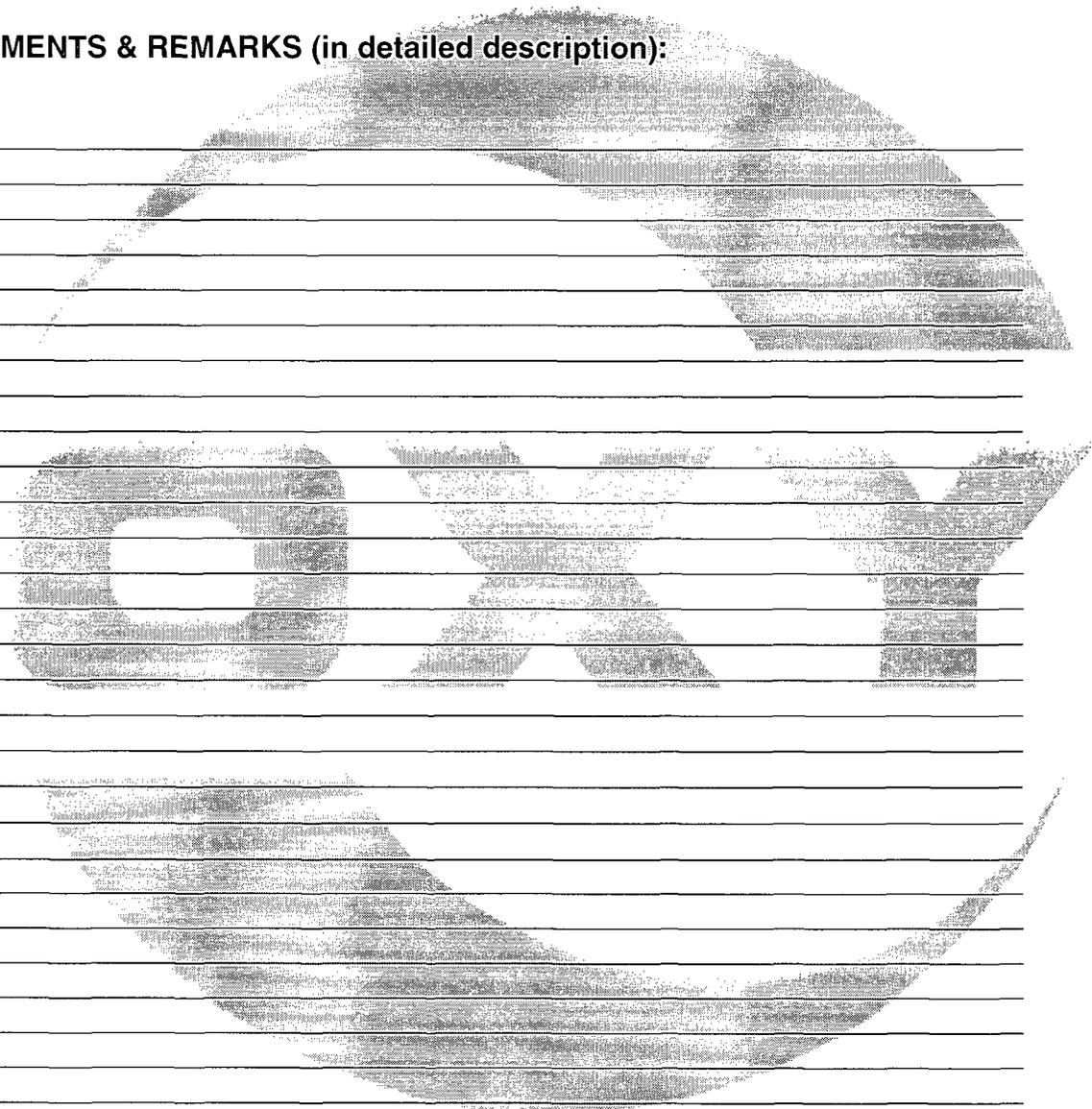
- | | | | |
|-------------------|------------------|--------------------|---------------|
| ___ Street Noises | ___ House Noises | ___ Factory Noises | ___ Machinery |
| ___ Crockery | ___ Motor | ___ Animal Noises | ___ Voices |
| ___ Office | ___ PA System | ___ Music | ___ Static |

Other Noises _____

THREAT LANGUAGE:

Well-Spoken Foul Language Incoherent Irrational
 Taped Message Read by Threat Maker

COMMENTS & REMARKS (in detailed description):



A large, faint watermark of a stylized face with a wide smile is overlaid on the lined area for comments. The face has large, rounded eyes and a wide, open mouth with a visible tongue. The watermark is centered horizontally and vertically within the lined area.

HAZARDOUS GAS (H₂S) RELEASE CONTINGENCY PLAN

Section I. Purpose

The purpose of this plan is to provide for the logical, efficient and safe Emergency Response action to be taken by the Occidental Mid-Continent Southwest Team, New Mexico.

The protection of the general public and workers, in the event of an accidental release of potentially hazardous quantity of **Hydrogen Sulfide Gas (H₂S)** from its operations, is of the **highest** priority.

A reaction-type contingency plan is a pre-planned, written procedure for alerting and protecting the public, within an area of exposure, where it is impossible or impractical to brief in advance all of the public that might possibly be within the **Radius of Exposure (ROE)** at the moment of an accidental release of a potentially hazardous volume of Hydrogen Sulfide (H₂S). It is intended that the Senior Emergency Response official (e.g. **Oxy Team Leader** or his designee) will become the individual in charge of the *Site Specific Incident Command System (ICS)*.

All emergency responders and their communication will be coordinated through the individual in charge of the ICS.

A. Scope of Plan Coverage

The Southwest – New Mexico team is responsible for the operation of Oxy Mid-Continent oil and gas leases and Indian Basin Gas Plant located in Eddy, Lea, Chavez, and Roosevelt Counties in New Mexico.

A small portion of the facilities / wells operated by the Southwest – NM team are located within or near the proper city limits of Carlsbad, New Mexico.

Sources of potentially hazardous volumes of H₂S gas in the Southwest – NM operations include:

- Oil and gas producing wells and associated flow lines
- Indian Basin Gas Plant activities
- Fluid gathering and handling facilities (satellites and batteries)
- Gas gathering systems (pipelines)
- Water Disposal systems

Leaks from these sources could create an H₂S exposure area (ROE). Whether such Radius' of Exposure would be hazardous would depend upon their location and size. The calculations of the exposure potential, leak size is assumed to be the maximum possible from the particular system. This is generally and intentionally a conservative calculation because the vast majority of leaks will occur as a small fraction of the system. These calculations are based on the escape rates as allowed by New Mexico Hydrogen Sulfide (H₂S) standard for existing and new operations. The H₂S concentrations were determined using applicable American Society for Testing and Materials (ASTM) or Gas Processors Association (GPA) standards or another method approved by the NMOCD. Radius' of Exposure (ROE) were calculated using the Pasquill-Gifford derived equation as defined by the standard.

The calculated ROEs for the OXY facilities and wells are located in Section II of this plan.

B. Southwest - NM Key Contact Information

Physical Address: 1502 W. Commerce Drive,
Carlsbad, NM 88220

Office Telephone Number: 575-628-4116

Office Fax Number: 575-628-4125

24 Hour Answering Service: 575-393-3021

Mailing Address: 1502 W. Commerce Drive,
Carlsbad, NM 88220

Plan Development and Maintenance: Rick Kerby: 575-390-8639
Kelton Beard: 575-390-1903
Marty Johnson: 575-499-5652

Production Coordinators (PC): Jerry Harrison: 575-365-5863
Van Barton: 575-706-7671
Mark Treesh: 575-200-8010

C. Coordination with State Emergency Plans

Under certain conditions, as provided for in the New Mexico Hazardous Materials Emergency Response Plan (HMERP), the New Mexico State Police responding to the emergency may elect to assume the position of **Incident Commander** or they may establish a Unified Command of which the OXY Production Coordinator may be a key member. Under the Unified Command scenario, the **OXY Production Coordinator** shall cooperate with other involved emergency responders, such as the New Mexico State Police, local Fire Department, City Police, Sheriff's Office, NMOCD or other appropriate

public emergency response agencies to manage the effective and safe response to the emergency situation.

The **Incident Commander's** responsibility is to ensure control of the Emergency Incident. The Southwest – NM **Production Coordinator** will notify or delegate notifications of all OXY Mid-Continent or Contract personnel as well as civil authorities needed for response to the situation.

The **OXY Production Coordinator** will assign additional OXY personnel to support roles as needed.

Upon notification or discovery of a potential emergency situation, the following steps should be taken by the **OXY Production Coordinator** or relief

1. Assume the role of **Incident Commander** and attempt to gather as much information as possible as to the scope and severity of the situation.
2. Alert other emergency response personnel of the situation.
3. Arrange for back up personnel to be dispatched to the scene.
4. Proceed to the site to further assess the emergency response measures.
5. Establish an on-site mobile command station.
6. *Implement* the Emergency Action Plan as necessary.
7. Remain on site as **Incident Commander** until relieved or the emergency is over.

See additional roles and responsibilities of the Incident Commander in Section III. Roles and Responsibilities of Emergency Response Personnel.

Section II. Emergency Procedures

Operations

The plant is currently processing approximately 50 MMSCF/D. Residue gas is sold on a spot market basis. Approximately 3000 BPD of natural gas liquids (NGL) and 100 BPD of condensate are recovered.

Gas from the field currently passes through inlet separators, and then into a treating unit to remove hydrogen sulfide and carbon dioxide. Gas from this amine unit (A-1) flows to a glycol contactor to remove moisture, molecular sieve beds to remove remaining moisture, a dust filter and then on to one cryogenic unit for NGL extraction. A Demethanizer tower

adjacent to the cryo skid provides final separation of the methane sales gas and NGL product.

Overhead sales gas from the Demethanizer passes through heat exchangers, the expander booster compressors and is compressed further by one of four turbine compressors. Final pipeline pressure is achieved by the turbine-driven outlet compressor.

NGL's from the Demethanizer flow to the respective product surge tanks at 280 to 360 psig. From there the NGL product is pumped by booster pumps and a second set of pumps to a Chevron operated product pipeline. Occasionally, when NGL product cannot be shipped it is stored in three storage tanks located just outside of the south fence.

Condensate is received directly from the field and is recovered from two inlet separators. Water is removed from the condensate by settling in the inlet tank. The condensate is then processed through a stabilizer and sent to the condensate storage system. In the condensate storage system, there is one gunbarrel tank in place to separate residual water still in the condensate. From the gunbarrel the condensate is then stored in two condensate storage tanks each with a capacity of 1000 bbl and the water is then sent to a 500 bbl water tank. Condensate is shipped by truck from the rack located east of the plant approximately 100 feet from the fence. Truck shipments are usually two or three trucks per day. There are days when no truck shipments are made.

Emergency Alarm System

The gas plant emergency alarm system has two encoders for activating the various system capabilities. These encoders are located in the gas plant main office and in the control room. The alarm system has several different tones that can be used; however, the WAIL tone is currently used for emergency evacuation purposes. The system also has the capability for delivering pre-programmed voice messages to warn of "high H₂S", "fire", "high pressure line rupture", "tornado warning", and "plant evacuation". A public address (PA) system is also built into the system so that customized messages can be voiced over the speaker tower. The system utilizes one speaker tower located in the center of the plant.

Eleven (11) H₂S/LEL Zones have been established with numerous H₂S and LEL monitors in pertinent locations. If a hazardous atmosphere is present within these zones, lights flash and sirens sound with a steady high pitch. Alarms are annunciated on the DCS to alert operations of the hazardous condition.

The IBGP radio must be set to CHANNEL F1 in the gas plant office for the emergency alarm system to be functional.

The emergency evacuation alarm should be tested monthly at a minimum. This test should be documented and kept on file for future reference. Tests are performed at the start of each monthly safety meeting.

Plant Communications

Aside from the PA function of the emergency alarm system, the gas plant has a telephone system with multiple lines. Phones are located throughout the gas plant offices and in the control room. Several hand-held radios are maintained and utilized by gas plant personnel. Many plant employees are also provided cellular telephones.

There is a telephone located in a locked fiberglass box near monitoring well #58, located approximately ½ mile east of the plant on the north side of county road 401 (Marathon Road). The combination to the lock is 2621, the last four digits of the main phone number to the offices.

Emergency Shutdown System

The gas plant is equipped with an emergency shutdown (ESD) system and a blow-down system. The Indian Basin Gas Plant Emergency Shut Down (ESD) and Blowdown (BD) system was installed for the purpose of shutting down, isolating, and depressuring the gas plant equipment in the event of an emergency. Some of the valves used by the system are control valves normally in process service, and some serve only an ESD or BD function. In the event of an emergency, appropriate personnel will determine the need for ESD and blow-down system actuation. Six (6) actuation stations are located throughout the gas plant. These locations are:

ESD Stations

- | | | | |
|---|------------------------------|---|-----------------------|
| 1 | Southeast plant fence exit | 4 | West plant fence exit |
| 2 | East plant fence exit | 5 | Near South amine pump |
| 3 | Front plant gate (Northeast) | 6 | Control room |

Hydrogen Sulfide Detection

Fixed hydrogen sulfide (H₂S) detection equipment is located at the Sulfur Recovery Unit (SRU), the Acid Gas Compressor and throughout the Amine Systems. Upon detection of hydrogen sulfide, a beacon light and audible alarm will actuate in the area where H₂S is detected. Personnel shall immediately evacuate the area. The alarm is also annunciated in the control room. Personal hydrogen sulfide monitors shall be worn at all times when in the gas plant.

Manning

The plant is attended 24 hours per day, 365 days per year. A minimum of two operators are on duty in the plant at all times.

A. Discovery and Implementation of Immediate Action Plan

Upon discovering or recognizing a potentially hazardous **H2S release** OXY employees should immediately implement the following immediate action plan:

- a. Alert and account for facility personnel**
 1. Move away from the source and get away from the affected area
 2. Don appropriate personal protective equipment
 3. Alert other affected personnel
 4. Assist personnel in distress
 5. Proceed to the designated emergency assembly area / Muster Area
 6. Account for on-site personnel by reference to Control Room sign in log

The **primary muster area** is located across the road from the main office, near the Wilson Warehouse. If this primary location is deemed unsafe for assembly due to the close proximity of the incident site, wind direction, or other reason; an alternative (**secondary**) muster area has been designated southeast of the plant near the scrap metal storage area (beyond the horizontal storage bullet tanks). If this area is also deemed unsafe for any reason, another muster area will be announced over the PA speaker.

- b. Take immediate measures to control the presence of or potential H2S discharge and to eliminate possible ignition sources.**

Emergency Shutdown Procedures should be initiated as deemed necessary to correct or control the specific situation.

When the required action cannot be accomplished in time to prevent exposing operating personnel or the public to hazardous concentration of H2S proceed to the following steps, as appropriate for the site specific conditions.

Alert the public (directly or through appropriate government agencies) that may be subjected to an atmosphere exceeding **100 ppm of H2S**.

Alerting of any residences in affected area will be initiated by OXY personnel designated by **Production Coordinator** or **Incident Commander** by the following methods:

- Telephone**
- Direct contact at residence**
- Utilization of public agencies**

Phone list and addresses of residences are included in this Emergency Action Plan

Block access points to the area (intersections, etc..) at a determined radius of the incident.

Initiate evacuation operations

Contact the first available designated supervisor on the call list. Notify the supervisor of the circumstances and whether or not immediate assistance is needed. The supervisor should notify (or arrange for notification of) other supervisors and other appropriate personnel (including public officials) on the call list.

Make recommendations to public officials regarding *blocking unauthorized access* to the unsafe area and assist as appropriate.

Make recommendations to public officials regarding the *evacuation of the public* and assist as appropriate.

Notify, as required, state and local officials and the National Response Center to comply with release reporting requirements.

Monitor the ambient air in the area of exposure (after following abatement measures) to determine when it is safe for re-entry.

B. Initial Response

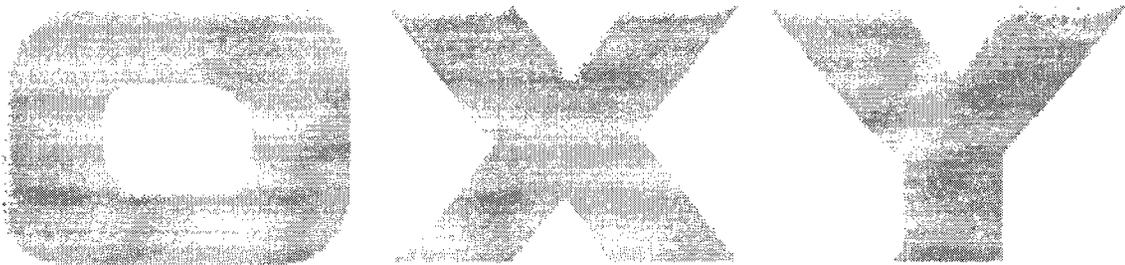
1. The OXY Mid-Continent employee (**first responder**) responding to or receiving notification of an emergency situation shall immediately proceed to the location and attempt to assess the situation and then notify the **Production Coordinator** or his relief.
 - a. Provide the **Production Coordinator** with as much data possible concerning the *location, the extent of emergency and need for additional assistance*.
 - b. **Warn others** in the area of situation, **evacuate** if necessary.
 - c. Remain at site, at a safe distance, and available for communication. Wait for assistance to arrive before attempting to enter into any potentially hazardous area.
 - d. Initiate rescue and first aid as situation dictates.
2. Upon notification of an emergency the **Production Coordinator** (or relief) shall:
 - a. Notify other key team personnel and alert them to situation.
 - b. The **Production Coordinator** shall then proceed to the site to assess the situation.

- c. The **Production Coordinator** shall determine if the Emergency Response Plan is to be initiated.
- d. In the absence of the **Production Coordinator** (or relief) the OXY employee at the site shall determine whether or not to activate the Reaction-type Emergency Response Plan and shall remain at the scene until relieved by another OXY employee or the Civil Authorities.

C. Activation Of Hydrogen Sulfide Contingency Plan

The **Hydrogen Sulfide (H₂S) Contingency Plan** shall be activated when the release creates a concentration of hydrogen sulfide of greater than:

- **100 ppm** in any public area,
- **500 ppm** at any public road
- or **100 ppm ROE** is greater than 3000 feet from the site of the release.

A large, semi-transparent watermark of the word "OXY" is centered on the page. The letters are bold and blocky, with a textured, halftone-like appearance. The watermark is positioned behind the bulleted list.

Facility Name	19.15.11.7 100 ppm ROE (Feet)	19.15.11.7 500 ppm ROE (Feet)
129 COMPRESSION FACILITY	0	0
311 SMITH FED CTB	276	126
BUCHANAN CTB	0	0
EAST INDIAN BASIN CTB	2016	921
EIB COMPRESSION FACILITY	2016	921
IB STAT 210 BOOSTER COMPR	31	14
INDIAN BASIN STATION 117	657	300
INDIAN BASIN STATION 120	669	306
INDIAN BASIN STATION 128	0	0
INDIAN BASIN STATION 129	1254	573
INDIAN BASIN STATION 132	319	146
INDIAN BASIN STATION 133	408	186
INDIAN BASIN STATION 210	25	12
INDIAN BASIN STATION 215	23	10
INDIAN BASIN STATION 226	347	159
INDIAN BASIN STATION 227	0	0
INDIAN BASIN STATION 229	0	0
INDIAN BASIN STATION 235	0	0
INDIAN HILLS ST COM 7 SWD	124	57
MOC SWD	929	424
MOC PRODUCTION FACILITY	390	178
NIBU SCREW COMPRESSOR	0	0
NIBU11 CTB	17	8
ROCKY HILLS #1 & #2 SWD	0	0
SIB COMPRESSION FACILITY	0	0
SIB FLUID HANDLING	0	0
STATE COM CTB	101	46
Yates Facility Tank Battery E	0	0
David Crockett Production Facility	0	0
Mitchusson Production sat	0	0
Acid Gas Compressor	4924	2250
Indian Basin Gas Plant	4645	2122

**ROE Map is an attachment to this document*

The Southwest - NM **Production Coordinator** or designated relief will serve as the **Incident Commander**.

It is the responsibility of the Incident Commander to ensure control of the Emergency Response Management System and if necessary to coordinate these efforts with any state or local emergency plans.

D. Evacuation of Public Areas

When the situation requires the evacuation of the public from areas which contain or could contain potentially hazardous volumes of H₂S, the information regarding the calculated Radius Of Exposures (ROE) contained in Section IV shall be utilized.

This information will assist in determining the areas of concern to a specific release site. Therefore, this Contingency Plan is the best means for allowing for the timely notification of the persons located in the potentially affected public areas or roads.

ROEs have been calculated for Plants, well sites, tank batteries, satellite facilities, and production and gas gathering and injection distribution systems and are maintained and reviewed periodically to ensure accuracy.

ROE Maps have been developed for reference for all areas over 100 ppm exposure potential.

Information contained in this plan will be readily available, and determine the Radius of Exposures, for the assistance of emergency responders such as the fire department, local law enforcement and other public agencies and authorities, to be available for response in a timely and effective manner consistent with the requirements of the New Mexico H₂S standard.

E. Training and Drills

The value of training and drills in emergency response procedures can not be over emphasized.

All OXY personnel identified in this plan shall be trained on the Emergency Response Plan and procedures **annually**.

The importance of each role of the emergency responders and the effects that each person has during an emergency will be stressed. In addition, the needs for Emergency Preparedness will be emphasized through the use of drills and other exercises that simulate an emergency in which personnel perform or demonstrate their duties. These exercises will consist of table-top or classroom discussions, or can be a realistic drill in which equipment is deployed, communications equipment tested and "victims" evacuated to the hospital with simulated injuries. Public officials will be informed and preferably involved in these exercises.

Review and critiques of the drills or exercises will be conducted after completed to identify any potential improvement opportunities for the plan.

The plan will be periodically reviewed and updated anytime its provisions or coverage change.

Documentation of the training, drills and reviews will be on file in the team files.

F. Physical Properties and Physiological Effects of Hydrogen Sulfide

Physical Data

Chemical Name: Hydrogen Sulfide
CAS Number: 7783-06-4
Synonyms: Sulfureted hydrogen, hydrosulfuric acid, dihydrogen sulfide
Chemical Family: Inorganic sulfide
Chemical Formula: H₂S

Normal Physical State: Colorless Gas, slightly heavier than air. Vapor Density (specific gravity) at 59°F (15° C) and 1 atmosphere = 1.189

Auto ignition Temperature: 500°F (260° C)

Boiling Point: -76.4°F (-60.2° C)

Melting Point: -117°F (-82.9° C)

Flammable Limits: 4.3 – 46 percent vapor by volume in air.

Solubility: Soluble in water and oil; solubility decreases as the fluid temperature increases.

Combustibility: Burns with a blue flame to produce Sulfur Dioxide (SO₂)
Odor and Warning Properties: Hydrogen Sulfide has an extremely unpleasant odor, characteristic of rotten eggs, and is easily detected at low concentrations, however, due to rapid onset of olfactory fatigue and paralysis (inability to smell) **ODOR SHALL NOT BE USED AS A WARNING MEASURE**

Exposure Limits

The American Conference of Governmental Industrial Hygienists (ACGIH) recommends a Threshold Limit Value (TLV) of 10 ppm (8-hour TWA) and a short term exposure limit (STEL) of 15 ppm averaged over 15 minutes. (Action Level) Exposure at the STEL should not be repeated more than 4 times a day with at least 60 minutes between successive exposures in this range.

Physiological Effects

Inhalation at certain concentrations can lead to injury or death. The 300 ppm is considered by the ACGI as Immediately Dangerous to Life and Health (IDLH) Hydrogen Sulfide is an extremely toxic, flammable gas that may be encountered in the production of gas well gas, high-sulfur content crude oil, crude oil fractions, associated gas, and waters. Since hydrogen sulfide is heavier than air, it can collect in low places. It is colorless and has a foul, rotten egg odor. In low concentrations, H₂S can be detected by its characteristic odor; however smell cannot be relied on to forewarn of dangerous concentrations because exposure to high concentrations (greater than 100 ppm) of the gas rapidly paralyzes the sense of smell due to paralysis of the olfactory nerve. A longer exposure to lower concentrations has a similar desensitizing effect on the sense of smell. It should be well understood that the sense of smell will be rendered ineffective by hydrogen sulfide, which can result in the individual failing to recognize the presence of dangerously high concentrations. Exposure to hydrogen sulfide

causes death by poisoning the respiratory system at the cellular level. Symptoms from repeated exposure to low concentrations usually disappear after not being exposed for a period of time. Repeated exposure to low concentrations that do not produce effects initially may eventually lead to irritation if the exposures are frequent.

Respiratory Protection

Respiratory protection shall be worn above the action level.

G. Physical Properties and Physiological Effects of Sulfur Dioxide

Physical Data

Chemical Name: Sulfur Dioxide

CAS Number: 7446-09-05

Synonyms: Sulfurous acid anhydride, sulfurous oxide, sulfur oxide

Chemical Family: Inorganic

Chemical Formula: SO_2

Normal Physical State: Colorless Gas, slightly heavier than air.

Boiling Point: 148°F

Flammable Limits: Non-flammable (produced by burning hydrogen sulfide)

Solubility: Soluble in water and oil; solubility decreases as the fluid temperature increases.

Odor and Warning Properties: Sulfur Dioxide has a pungent odor associated with burning sulfur. It produces a suffocating effect and produces sulfurous acid on membranes of the nose and throat.

Exposure Limits

The American Conference of Governmental Industrial Hygienist recommends 2 ppm as an 8-hour TWA Threshold Limit Value and the 5 ppm as a STEL, averaged over 15 minutes for sulfur dioxide.

Physiological Effects

Acute Toxicity: Inhalation at certain concentrations can lead to injury or death. 100 ppm is considered by the ACGIH as Immediately Dangerous to Life and Health.

Respiratory Protection

Respiratory protection shall be worn above the action level.

H. “Non-OXY” Emergencies

It is possible that an OXY employee could discover a potentially hazardous leak from a pipeline or other facility not operated by OXY

Leaks could be reported to OXY personnel but upon investigation, turn out to be from someone else’s facility. In such instances, the OXY employee(s) involved should lend assistance without unduly endangering themselves. Generally, such assistance would include the following actions:

1. Immediately notify OXY supervisors or HES personnel of involvement in “Non-OXY” emergency.
2. Alert and/or assist any person apparently in immediate danger.
3. Notify the appropriate Public Safety personnel of the location and nature of the emergency and assistance needed, if any.
4. Notify the Operator of the facility if the identity can be determined, see list of outside operators and pipeline in Section V of this plan.
4. Continue to lend assistance, such as manning road barricades, until relieved by employees of the Operator or Public Safety Personnel.

Section III. Roles and Responsibilities of Emergency Response Personnel

Following is a description of key personnel responsibilities for incident response.

- a. **Production Coordinator:** Team Leader or designated relief will serve as the **Incident Commander**. Under certain conditions, the New Mexico State Police responding to the emergency may elect to assume the position of Incident Commander or they may establish a Unified Command of which the OXY Team Leader may be a key member.
The **Production Coordinator** responsibility is to ensure control of the emergency incident. Team Leader will notify or delegate notifications of all OXY Mid-Continent or contract personnel as well as the civil authorities needed for response to the situation. Team Leader will assign additional OXY personnel to support roles as needed.
- b. **Production Coordinator:** The initial priority for the Production Coordinator is to assess the size and scope of the incident scene. Such factors as the immediate level of danger to employees, contractors, and the general public should be high on the list of considerations. The following is an abbreviated list concerning the responsibilities and recommended sequence for the Production Coordinator to achieve his/her responsibilities.

1. Assess the size and scope of the incident scene.
2. Establish preliminary “hot and safe zones” based on the information available.
3. Set up a mobile command post at the scene of the incident.
4. Initiate any “municipal emergency response” requests as deemed appropriate.
5. Manage all aspects of the incident as OXY’s PC or as a key player in a Unified Command when Governmental authorities assume command of the incident.
6. Communicate routinely with the OXY Crisis Team’s Operations Manager in Houston.
7. PC is responsible for assigning support roles as listed below.

Note: Production Coordinator, or relief, remains on site until the emergency is over. The Production Coordinator ensures repairs have been completed and ensures the operation has returned to normal, before releasing emergency team members.

c. Production Coordinator Assistant: The Production Coordinator Assistant plays an integral role in interfacing with the various State and Local emergency responders in coordinating all response activities. This allows the PC to focus on the incident and its big picture decisions.

1. Facilitate onsite responder personnel briefings and status updates.
2. Arrange for humanitarian assistance with the OXY Human Resources Manager if required by the scope of the incident with coordination from the Production Coordinator.
3. If requested, assist the local municipalities in a “search and rescue” operation categorized as a specialized employee under the OSHA HAZWOPER guidelines.
4. Perform all other response functions as requested by the Production Coordinator.

d. Technical Specialist: Technical Specialists, those individuals possessing critical skills, experience and knowledge in specific areas of OXY’s or industry operations may be enlisted to assist in providing operational solutions for controlling releases in their areas of expertise. The Technical Specialist will function through the OMCSC. Examples of a technical specialist include:

- Downhole Specialist
- Critical Well Control Specialist
- Drilling Specialist
- Construction Specialist
- Electrician
- Maintenance Specialist

e. Facility Engineers: Facility Engineers, if available, will function through the OMCSC and assist in providing operational solutions to controlling the size and scope of an incident. The ability to identify process related equipment for isolation and routing for field sources often proves to be one of the biggest challenges during a crisis situation. The following tasks should receive the initial priority for responding Facility Engineers and operations personnel:

1. Identify source location and isolation equipment if available.
2. Provide detailed isolation instructions for responding personnel. Keep in mind the responders may or may not be OXY employees and may or may not have a good understanding of E&P operations.
3. Be prepared to provide the operational technical portion of update sessions with the onsite field response groups.
4. Begin the operational aspect of a facility recovery plan to first address operational needs to return to "normal" operating mode and second to complete long term considerations for site mitigation.

f. HES Specialist: The HES Specialist plays an integral part in assisting the Production Coordinator in managing the onsite issues surrounding an incident. Focused internally on the incident, the HES Specialist is constantly evaluating the safety and health issues involved with the incident and monitors pieces of the response process to allow the Production Coordinator to address "bigger picture" issues. The following is an abbreviated list of the responsibilities and recommended sequence for the HES Specialist to achieve his/her responsibilities.

1. Confirm the Production Coordinator's preliminary "hot and safe zones" are still applicable or adjust accordingly for such activities as staging areas, media crew locations, decontamination operations, etc.
2. Address Safety, Health, Environmental, and Regulatory issues including notifications.

3. If required, coordinate the development of a Site Safety and Health Plan or request this service from the OXY Crisis Team in Houston.
4. If required, develop an "incident mitigation or recovery plan" or request this service from the OXY Crisis Team in Houston.

Note: The HES Specialist must stay abreast of the incident status and situation in order to provide relief as an alternate PC if the situation dictates a change needs to be made.

g. Logistics Section Chief: The Logistics Section Chief (LSC) is responsible for assisting the Production Coordinator by arranging all aspects of field logistical support. The LSC must accommodate not only OXY responders but also municipal or other industrial responders as requested by the Production Coordinator or OMCSC. Because there may be limited logistical support capabilities at the location, it is recommended the LSC rely heavily on the OXY Crisis Team Logistical Manager in Houston. The Logistical Manager's staff has multiple contracts and processes already in place to assist in such issues as food, lodging, vehicles, aircraft, etc. The following is an abbreviated list and recommended sequence to ensure the LSC is able to achieve his/her responsibilities.

1. Initiate both victim and emergency responder "personnel accountability systems" upon arrival to the incident scene.
2. Establish and maintain a communication tool between the Production Coordinator and the OXY Crisis Team Operations Manager in Houston.
3. Assist in media interactions and establish the "OXY Point of Contact" for media inquiries.
4. Initiate and maintain an incident documentation system to ensure all activities are captured and a summary report will be available.
5. Begin supplying logistical support to the incident scene, staging operations, and local areas as soon as practical
6. Coordinate site security capabilities with the Production Coordinator, OMCSC, HES Specialist, and responding municipalities.

h. Media Contact: The Designated Media Contact is assigned to the Logistics Section and will function through the LSC. The Media Contact will work very closely with the PC, OMCSC, and the Oxy Public Affairs Representative located in Houston. Initial Priorities for the Media Contact will include the following:

1. Establish themselves as the onsite Media Contact for all media inquiries.
2. Work with the Public Affairs to establish and distribute an initial press release as soon as feasible and with an announced time of when additional updates would be available.
3. Either assist the Production Coordinator or personally conduct all initial media interviews until relieved by a member of the External Affairs group.
4. Assist in all other functions of the Logistics Section as requested by the LSC or PC.

- i. Other Employees:** All other personnel should stand by and wait for instructions from the Production Coordinator.

Once accounted for, Southwest - NM employees may be called upon by the LSC to provide logistical support in many different directions.

These may include contacting vendors for supplies, contacting local company support groups for assistance to the general public, providing onsite logistical support to the responders "staging area" where others wait to assist in the actual response efforts, escorting vendors to remote locations as a guide, blocking roads, assisting with evacuations, etc.

It should be understood however, no employee or contractor of the Southwest - NM area will be asked to provide incident scene support that they are not comfortable with in their ability to perform or have not been specifically trained to do.

- j. Answering Service:** Southwest - NM utilizes the services of Caprock Answering Service of Hobbs, N.M., and Artesia Answering Service of Artesia, N.M.

Upon notification of a possible emergency on Occidental Mid-Continent property, the answering service operator should ensure that he/she has all of the following information and proceed to call the OXY Technician on call and provide:

1. Name, phone number, and/or address of the person reporting emergency.
2. Location of emergency.
3. Concise statement of what is happening.
4. What type of emergency services are needed on location.

HAZARDOUS GAS DISCHARGE CHECKLIST

- Production Coordinator** to determine if leak could become a hazard to the public.
- If leak is not a hazard, take appropriate action to eliminate the leak.
- If leak is determined to be a hazard, and cannot be immediately eliminated:
 - Notify appropriate Team Members, HES, Oxy Mid-Continent management and regulatory agencies.
 - Proceed to area with all necessary personal protective equipment and monitors.
 - Barricade roads as determined necessary.
 - Call civil authorities for assistance.
 - Alert anyone within the contaminated zone of the potential hazard.
 - Notify hospital to alert staff for possible injuries and allow them the opportunity to initiate their emergency action plan.

NON-OXY MID-CONTINENT EMERGENCIES

It is possible that an Oxy Mid-Continent employee could discover a potentially hazardous leak from a pipeline or other facility not operated by Oxy Mid-Continent.

Also, leaks could be reported to Oxy but upon investigation, turn out to be from someone else's facility. In such instances, the Oxy Mid-Continent employee(s) involved should lend assistance without unduly endangering themselves. Generally, such assistance would include the following actions:

1. Alert and / or assist any persons apparently in immediate danger without entering a toxic or IDLH atmosphere.

Notify the appropriate civil authorities of the location and nature of the emergency and assist as requested.

2. Notify the operator of the facility, if identity can be determined. Telephone numbers of other operations are listed below and in the emergency telephone list included in this manual.

NATURAL DISASTERS

TORNADOES

If a tornado is sighted, the individual sighting the tornado should notify other persons in the area by radio and / or mobile phone.

If the individual has had "spotter" training through the National Weather Service, contact with the County Sheriff's Office should be made to report funnel clouds or tornadoes.

Employees should seek cover in a low-lying area away from power lines (i.e. ditch or culvert). Office employees should seek cover in an internal room with no windows. During nights and weekends employees should muster together if time permits.

After the tornado has passed, the **Plant / Operations Production Coordinator** in charge shall coordinate accounting of all employees, evaluate damage assessments and make appropriate notifications. The Emergency Action Plan will remain in effect until operations return to normal.

EARTHQUAKES

If an earthquake occurs, the Emergency Action Plan will be activated using the best available means.

After accounting for all employees, the situation should be evaluated for damage and the appropriate portions of the Emergency Action Plan should be initiated. The Emergency Action Plan will remain in effect until the Production Coordinator has determined the emergency over and operations are returned to normal.

APPENDIX C – SAFETY EQUIPMENT

The following safety equipment is available for use during emergencies:

- PPE – Gloves, Safety Glasses, Goggles, Shields, Hard Hat, Ear Plugs
- Personal H₂S Monitor
- SCBA (Self Contained Breathing Apparatus)
- Personal Work Unit
- Air Bottle Trailers
- NORM Meters and Safety Wear
- Multi Gas Detectors
- Fire Extinguishers
- First Aid Kits
- Chemical Handling Equipment
- Man Lifts
- Confined Space Entry Monitoring Trailer
- Electronic Line Finders
- MSDS Sheets
- Wind Socks
- Signage
- Fixed Alarm Systems
- Any other additional Safety equipment deemed necessary

APPENDIX D - EMERGENCY ACTION PLAN TRAINING

The team management and HES Specialist will be responsible for updating and reviewing this plan, with all employees **annually** (including make-up training). They will also be responsible for training all employees concerning any significant plan changes.

New employees and employees recently assigned to the operations area must receive training on the Emergency Action Plan as part of New Employee Orientation within the first week of assignment.

Contract employees who routinely enter work sites will receive a briefing explaining their responsibilities in an emergency situation.

All employees will be trained** in the following areas necessary for proper execution of the emergency responses for which this plan is designed:

1. Dry chemical fire extinguisher use (**annual**)
2. Respiratory Protection / use of Self-Contained Breathing Apparatus (**annual**)
3. Use of portable gas detection equipment (**annual**)
4. Proper use of Personal Protective Equipment (**ongoing**)
5. Initial 8-hour First Aid/CPR Course (**refresher training every two years**)
6. Hazard Communication/Chemical Safety Review (**annual**)
7. Lockout/Tagout / Confined Space Entry & Hot Work Permit Requirement (**annual**)

The following drills will be conducted **annually** when deemed necessary by the **Plant / Operations Production Coordinator** or Team Leader:

1. Fire and Explosion
2. Hydrocarbon Gas Release
3. Bomb Threat
4. Spill Response
5. Man down/Rescue and Medical Emergency

****Training is documented with sign-off by all personnel in attendance. Make-up training is required.**

APPENDIX E - PUBLIC RELATIONS

Oxy Mid-Continent recognizes that the news media has a legitimate interest in incidents at Oxy Mid-Continent facilities which could affect the public. It is to the company's benefit to cooperate with the news media when incidents occur because these media are our best liaison with the public.

Our objective is to see that all reports of any emergency are factual and represent the company's position fairly and accurately. Cooperation with news media representatives is the most reliable guarantee that this objective will be met.

All Team Members are instructed to NOT make any statement to the media concerning the emergency incident. If any employee is contacted by a media representative, they should refer them to the designated **Emergency Command Center** where they should contact the **Plant / Operations Production Coordinator, Field Incident Commander**, or his designated relief for any information concerning the incident.

MEDIA RELATIONS GUIDE

It is Oxy Mid-Continent's policy to cooperate with the media in the event of an emergency. In an emergency situation, you may be the first contact a reporter has with Oxy. Plan on the media showing up at the scene or calling your office for details on the emergency.

Remember, in the first hours of an emergency, the reporters want the **who, what, where, when, why** and **how** of the story. They aren't out to make Oxy look bad. As you assess the emergency from an operational point of view, prepare some key points about the situation that you want to make with reporters when they show up.

Preparing for the interview:

Your media relations **objectives** should be:

- The **actions** you are taking to contain the incident
- Whether the incident is a danger **to the community**
- **Information** about the incident
- Take time to **prepare yourself mentally**
- **Stay cool**, you're the expert

Hints for the interview:

- **Talk to the real audience.** The real audience is the people at home, not the reporter or the camera crew.
- **Remember the editorial process.** The reporter is looking for a 10-20 second sound bite containing our actions and concern about the incident.
- **Bridge to your media relations objectives** at every opportunity.
- **State the most important facts first: Who, what, where, when, why and how.** Speak directly and concisely.
- **If you don't know, say you don't know.** Don't try to snow the reporter. The reporter will have greater respect for you (and Oxy) if you don't waste his/her time trying to dance around an issue. "I don't know...but as soon as I do, I'll get back to you." **Then do.**
- **Never say "No comment."** The reporter will think you are trying to hide something. If you cannot discuss something because it involves matters of a confidential nature, or you don't know, say so.
- **Don't speculate or guess.** Reporters will understand that in the early moments of an emergency not all the facts are known.
- **Be responsive, but maintain control.** Don't lose your cool with a reporter if they seem uninformed or get a little pushy. They are trying to obtain information to file a credible story. Help them.
- **Do not release the names of injured people until their families have been notified.** Explain that to the reporters. They'll understand.
- **NEVER LIE.** Be honest and factual.
- Tell the reporters where they can safely take pictures/videos of the scene. **If it is safe,** show them what we are doing to contain the emergency and **let them take photos/video of our actions.**
- **Short answers** are better than the long ones. They are most easily understood and more likely to be used unedited.
- **Keep it simple.** Don't be technical...remember you are talking to people who don't share your knowledge of our industry. Don't use jargon or acronyms.
- **Look at the reporter,** not at the camera. Assume that TV cameras and microphones are always on...and possibly recording your words, actions and expressions.
- **Be serious.** Any attempt at humor will fail with some readers, viewers or listeners and may embarrass you and Oxy Mid-Continent.

APPENDIX F: - OXY MID-CONTINENT CRISIS MANAGEMENT PLAN

OXY MID-CONTINENT CRISIS MANAGEMENT PLAN

OXY Mid-Continent is dedicated to educating its employees, contractors, and communities surrounding our operations with critical information should an unfortunate incident occur. Although prevention of such incidents remains a high priority for OXY Mid-Continent, additional information and training, as appropriate, could aid in minimizing or mitigating the effects of any incident related to our operations. It is the responsibility of each employee, contractor, or visitor to identify and notify OXY Mid-Continent of incidents which could or have resulted in an emergency situation.

(CMP)

OXY MIDCONTINENT CRISIS MANAGEMENT OBJECTIVES

1. Utilize emergency preparedness exercises as a key learning for emergency prevention planning.
2. Ensure each individual on OXY Mid-Continent property understands their role during an emergency and is equipped with the knowledge and tools to successfully perform that role.
3. Identify potentially high risk operations and plan for worst case scenarios.
4. Identify any hazard information sharing opportunities with the civil authorities who will respond to our facilities during an emergency.
5. Identify and plan for regulatory notification in a timely manner.
6. Maximize resource utilization to minimize process interrupt and to minimize adverse external impacts of any OXY Mid-Continent incidents in the communities where we operate.

OMCCT NOTIFICATION LISTS

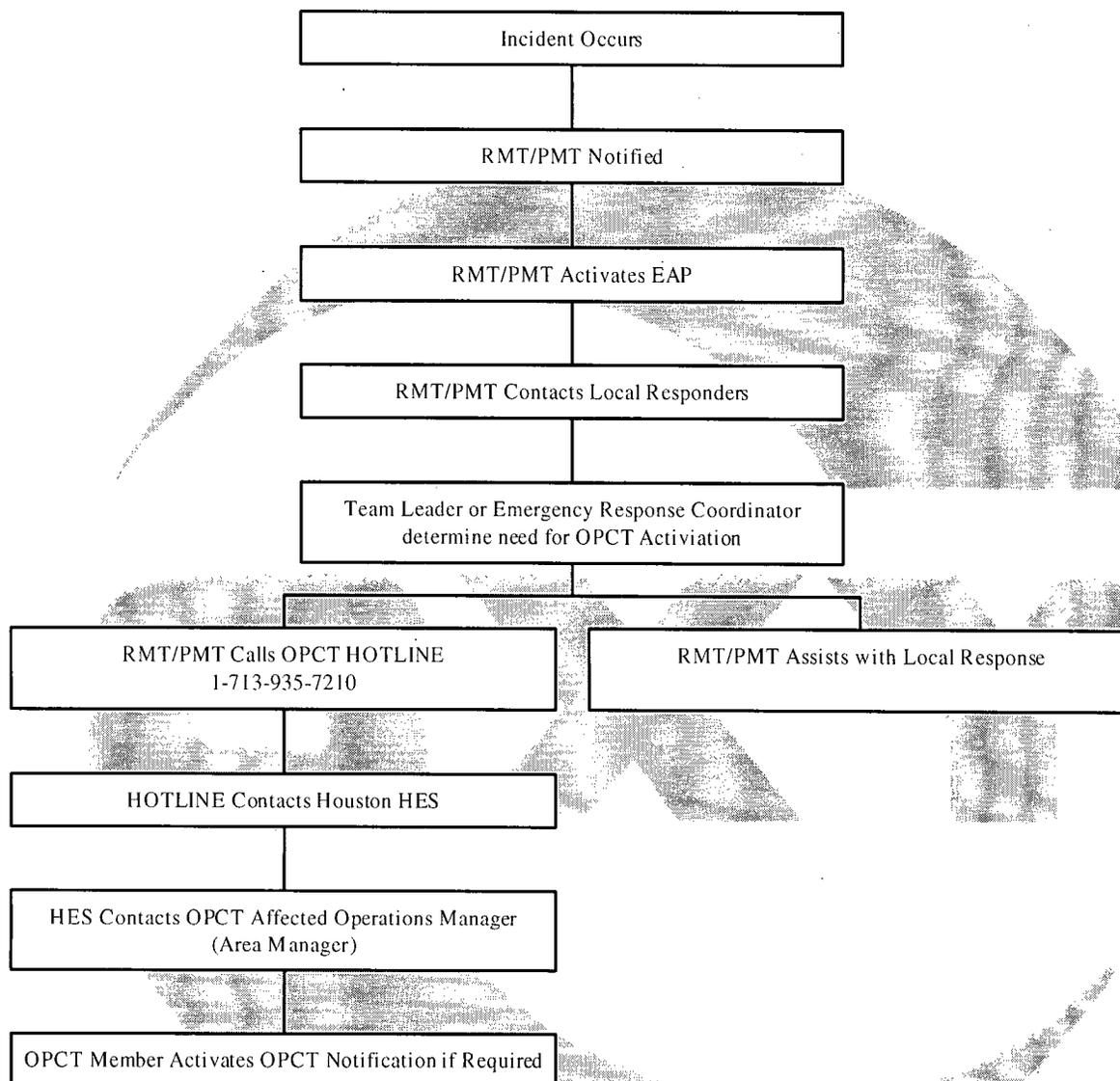
OMCCT NOTIFICATION REQUIREMENTS

The following examples are provided as a guideline to determine whether an incident requires notification of the OXY Mid-Continent Crisis Team (“OMCCT”). These examples provide only a basis for rationale when evaluating the extent of the incident. If there is a question about notification or OMCCT involvement, the OXY Mid-Continent Management Team would prefer over notification instead of field locations attempting to manage an incident without adequate resources.

Examples:

1. Employee or contractor fatalities.
2. Any fatality, injury or illness to a member of the public.
3. Multiple hospitalizations of contractor or employees.
4. Potential or actual threat to public health.
5. Significant environmental impact; offsite or onsite.
6. Potential or actual incident media coverage.
7. Unified (company & community) response required.
8. Existing threat; bomb/disgruntled employee/etc.
9. Blatant unsafe acts may have occurred.
10. Obvious potential for litigation exists.
11. Substantial long term cost impacts are inevitable.
12. Incidents causing injuries to multiple personnel (more severe than first aid) and involving OXY Mid-Continent equipment, facilities, operations, construction, or transportation.

OMCCT NOTIFICATION PROCESS



OMCCT HOTLINE NOTIFICATION

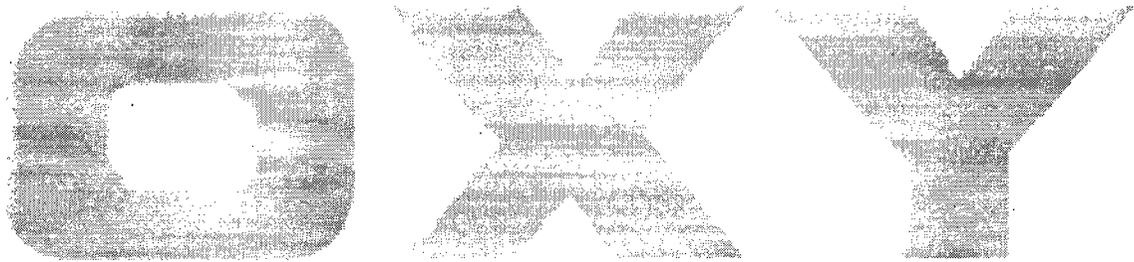
The OXY MID-CONTINENT CRISIS TEAM (OMCCT) members will be directed to report to the designated Emergency Operations Center (“EOC”). The EOC is located on the Plaza Level of Greenway 5 in Houston but another area may be designated as necessary. The OMCCT can be notified of a crisis by contacting the OXY Mid-Continent Crisis Answering Service at the following number:

713-935-7210

HOUSTON HES CONTACTS

Greg Hardin 713-366-5324(W)

713-560-8037(C)



OMCCT Member Duties

INCIDENT MANAGER

- Exterior Focus
- Total OXY Mid-Continent Operations Impact
- Total OXY Mid-Continent Image Impact
- Community Impact
- Houston Media Interaction
- OOGC & OMCC Required Interactions

OPERATIONS MANAGER

- Manage Field Response through FIC
- Coordinate Response Efforts with OMCCT
- Ensure Resources Available for HASP
- Identify Resources for Long Responses
- Communicate Response & Recovery Plans to Facilitate State/Fed Approval
- Provide Operations Updates during OMCCT Briefings on Regular Basis

PLANNING MANAGER

- Develop Action Plan Toward Recovery
- Ensure Site Security is Obtained
- Publish & Distribute Incident Action Plan
- Publish Incident Journal After Legal Review
- Ensure Site HASP is in Place
- Identify Long and Short Term Impacts
- Present Recovery Plan to OMCCT for Approval
- Schedule and Conduct OMCCT Briefings

LOGISTICS MANAGER

- Support Mobilization of OMCMRT team
- Acquire Local Support as Requested
- Ensure Available Cash Support for OMCMRT
- Assist Planning Mgr in Costs Estimates
- Coordinate Logistics for Communities

OMCCT MEMBER DUTIES (cont.)

HES MANAGER

- Assist Incident Site with HASP
- Ensure Notifications Have Occurred
- Provide HES Consultation to OMCCT
- Provide HES Field Support as Requested
- Assist with Recovery Planning
- Advise Planning Mgr with HES Impacts

EOC COORDINATOR

- Maintain Incident Information Center
- Ensure EOC is Functional and Staffed
- Ensure F&S has Building Security in Place
- Provide Central Contact for EOC

HUMAN RESOURCES MANAGER

- Coordinate Humanitarian Assistance
- Assist in Crisis EAP Services
- Ensure Personnel Records are Maintained
- Assist with Labor & Employment Issues
- Establish Family Hotline

EXTERNAL AFFAIRS

- Coordinate All Media Interactions
- Support Incident Mgr and Field Communications; Press and Media
- Support OOGC & OMCC Organizational Updates

GENERAL COUNSEL

- Assist in Liability Determination
- Advise OMCCT and Field in Legal Counsel
- Review All Press Releases
- Handle All Legal Inquiries during Crisis

OXY MID-CONTINENT MANAGEMENT RESPONSE TEAM (OMCMRT)

The following individuals have been designated to mobilize to the incident site at the discretion of the OMCMRT Manager. Each member's duties will be determined by the OMCMRT collectively and will be driven by the incident requirements.

The primary objective is to assist the local Incident Commander in the management aspects of his incident especially in the areas of *media interactions, immediate (3-5 day) logistical assistance for victims, long term recovery commitments, and community relations at the scene.*

The OMCMRT may be expanded at the discretion of the Team Manager based on the incident but will not include members of the OMCMRT assigned to other responsibilities.

NOTE: Aircraft accommodations will be pre-arranged by the OMCCT Logistics Manager and communicated to the OMCMRT.

OXY MID-CONTINENT CRISIS TEAM (OMCCT)

Automated Call Out Procedures

The following procedure is intended for use by the Incident Managers, Operations Managers, or OMC MRT Team Leaders to quickly alert the OMCCT that activation of Crisis Management Plan is underway. Specific callout distributions will be established on each of these OMCCT managers' phones to allow for one call OMCCT notification.

Callout Procedure:

To leave an Alert message for the OMC Crisis Management Team and to notify their cell phones in order to check Alert Message:

1. Call the Voice Mail System: **713-215-7500 or 1-800-733-0330**
2. Enter the Crisis Management Mail Box Number: **5911#**
3. Enter Password: **911911#**
4. To compose the Alert Message Dial: **75**
5. Enter the Crisis Management Distribution List: **12##**
(This will automatically access each individual's personal mail box number.)
6. To Record the Message, Press: **5**
7. After Recording Message, Dial: **#701**, to tag the message for urgent delivery
8. To Send the Recorded Message Dial: **79**
9. Hang Up

Responding to an OMC Crisis Management Alert Message:

1. If you get a voicemail at your office phone, retrieve message by following the usual procedures
2. If you received a call on your cell phone from the Voice Mail System: Follow instructions given during the call to retrieve the message
3. If the call to your cell phone goes to your cell phone voice mail, you will only be able to retrieve the message by calling (713) 215-7500 or 1-800-733-0330. These are the same number you use for remote access to voice mail for your office phone voice mail.
4. Enter Your Personal Mailbox Number Followed by the # Sign; Enter Your Password, Followed by the # Sign.

APPENDIX G – FIRE PREVENTION PLAN

PURPOSE

This Fire Prevention Plan applies to all Production Area operations including field offices of the Southwest – NM Team where employees may encounter a fire. This plan requirement is based on OSHA’s Fire Prevention Plan regulation found at 29 CFR 1910.38(b).

A written prevention plan shall be included in the local Emergency Action Plan for each Production Area of the Southwest – NM properties to control and reduce the possibility of fire and to specify the type of equipment to use in case of fire. This plan addresses the following issues:

- Major workplace fire hazards and their proper handling and storage procedures.
- Potential ignition sources for fires and their control procedures.
- The type of fire protection equipment or systems which can control a fire.
- Regular job titles of personnel responsible for coordinating inspections and/or maintenance of equipment and systems installed to prevent or control ignition of fires and for control of fuel source hazards
- Housekeeping
- Training
- Employee Review

The fire prevention plan communicates to employees, guidelines to follow when fires erupt, as well as what actions should be taken to prevent occurrence. This written plan is available, upon request, to employees, their designated representatives, Oxy Mid-Continent management and any OSHA official upon request.

Should there be any suggestions on “plan” improvements, please contact your HES Technician. The Southwest – NM team encourages all suggestions to enhance the success of each Production Area Emergency Action Plan.

PLAN ACTIONS

1. Develop a written fire prevention plan for regular and after-hours work conditions.
2. Satisfy all local fire codes and regulations.
3. Prepare an office building "plat" showing the location of fire exits, fire extinguishers, evacuation routes, and emergency "staging" areas. This plat should be posted throughout the office building and should be included in the Fire Prevention Section of the local emergency action plan.
4. Train employees on Oxy Mid-Continent's philosophy on fighting fires, in the use of fire extinguishers and the application of medical first-aid techniques.
5. Train employees on the procedures for reporting a fire.
6. Keep Production Area's emergency call-list of telephone numbers by each telephone in the office for immediate use in the event of a fire. Make the list available to all employees (and contractors as appropriate), to be retained in their homes, for use in communicating a fire occurring during non-work hours.

FIRE GUIDELINES

1. Immediate notification is required to local emergency response agencies and local Oxy management and company/contractor personnel as appropriate.
2. Decide to remain in or evacuate the workplace.
3. If evacuation is deemed necessary, ensure that:
 - All affected employees and/or contractors are immediately notified.
 - All inside doors of the office building are closed before evacuating, if time permits.
 - All employees and/or contractors are counted for to confirm total evacuation.

Note: When practical, equipment should be placed and locked in storage rooms or desks for protection.

WORKPLACE FIRE HAZARDS [29 CFR 1910.38 (b)(2)(i)]

It is the intent of the Southwest-NM to assure that hazardous accumulations of combustible waste materials are controlled so that a fast developing fire, rapid spread of toxic smoke, or an explosion will not occur. Employees and/or contractors are to be made aware of the hazardous properties of materials in their workplaces on Oxy Mid-Continent operated properties, and the degree of hazard each poses.

A list of the major fire hazards that may be found in the work environment includes but is not limited to:

Crude Oil
Natural Gas
Electrical Wiring
Wood/Paper/Cardboard
Vehicles

Proper handling and storage procedures are important factors in eliminating fire hazards. Every effort should be made to keep fire hazards away from ignition sources such as heat, sparks, or open flames. Grounding and bonding of load lines or containers when transferring flammable materials is used to eliminate sparks from potential static electricity charges. Proper electrical wiring utilizing conduits along with proper insulation and seals and by not allowing temporary wiring (extension cords) to become permanent wiring. Keeping containers closed and storage areas properly ventilated. Eliminating the accumulation of combustible items such as wood, waste paper, and corrugated boxes, etc that may be easily ignited by matches, welder's sparks, cigarettes and other similar low-level energy ignition sources. There is also driver safety associated with allowing vehicles into potential hazardous atmospheres or into an arid brush field area where the vehicle exhaust system (catalytic converter) may emit a spark.

Fire prevention measures must be developed for all fire hazards found. Once employees are made aware of the fire hazards in their work areas, they must be trained in the fire prevention measures developed and use them in the course of their work.

The following procedures are used to control known ignition sources.

- Proper electrical fittings, as defined by areas of classification, are utilized;
- Smoking is prohibited in all Mid-Continent facilities;
- Vehicles are not allowed where there is a known concentration of combustible material.
- Air conditioning/heater closets, kitchen area, coffee bar area, and microwaves are inspected to ensure there is not an accumulation of flammables/combustibles around ignition sources and that appliances are functioning normal
- Communication switch closets are inspected to ensure flammables/combustibles are not accumulating in front of or adjacent to electrical panels or switches.

Fire protection equipment in use for the Southwest – NM may include the installation of ABC/BC dry chemical fire extinguishers on vehicles, and/or at field facilities and field office buildings to protect from the various types of fire hazards.

29 CFR 1910.38 (b)(2)(ii)

The HES Technician for each Production Area will serve as the Fire Prevention Plan Coordinator. The HES Technician has overall responsibility for the plan and will review and update it as necessary. The written program may also be found in designated Fire Prevention Safety Files at each Production Area Field Office.

29 CFR 1910.38 (b)(2)(iii)

Each employee is responsible for controlling fuel source hazards in their assigned work areas.

HOUSEKEEPING [29 CFR 1910.38 (b)(3)]

It is the responsibility of each employee to ensure proper housekeeping procedures are utilized to control the accumulation of flammable and combustible material. Employees' responsibilities concerning housekeeping include maintaining a clean and orderly work area in their area of responsibility, taking corrective action if a general use area appears to have an excessive amount of flammables/combustibles accumulating, and reporting any perceived unsafe condition concerning ignition sources and housekeeping practices.

TRAINING [29 CFR 1910.38 (b)(4)]

At the time of a fire, employees should know what type of evacuation is necessary and what their role is in carrying out the plan. In cases where the fire is large, total and immediate evacuation of all employees is necessary. In smaller fires, a partial evacuation of nonessential employees with a delayed evacuation of others may be appropriate. We must be sure that employees know what is expected of them during a fire to assure their safety. Oxy Mid-Continent's fire fighting philosophy focuses on fighting "incipient" (beginning) stage fires only. There is no expectation or requirement for employees to participate in extinguishing an incipient stage fire. The primary objective is the safety of all personnel. In addition, OSHA requires training on the plan's content. Annual training including make-up training is required by the Southwest – NM area.

Initial Assignment Training [29 CFR 1910.38 (b)(4)(i)]

Employees are apprised of the fire hazards of the materials and processes that they will be exposed to in their job responsibilities and work locations.

- What to do if an employee discovers a fire;
- Demonstration of the alarm (if appropriate);
- How to recognize fire exits;
- Evacuation routes;
- Assisting employees with disabilities;
- Measures to contain fire (close all office doors prior to leaving building);
- Head count procedures (see EAP for details); and
- Return to building after the "all-clear" signal.

If there is reason to believe an employee does not have the understanding required, the employee must be retrained.

Fire Prevention Equipment [29 CFR 1910.38(b)(4)(ii)]

Training is provided for each employee who is required to use fire prevention equipment. Employees shall not use fire prevention equipment without appropriate training. Training, before an individual is allowed to fight a fire, includes:

- Types of alarms and their meaning;
- Types of fires;
- Types of fire prevention equipment;
- Location of fire prevention equipment;
- How to use fire prevention equipment;
- Limitations of fire prevention equipment; and
- Proper care and maintenance of assigned fire prevention equipment.

Employees must demonstrate an understanding of the training and the ability to use the equipment properly before they are allowed to fight a fire.

MAINTENANCE OF FIRE PROTECTION EQUIPMENT [29 CFR 1910.38 (b)(5)]

Once hazards are evaluated and equipment is installed to control them that equipment must be monitored on a regular basis to make sure it continues to function properly. Every employee who is issued a fire extinguisher is responsible for maintaining their equipment and performing monthly inspections as required by OSHA.

The HES Technician will coordinate monthly inspections of all fire extinguishers and smoke alarms at each Production Area Field Office. Inspection records are maintained in each Production Area's safety files.

Certain equipment is often installed in workplaces to control heat sources or to detect gas leaks. An example is a temperature limit switch found on Vapor Recovery Units (VRU). There may be similar switches for high temperature dip tanks, or flame failure and flashback-arrester devices on furnaces and similar heat producing equipment. If these devices are not properly maintained or if they become inoperative, a definite fire hazard exists. Employees and supervisors should be aware of the specific type of control devices on equipment involved with combustible materials in the workplace and should make sure, through periodic inspection or testing, that these controls are operable. Manufacturer's recommendations should be followed to assure proper maintenance procedures. Maintenance files for these types of equipment control devices are located at each Production Area Office.

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, February 02, 2010 7:11 AM
To: 'Mark_Treesh@oxy.com'
Cc: Dade, Randy, EMNRD; VonGonten, Glenn, EMNRD
Subject: FW: Oxy Indian Basin Gas Plant (GW-021) C-141 H2S Contingency Plan
Attachments: 19.15.11 NMAC.pdf

Mr. Treesh:

Good morning. This is a reminder that your H2S Contingency Plan for the above subject facility is due February 17, 2010.

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/ocd/index.htm>
(Pollution Prevention Guidance is under "Publications")

From: Chavez, Carl J, EMNRD
Sent: Tuesday, November 17, 2009 10:27 AM
To: 'Mark_Treesh@oxy.com'
Cc: Dade, Randy, EMNRD; Ezeanyim, Richard, EMNRD; VonGonten, Glenn, EMNRD
Subject: RE: Oxy Indian Basin Gas Plant (2RP-22-0) C-141 Acid Gas Compressor Shutdown Due to Low Lube Oil Flow Shutdown to Cylinders

Mr. Treesh:

The New Mexico Oil Conservation Division (OCD) has completed its review of your e-mail submittals.

The C-141 corrective actions taken hopefully will correct the reoccurring problem.

The Emergency Response Plan for Southwest New Mexico (Eddy, Lea, Chavez & Roosevelt Counties) does not appear to specifically address OCD § 19.15.11 NMAC (Hydrogen Sulfide Gas- see attached regulations) regulatory requirements for each facility. While the OCD commends OXY for developing a generic plan (Pages 41-42 attempting to display all OXY facility area of exposures, etc., which are not discernible from the figure and appear generic in nature), it appears that either a new generic plan focusing on OCD's Hydrogen Sulfide Gas Regulations is needed with site-specific Contingency Plan (CP) pages with maps to scale for every facility that may have 100 ppm or greater H2S gas releases (see attached regulations).

Please take a moment to review the OCD regulations and contact me to discuss how OXY may develop one generic plan for all applicable facilities in New Mexico that will satisfy § 19.15.11 NMAC or an individual CP for each facility that the regulations applies to in New Mexico. The OCD requests that you submit a H2S CP for the Oxy Indian Basin Gas Plant within 90 days of receipt of this e-mail. In addition, OXY may desire to develop one generic CP with site specific pages that display the required information for each applicable facility.

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
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(Pollution Prevention Guidance is under "Publications")

From: Mark_Treesh@oxy.com [mailto:Mark_Treesh@oxy.com]
Sent: Friday, November 13, 2009 7:14 PM
To: Chavez, Carl J, EMNRD
Cc: Dade, Randy, EMNRD; Ezeanyim, Richard, EMNRD
Subject: RE: Oxy Indian Basin Gas Plant (2RP-22-0) C-141 Acid Gas Compressor Shutdown Due to Low Lube Oil Flow Shutdown to Cylinders

Mr. Chavez,

As requested attached are:

1] The OXY-Midcontinent Emergency Response Plan (ERP) for southwest New Mexico. The H2S contingency plan is included in the ERP with maps of the Indian Basin area including the plant showing radius of exposures and the nearest public residences on page 41 and 42.

2] An amended C-141 that contains an improved description of the problem and events leading up to the release and the actions we took to remedy the problem and to limit the probability of recurrence.

I apologize in the slight delay in getting you this response as I have been experiencing internet / email problems throughout the day.

Mark Treesh
Production Coordinator
Indian Basin Gas Plant
Office: 575-628-4112
Cell: 575-200-8010

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Thursday, November 05, 2009 5:05 PM
To: Treesh, Mark E
Cc: Dade, Randy, EMNRD; Ezeanyim, Richard, EMNRD
Subject: Oxy Indian Basin Gas Plant (2RP-22-0) C-141 Acid Gas Compressor Shutdown Due to Low Lube Oil Flow Shutdown to Cylinders

Mr. Mark Treesh:

Good afternoon. The Oil Conservation Division (OCD) is in receipt of your C-141 Form for a 90.67 MCF release that occurred on 10/31/2009 at 4:42 p.m. The OCD has received prior C-141s indicating a similar description for cause of the release ("acid gas compressor shutdown due to low lube oil flow shutdown to cylinders").

You indicated in a telephone call that when the compressor shuts down 98% of the gas is flared with a sulfur dioxide emission. In addition, a release form is submitted to the NMED for air quality monitoring purposes.

I have attached the C-141 Form for reference.

Based on the final C-141 Form that was submitted, the OCD requests the following:

- 1) Copy of your H2S Contingency Plan (CP) as required by 19.15.11 NMAC (Hydrogen Sulfide Gas). The CP should have a map to help assess public health threats from the releases that have been occurring.

- 2) Amend the C-141 Form to describe the cause of the problem and remedial action taken, in this case, to fix the problem or steps taken to remedy the situation and prevent these releases from re-occurring.

The OCD hopes that the problem with the compressor is fixed to prevent these "Major Releases" from occurring in the future. Please resubmit a recompleted C-141 Form and CP to me by close of business next Friday, November 13, 2009.

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
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Office: (505) 476-3490
Fax: (505) 476-3462
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TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 11 HYDROGEN SULFIDE GAS

19.15.11.1 ISSUING AGENCY: Energy, Minerals and Natural Resources Department, Oil Conservation Division.
[19.15.11.1 NMAC - N, 12/1/08]

19.15.11.2 SCOPE: 19.15.11 NMAC applies to a person subject to the division's jurisdiction, including a person engaged in drilling, stimulating, injecting into, completing, working over or producing an oil, gas or carbon dioxide well or a person engaged in gathering, transporting, storing, processing or refining of oil, gas or carbon dioxide. 19.15.11 NMAC does not exempt or otherwise excuse surface waste management facilities the division permits pursuant to 19.15.36 NMAC from more stringent conditions on the handling of hydrogen sulfide required of such facilities by 19.15.36 NMAC or more stringent conditions in permits issued pursuant to 19.15.36 NMAC, nor shall the facilities be exempt or otherwise excused from the requirements set forth in 19.15.11 NMAC by virtue of permitting under 19.15.36 NMAC.
[19.15.11.2 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.3 STATUTORY AUTHORITY: 19.15.11 NMAC is adopted pursuant to the Oil and Gas Act, NMSA 1978, Section 70-2-6, Section 70-2-11 and Section 70-2-12.
[19.15.11.3 NMAC - N, 12/1/08]

19.15.11.4 DURATION: Permanent.
[19.15.11.4 NMAC - N, 12/1/08]

19.15.11.5 EFFECTIVE DATE: December 1, 2008, unless a later date is cited at the end of a section.
[19.15.11.5 NMAC - N, 12/1/08]

19.15.11.6 OBJECTIVE: To require oil and gas operations be conducted in a manner that protects the public from exposure to hydrogen sulfide gas.

[19.15.11.6 NMAC - N, 12/1/08]

19.15.11.7 DEFINITIONS:

A. "ANSI" means the American national standards institute.

B. "Area of exposure" means the area within a circle constructed with a point of escape at its center and the radius of exposure as its radius.

C. "Dispersion technique" is a mathematical representation of the physical and chemical transportation characteristics, dilution characteristics and transformation characteristics of hydrogen sulfide gas in the atmosphere.

D. "Escape rate" means the maximum volume (Q) that is used to designate the possible rate of escape of a gaseous mixture containing hydrogen sulfide, as set forth in 19.15.11 NMAC.

(1) For existing gas facilities or operations, the escape rate is calculated using the maximum daily rate of the gaseous mixture produced or handled or the best estimate thereof. For an existing gas well, the escape rate is calculated using the current daily absolute open flow rate against atmospheric pressure or the best estimate of that rate.

(2) For new gas operations or facilities, the escape rate is calculated as the maximum anticipated flow rate through the system. For a new gas well, the escape rate is calculated using the maximum open-flow rate of offset wells in the pool or reservoir, or the pool or reservoir average of maximum open-flow rates.

(3) For existing oil wells, the escape rate is calculated by multiplying the producing gas/oil ratio by the maximum daily production rate or the best estimate of the maximum daily production rate.

(4) For new oil wells, the escape rate is calculated by multiplying the producing gas/oil ratio by the maximum daily production rate of offset wells in the pool or reservoir, or the pool or reservoir average of the producing gas/oil ratio multiplied by the maximum daily production rate.

(5) For facilities or operations not mentioned, the escape rate is calculated using the actual flow of the gaseous mixture through the system or the best estimate of the actual flow of the gaseous mixture through the system.

E. "GPA" means the gas processors association.

F. "LEPC" means the local emergency planning committee established pursuant to the Emergency Planning and Community Right-To-Know Act, 42 U.S.C. section 11001.

G. "NACE" means the national association of corrosion engineers.

H. "Potentially hazardous volume" means the volume of hydrogen sulfide gas of such concentration that:

(1) the 100-ppm radius of exposure includes a public area;

(2) the 500-ppm radius of exposure includes a public road; or

(3) the 100-ppm radius of exposure exceeds 3000 feet.

I. "Public area" means a building or structure that is not associated with the well, facility or operation for which the radius of exposure is being calculated and that is used as a dwelling, office, place of business,

church, school, hospital or government building, or a portion of a park, city, town, village or designated school bus stop or other similar area where members of the public may reasonably be expected to be 19.15.11 NMAC

<http://www.nmcpr.state.nm.us/nmac/parts/title19/19.015.0011.htm>[1/16/2009 4:18:08 PM] present.

J. “Public road” means a federal, state, municipal or county road or highway.

K. “Radius of exposure” means the radius constructed with the point of escape as its starting point and its length calculated using the following Pasquill-Gifford derived equation, or by such other method as the division may approve:

(1) for determining the 100-ppm radius of exposure: $X = [(1.589)(\text{hydrogen sulfide concentration})(Q)](0.6258)$, where “X” is the radius of exposure in feet, the “hydrogen sulfide concentration” is the decimal equivalent of the mole or volume fraction of hydrogen sulfide in the gaseous mixture and “Q” is the escape rate expressed in cubic feet per day (corrected for standard conditions of 14.73 psi absolute and 60 degrees fahrenheit);

(2) for determining the 500-ppm radius of exposure: $X = [(0.4546)(\text{hydrogen sulfide concentration})(Q)](0.6258)$, where “X” is the radius of exposure in feet, the “hydrogen sulfide concentration” is the decimal equivalent of the mole or volume fraction of hydrogen sulfide in the gaseous mixture and “Q” is the escape rate expressed in cubic feet per day (corrected for standard conditions of 14.73 psi absolute and 60 degrees fahrenheit);

(3) for a well being drilled, completed, recompleted, worked over or serviced in an area where insufficient data exists to calculate a radius of exposure but where hydrogen sulfide could reasonably be expected to be present in concentrations in excess of 100 ppm in the

gaseous mixture, a 100-ppm radius of exposure equal to 3000 feet is assumed.

[19.15.11.7 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.8 REGULATORY THRESHOLD:

A. Determination of hydrogen sulfide concentration.

(1) Each person shall determine the hydrogen sulfide concentration in the gaseous mixture within wells, facilities or operations either by testing (using a sample from each well, facility or operation); testing a representative sample; or using process knowledge in lieu of testing. If the person uses a representative sample or process knowledge, the concentration derived from the representative sample or process knowledge shall be reasonably representative of the hydrogen sulfide concentration within the well, facility or operation.

(2) The person shall conduct the tests used to make the determination referred to in Paragraph (1) of Subsection A of 19.15.11.8 NMAC in accordance with applicable ASTM or GPA standards or by another division-approved method.

(3) If the person conducted a test prior to January 31, 2003 that otherwise meets the requirements of Paragraphs (1) and (2) of Subsection A of 19.15.11.8 NMAC, new testing is not required.

(4) If a change or alteration may materially increase the hydrogen sulfide concentration in a well, facility or operation, the person shall make a new determination in accordance with 19.15.11 NMAC.

B. Concentrations determined to be below 100 ppm. If the hydrogen sulfide concentration in a given well, facility or operation is less than 100 ppm, the person is not required to take further actions pursuant to 19.15.11 NMAC.

C. Concentrations determined to be above 100 ppm.

(1) If the person determines the hydrogen sulfide concentration in a given well, facility or operation is 100 ppm or greater, then the person shall calculate the radius of exposure and comply with applicable requirements of 19.15.11 NMAC.

(2) If calculation of the radius of exposure reveals that a potentially hazardous volume is present, the person shall provide results of the hydrogen sulfide concentration determination and the calculation of the radius of exposure to the division. For a well, facility or operation, the person shall accomplish the determination, calculation and submission 19.15.11.8 NMAC requires before operations begin.

D. Recalculation. The person shall calculate the radius of exposure if the hydrogen sulfide concentration in a well, facility or operation increases to 100 ppm or greater. The person shall also recalculate the radius of exposure if the actual volume fraction of hydrogen sulfide increases by a factor of 25 percent in a well, facility or operation that previously had a hydrogen sulfide concentration of 100 ppm or greater. If calculation or recalculation of the radius of exposure reveals that a potentially hazardous volume is present, the person shall provide the results to the division within 60 days.

[19.15.11.8 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.9 HYDROGEN SULFIDE CONTINGENCY PLAN:

A. When required. If a well, facility or operation involves a potentially hazardous volume of hydrogen sulfide, the person shall develop a hydrogen sulfide contingency plan that the person will use to alert and protect the public in accordance with the Subsections B through I of 19.15.11.9 NMAC.

B. Plan contents.

(1) **API guidelines.** The person shall develop the hydrogen sulfide contingency plan with due consideration of paragraph 7.6 of the guidelines in the API publication **Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide, RP-55**, most recent edition, or with due consideration to another division-approved standard.

(2) **Required contents.** The hydrogen sulfide contingency plan shall contain information on the following subjects, as appropriate to the well, facility or operation to which it applies.

(a) **Emergency procedures.** The hydrogen sulfide contingency plan shall contain information on emergency procedures the person will follow in the event of a release and shall include, at a minimum, information concerning the responsibilities and duties of personnel during the emergency, an immediate action plan as described in the API document referenced in Paragraph (1) of Subsection B of 19.15.11.9 NMAC, and telephone numbers of emergency responders, public agencies, local government and other appropriate public authorities. The plan shall also include the locations of potentially affected public areas and public roads and shall describe proposed evacuation routes, locations of road blocks and procedures for notifying the public, either through direct telephone notification using telephone number lists or by means of mass 19.15.11 NMAC <http://www.nmcpr.state.nm.us/nmac/parts/title19/19.015.0011.htm>[1/16/2009 4:18:08 PM] notification and reaction plans. The plan shall include information on the availability and location of necessary safety equipment and supplies.

(b) **Characteristics of hydrogen sulfide and sulfur dioxide.** The hydrogen sulfide contingency plan shall include a discussion of the characteristics of hydrogen sulfide and sulfur dioxide.

(c) **Maps and drawings.** The hydrogen sulfide contingency plan shall include maps and drawings that depict the area of exposure and public areas and public roads within the area of exposure.

(d) **Training and drills.** The hydrogen sulfide contingency plan shall provide for training and drills, including training in the responsibilities and duties of essential personnel and periodic on-site or classroom drills or exercises that simulate a release, and shall describe how the person will document the training, drills and attendance. The hydrogen sulfide contingency plan shall also provide for training of residents as appropriate on the proper protective measures to be taken in the event of a release, and shall provide for briefing of public officials on issues such as evacuation or shelter-in-place plans.

(e) **Coordination with state emergency plans.** The hydrogen sulfide contingency plan shall describe how the person will coordinate emergency response actions under the plan with the division and the New Mexico state police consistent with the New Mexico hazardous materials emergency response plan.

(f) **Activation levels.** The hydrogen sulfide contingency plan shall include the activation level and a description of events that could lead to a release of hydrogen sulfide sufficient to create a concentration in excess of the activation level.

C. Plan activation. The person shall activate the hydrogen sulfide contingency plan when a release creates a hydrogen sulfide concentration greater than the activation level set forth in the hydrogen sulfide contingency plan. At a minimum, the person shall activate the plan whenever a release may create a hydrogen sulfide concentration of more than 100 ppm in a public area, 500 ppm at a public road or 100 ppm 3000 feet from the site of release.

D. Submission.

(1) Where submitted. The person shall submit the hydrogen sulfide contingency plan to the division.

(2) When submitted. The person shall submit a hydrogen sulfide contingency plan for a new well, facility or operation before operations commence. The hydrogen sulfide contingency plan for a drilling, completion, workover or well servicing operation shall be on file with the division before operations commence and may be submitted separately or along with the APD or may be on file from a previous submission. A person shall submit a hydrogen sulfide contingency plan within 180 days after the person becomes aware or should have become aware that a public area or public road is established that creates a potentially hazardous volume where none previously existed.

(3) Electronic submission. A filer who operates more than 100 wells or who operates an oil pump station, compressor station, refinery or gas plant shall submit each hydrogen sulfide contingency plan in electronic format. The filer may submit the hydrogen sulfide contingency plan through electronic mail, through an Internet filing or by delivering electronic media to the division, so long as the electronic submission is compatible with the division's systems.

E. Failure to submit plan. A person's failure to submit a hydrogen sulfide contingency plan when required may result in denial of an application for permit to drill, cancellation of an allowable for the subject well or other enforcement action appropriate to the well, facility or operation.

F. Review, amendment. The person shall review the hydrogen sulfide contingency plan any time a subject addressed in the plan materially changes and make appropriate amendments. If the division determines that a hydrogen sulfide contingency plan is inadequate to protect public

safety, the division may require the person to add provisions to the plan or amend the plan as necessary to protect public safety.

G. Retention and inspection. The hydrogen sulfide contingency plan shall be reasonably accessible in the event of a release, maintained on file at all times and available for division inspection.

H. Annual inventory of contingency plans. On an annual basis, each person required to prepare one or more hydrogen sulfide contingency plans pursuant to 19.15.11 NMAC shall file with the appropriate local emergency planning committee and the state emergency response commission an inventory of the wells, facilities and operations for which plans are on file with the division and the name, address and telephone number of a point of contact.

I. Plans required by other jurisdictions. The person may submit a hydrogen sulfide contingency plan to the BLM or other jurisdiction require that meets the requirements of 19.15.11.9 NMAC to the division in satisfaction of 19.15.11.9 NMAC.

[19.15.11.9 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.10 SIGNS, MARKERS: For each well, facility or operation involving a hydrogen sulfide concentration of 100 ppm or greater, the person shall install and maintain signs or markers that conform with the current ANSI standard Z535.1-2002 (Safety Color Code), or some other division-approved standard. The sign or marker shall be readily readable, and shall contain the words "poison gas" and other information sufficient to warn the public that a potential danger exists. The person shall prominently post signs or markers at locations, including entrance points and road crossings, sufficient to alert the public that a potential danger exists.

[19.15.11.10 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.11 PROTECTION FROM HYDROGEN SULFIDE DURING DRILLING, COMPLETION, WORKOVER AND WELL SERVICING OPERATIONS:

A. API standards. The person shall conduct drilling, completion, workover and well servicing operations involving a hydrogen sulfide concentration of 100 ppm or greater with due consideration to the guidelines in the API publications Recommended Practice for Oil and Gas Well Servicing and Workover Operations Involving Hydrogen Sulfide, RP-68, and Recommended Practices for Drilling and Well Servicing Operations Involving Hydrogen Sulfide, RP-49, most recent editions, or some other division-approved standard.

B. Detection and monitoring equipment. Drilling, completion, workover and well servicing operations involving a hydrogen sulfide 19.15.11 NMAC

<http://www.nmcpr.state.nm.us/nmac/parts/title19/19.015.0011.htm>[1/16/2009 4:18:08 PM] concentration of 100 ppm or greater shall include hydrogen sulfide detection and monitoring equipment as follows.

(1) Each drilling and completion site shall have an accurate and precise hydrogen sulfide detection and monitoring system that automatically activates visible and audible alarms when the hydrogen sulfide's ambient air concentration reaches a predetermined value the operator sets, not to exceed 20 ppm. The operator shall locate a sensing point at the shale shaker, rig floor and bell nipple for a drilling site and the cellar, rig floor and circulating tanks or shale shaker for a completion site.

(2) For workover and well servicing operations, the person shall locate one operational sensing point as close to the well bore as practical. Additional sensing points may be necessary for large or long-term operations.

(3) The operator shall provide and maintain as operational hydrogen sulfide detection and monitoring equipment during drilling when

drilling is within 500 feet of a zone anticipated to contain hydrogen sulfide and continuously thereafter through all subsequent drilling.

C. Wind indicators. Drilling, completion, workover and well servicing operations involving a hydrogen sulfide concentration of 100 ppm or greater shall include wind indicators. The person shall have equipment to indicate wind direction present and visible at all times. The person shall install at least two devices to indicate wind direction at separate elevations that visible from all principal working areas at all times. When a sustained hydrogen sulfide concentration is detected in excess of 20 ppm at a detection point, the person shall display red flags.

D. Flare system. For drilling and completion operations in an area where it is reasonably expected that a potentially hazardous hydrogen sulfide volume will be encountered, the person shall install a flare system to safely gather and burn hydrogen-sulfide-bearing gas. The person shall locate flare outlets at least 150 feet from the well bore. Flare lines shall be as straight as practical. The person shall equip the flare system with a suitable and safe means of ignition. Where oncombustible gas is to be flared, the system shall provide supplemental fuel to maintain ignition.

E. Well control equipment. When the 100 ppm radius of exposure includes a public area, the following well control equipment is required.

(1) Drilling. The person shall install a remote-controlled well control system that is operational at all times beginning when drilling is within 500 vertical feet of the formation believed to contain hydrogen sulfide and continuously thereafter during drilling. The well control system shall include, at a minimum, a pressure and hydrogen-sulfide-rated well control choke and kill system including manifold and blowout preventer that meets or exceeds the specifications in API publications Choke and Kill Systems, 16C and Blowout Prevention Equipment Systems for Drilling Wells, RP 53 or other division-approved specifications. The person shall use mud-gas separators. The person

shall test and maintain these systems pursuant to the specifications referenced, according to the requirements of 19.15.11 NMAC, or as the division otherwise approves.

(2) Completion, workover and well servicing. The person shall install a remote controlled pressure and hydrogen-sulfide-rated well control system that meets or exceeds API specifications or other division-approved specifications that is operational at all times during a well's completion, workover and servicing.

F. Mud program. Drilling, completion, workover and well servicing operations involving a hydrogen sulfide concentration of 100 ppm or greater shall use a hydrogen sulfide mud program capable of handling hydrogen sulfide conditions and well control, including de-gassing.

G. Well testing. except with prior division approval, a person shall conduct drill-stem testing of a zone that contains hydrogen sulfide in a concentration of 100 ppm or greater only during daylight hours and not permit formation fluids to flow to the surface.

H. If hydrogen sulfide encountered during operations. If hydrogen sulfide was not anticipated at the time the division issued a permit to drill but is encountered during drilling in a concentration of 100 ppm or greater, the operator shall satisfy the requirements of 19.15.11 NMAC before continuing drilling operations. The operator shall notify the division of the event and the mitigating steps that the operator has or is taking as soon as possible, but no later than 24 hours following discovery. The division may grant verbal approval to continue drilling operations pending preparation of a required hydrogen sulfide contingency plan. [19.15.11.11 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.12 PROTECTION FROM HYDROGEN SULFIDE AT OIL PUMP STATIONS, PRODUCING WELLS, TANK

BATTERIES AND ASSOCIATED PRODUCTION FACILITIES, PIPELINES, REFINERIES, GAS PLANTS AND COMPRESSOR STATIONS:

A. API standards. A person shall conduct operations at oil pump stations and producing wells, tank batteries and associated production facilities, refineries, gas plants and compressor stations involving a hydrogen sulfide concentration of 100 ppm or greater with due consideration to the guidelines in the API publication Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide, RP-55, latest edition or some other division-approved standard.

B. Security. A person shall protect well sites and other unattended, fixed surface facilities involving a hydrogen sulfide concentration of 100 ppm or greater from public access by fencing with locking gates when the location is within 1/4 mile of a public area. For the purposes of Subsection B of 19.15.11.12 NMAC, a surface pipeline is not considered a fixed surface facility.

C. Wind direction indicators. Oil pump stations, producing wells, tank batteries and associated production facilities, pipelines, refineries, gas plants and compressor stations involving a hydrogen sulfide concentration of 100 ppm or greater shall have equipment to indicate wind direction. The person shall install wind direction equipment that is visible from all principal working areas at all times.

D. Control equipment. When the 100 ppm radius of exposure includes a public area, the following additional measures are required.

(1) The person shall install and maintain in good operating condition safety devices, such as automatic shut-down devices, to prevent hydrogen sulfide's escape. Alternatively, the person shall establish safety procedures to achieve the same purpose.

(2) A well shall possess a secondary means of immediate well control through the use of an appropriate christmas tree or downhole completion equipment. The equipment shall allow downhole accessibility (reentry) under pressure for permanent well control.

E. Tanks or vessels. The person shall chain each stair or ladder leading to the top of a tank or vessel containing 300 ppm or more 19.15.11 NMAC

<http://www.nmcpr.state.nm.us/nmac/parts/title19/19.015.0011.htm>[1/16/2009 4:18:08 PM] of hydrogen sulfide in the gaseous mixture or mark it to restrict entry. [19.15.11.12 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.13 PERSONNEL PROTECTION AND TRAINING: The person shall provide persons responsible for implementing a hydrogen sulfide contingency plan training in hydrogen sulfide hazards, detection, personal protection and contingency procedures. [19.15.11.13 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.14 STANDARDS FOR EQUIPMENT THAT MAY BE EXPOSED TO HYDROGEN SULFIDE: Whenever a well, facility or operation involves a potentially hazardous hydrogen sulfide volume, the person shall select equipment with consideration for both the hydrogen sulfide working environment and anticipated stresses and shall use NACE Standard MR0175 (latest edition) or some other division-approved standard for selection of metallic equipment or, if applicable, use adequate protection by chemical inhibition or other methods that control or limit hydrogen sulfide's corrosive effects. [19.15.11.14 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.15 EXEMPTIONS: A person may petition the director or the director's designee for an exemption to a requirement of 19.15.11 NMAC. A petition shall provide specific information as to the circumstances that warrant approval of the exemption requested and how the person will protect public safety. The director or the director's

designee, after considering all relevant factors, may approve an exemption if the circumstances warrant and so long as the person protects public safety.

[19.15.11.15 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

19.15.11.16 NOTIFICATION OF THE DIVISION: The person shall notify the division upon a release of hydrogen sulfide requiring activation of the hydrogen sulfide contingency plan as soon as possible, but no more than four hours after plan activation, recognizing that a prompt response should supersede notification. The person shall submit a full report of the incident to the division on form C-141 no later than 15 days following the release.

[19.15.11.16 NMAC - Rp, 19.15.3.118 NMAC, 12/1/08]

HISTORY of 19.15.11 NMAC:

History of Repealed Material: 19.15.3 NMAC, Drilling (filed 10/29/2001) repealed 12/1/08.

NMAC History:

That applicable portion of 19.15.3 NMAC, Drilling (Section 118) (filed 10/29/2001) was replaced by 19.15.11 NMAC, Hydrogen Sulfide Gas, effective 12/1/08.

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Friday, November 13, 2009 6:17 AM
To: 'Clinton_Kirkes@oxy.com'
Subject: Indian Basin Gas Plant (2R-22-0) C-141s & Hydrogen Sulfide Contingency Plan

Mr. Kirkes:

Could you please forward a copy of your H2S Contingency Plan to me? Thanks.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
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Website: <http://www.emnrd.state.nm.us/ocd/index.htm>
(Pollution Prevention Guidance is under "Publications")