REACTION-TYPE CONTINGENCY PLAN
FOR A
HYDROGEN SULFIDE GAS EMERGENCY
INVOLVING THE
OXY PERMIAN-HOBBS RMT OPERATIONS
Prepared 4/21/2003
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OCCIDENTAL PERMIAN LTD.
HOBBS, NEW MEXICO
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REACTION-TYPE CONTINGENCY PLAN FOR A HYDROGEN SULFIDE GAS EMERGENCY INVOLVING THE OXY PERMIAN-HOBBS RMT

Section I.

A. Purpose and Scope of Plan Coverage

The purpose of this plan is to provide for the logical, efficient and safe emergency response action to be taken by the Occidental Permian Hobbs Reservoir Management Team (Hobbs RMT). The protection of the general public and workers in the event of an accidental release of potentially hazardous quantity of Hydrogen Sulfide Gas (H_2S) from it 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 area of exposure at the moment of an accidental release of a potentially hazardous volume of hydrogen sulfide. 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.

The Hobbs RMT is responsible for the operation of the Occidental Permian oil and gas leases located in southern Lea County, New Mexico. A significant portion of the facilities/wells operated by the Hobbs RMT are located within or near the proper city limits of the City of Hobbs, New Mexico

The operations consist of approximately 227 producing oil and gas wells, 5 Tank Batteries, 17 production satellites, 1 CO2 Recompression Facility, 3 Water Injection facilities and several thousand feet of underground pipeline injection or production gathering systems. The RMT has operated a secondary recovery waterflood program of the properties and has recently implemented a tertiary recovery program which will utilize carbon dioxide (CO2) flood as a means of additional recovery of oil and gas production. The projections through the year 2005 estimate that the CO2 flood will consist of 119 producing well and approximately 41 produced gas injection and 35 CO2 injection wells

The operational areas of the Hobbs RMT are divided into two areas, the North Hobbs and South Hobbs Units. A map of the RMT boundaries is included as Appendix A in Section IV of this plan

Sources of potentially hazardous volumes of H2S gas in the Hobbs RMT operations include:

- Oil and gas producing wells and associated flow lines
- Fluid gathering and handling facilities (satellites and batteries)
- Gas gathering systems (pipelines)
- Produced Gas Injection Compression Facility, it's distribution system and associated injection wells

Leaks from these sources could create an H_2S exposure area. Whether such exposure areas 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 small fraction of the system. These calculations are based on the escape rates as allowed by New Mexico Hydrogen Sulfide standard for existing and new operations. The H2S concentrations were determined using applicable ASTM or GPA standards or another method approved by the NMOCD. Radiuses of exposure 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 IV of this plan.

B. Hobbs RMT Key Contact Information

Physical Address: 1017 Stanolind Road, Hobbs, New Mexico
Office Telephone Number: 505-397-8200
Office Fax Number: 505-397-8204
24 Hour Answering Service: 505-397-8255
Mailing Address: 1017 Stanolind Road, Hobbs, New Mexico 88240
Key Contact - Plan Development and Maintenance: Steve Bishop 505-397-8251
Name of RMT Team Leader: Gary Bullock (office number 505-397-8203

C. Coordination with State Emergency Plans

Under certain conditions as provided for in the New Mexico Hazardous Materials Emergency Response Plan (HMER), the New Mexico State Police responding to the emergency may elect to assume the position of FIC or they may establish a Unified Command of which the OXY FIC may be a key member. Under the Unified Command scenario, the OXY FIC shall cooperate with the 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 FIC's responsibility is to ensure control of the emergency incident. The Hobbs RMT FIC will notify or delegate notifications of all OXY Permian or contract personnel as well as the civil authorities needed for response to the situation. The OXY FIC 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 FIC or relief

1. Assume the role of Field Incident Commander (FIC) 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 FIC until relieved or the emergency is over.

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

II. Emergency Procedures

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 personal protective breathing equipment
   3. Alert other affected personnel
   4. Assist personnel in distress
   5. Proceed to the designated emergency assembly area
   6. Account for on-site personnel

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.

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

d. Initiate evacuation operations

e. 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.

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 evacuating 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.

B. Initial Response

1. The OXY Permian 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 Team Leader or his relief.
   a. Provide the Team Leader 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 Team Leader (or relief) shall:

   a. Notify other key RMT personnel and alert them to situation.
   b. The Team leader shall then proceed to the site to assess the situation.
   c. The Team leader shall determine if the emergency response plan is to be initiated.
   d. In the absence of the Team Leader (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 contingency plan shall be activated when the release creates a concentration of hydrogen sulfide of more 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

The Hobbs RMT Team Leader or designated relief will serve as the Field Incident Commander (FIC). It is the responsibility of the FIC 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. Since a large portion of the Hobbs RMT operations are

located within the city limits of Hobbs New Mexico, it is impossible or impractical to include a listing of all the locations of potentially affected public areas and public roads into this plan.

Therefore, this reaction –type 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 well sites, tank batteries, satellite facilities, and production and gas gathering and injection distribution systems and are maintained and reviewed periodically to ensure accuracy. Information contained in this plan will them to readily determine the radius of exposures and with the assistance of emergency responders such as the fire department, local law enforcement and other public agencies and authorities will be able to respond in 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 additional, the needs for emergency preparedness will emphasized through the use of drills and other exercise 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 is tested and "victims" are sent 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 RMT 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: H_2S
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 (SO_2)
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 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. Also, 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. Alert and/or assist any person apparently in immediate danger.
2. Notify the appropriate Public Safety personnel of the location and nature of the emergency and assistance needed, if any.
3. 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

1. Roles and Responsibilities of Emergency Response Personnel

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

a. **Team Leader:** Team Leader or designated relief will serve as the Field Incident Commander (FIC). Under certain conditions, the New Mexico State Police responding to the emergency may elect to assume the position of FIC or they may establish a Unified Command of which the OXY Team Leader may be a key member. The FIC's responsibility is to ensure control of the emergency incident. Team Leader will notify or delegate notifications of all OXY Permian 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.

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

b. **Field Incident Commander:** The initial priority for the Field Incident Commander (FIC) 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 FIC 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 FIC or as a key player in a Unified Command.
6. Communicate routinely with the OXY Crisis Team's Operations Manager in Houston.
7. FIC is responsible for assigning support roles as listed below.

c. **Operations and Planning Section Chief:** The Operations and Planning Section Chief (OPSC) plays an integral role in interfacing with the various State and Local emergency responders in coordinating all response activities. This allows the FIC 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 FIC.
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 FIC.

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 OPSC.

Examples of Technical Specialists include:

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

e. **Facility Engineers:** Local Facility Engineers will function through the OPSC 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. **Safety Officer**: The Safety Officer (SO) plays an integral part in assisting the FIC in managing the onsite issues surrounding an incident. Focused internally on the incident, the Safety Officer is constantly evaluating the safety and health issues involved with the incident and monitors pieces of the response process to allow the FIC to address "bigger picture" issues. The following is an abbreviated list of the responsibilities and recommended sequence for the SO to achieve his/her responsibilities.
   1. Confirm the FIC'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 SO must stay abreast of the incident status and situation in order provide relief as an alternate FIC if the situations dictates a change needs to be made.

g. **Logistics Section Chief:** The Logistics Section Chief (LSC) is responsible for assisting the FIC 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 FIC or OPSC. 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 FIC 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 FIC, OPCS, SO, 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 FIC, OPSC, 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 FIC 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 FIC.

i. **Other Employees**: All other personnel should stand by and wait for instructions from the FIC.
   Once accounted for, Hobbs RMT 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 Hobbs RMT will be asked to provide incident scene support that they are not comfortable in their ability to perform or have not been specifically trained to do.

j. **Caprock Answering Service:** Upon notification of a possible emergency on Occidental Permian 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.

Section IV Appendices

Appendix A

Map Of Hobbs RMT Unit Boundaries

Appendix B

List of Hobbs RMT Facilities and 100 & 500 ppm ROE's

Lease / Facility	MCF/ Month	PPM H2S	ROE (ft) 100 PPM	ROE (ft) 500 PPM
SHU Satellite 1	21848	35000	757	346
SHU Satellite 2	11733	54000	673	307
SHU Satellite 3	10734	62000	694	317
SHU Satellite 5	31555	34000	935	427
SHU Central Tank Battery	4786	140000	697	318
NHU Satellite 19	4841	52000	377	172
NHU Satellite 19-C	6984	24000	293	134
NHU Satellite 24-C	317433	11000	1957	894
NHU Satellite 25	30845	20000	661	302
NHU Satellite 27	2452	64000	281	128
NHU Satellite 28	2293	55000	245	112
NHU Satellite 29-C	296682	3700	949	434
NHU Satellite 30-C	471507	7300	1940	886
NHU Satellite 31E-C	227579	8200	1322	604
NHU Satellite 32E-C	205712	5200	933	427
NHU Satellite 32W	22265	22000	573	262
NHU Satellite 32W-C	385189	3700	1117	510
NHU Satellite 33	17209	54000	855	391
NHU Central Tank Battery	167750	11000	1313	600
NHU North Injection Battery	33184	7900	387	177
NHU West Injection Battery	100650	23000	1513	692
NHU Recompression Facility	1850320	8900	5166	2361
State AB Battery	0	0	0	0
State HF	4707	0	0	0
Turner Tr. 2	9919	0	0	0
Hobbs Deep A	214	0	0	0
State A #11	915	22500	79	36
B. Hardin #1	11132	0	0	0
B. Hardin #2	3050	0	0	0
H. D. McKinley A #12	1525	0	0	0
Updated 11/23/2005				

Appendix C

List of Hobbs RMT Low Pressure Producing Wells and 100 & 500 ppm ROE's

Lease / Facility	MCF/ Month	Mole % H2S	PPM H2S	ROE (ft) 100 PPM	ROE (ft) 500 PPM
NHU13341	0	2	20000	0	0
NHU14421	0	2	20000	0	0
NHU19121	640	5.2	52000	106	49
NHU19141	884	5.2	52000	130	60
NHU19221	213	5.2	52000	33	15
NHU19232	1037	2.4	24000	144	66
NHU19241	122	5.2	52000	38	17
NHU19242	488	5.2	52000	90	41
NHU19615	7625	1.1	11000	190	87
NHU19627	1586	2.4	24000	116	53
NHU20141	0	5.2	52000	0	0
NHU20341	91	5.2	52000	33	15
NHU23331	640	2	20000	59	27
NHU23421	7228	1.1	11000	184	84
NHU23441	457	2	20000	47	22
NHU24141	26321	1.1	11000	412	188
NHU24211	6222	1.1	11000	167	76
NHU24221	6496	1.1	11000	172	78
NHU24231	5947	1.1	11000	162	74
NHU24241	6588	1.1	11000	173	79
NHU24311	11834	1.1	11000	250	114
NHU24321	6313	1.1	11000	169	77
NHU24341	6222	1.1	11000	167	76
NHU24411	6222	1.1	11000	167	76
NHU24412	5490	1.1	11000	154	71
NHU24414	2897	1.1	11000	104	47
NHU 24421	6130	1.1	11000	166	76
NHU 24431	54869	1.1	11000	652	298
NHU 24441	6252	1.1	11000	168	77
NHU24539	8479	1.1	11000	203	92
NHU24549	27206	1.1	11000	421	192
NHU 24611	53100	1.1	11000	639	292
NHU24612	6496	1.1	11000	172	78
NHU24613	7137	1.1	11000	186	83
NHU24614	8113	1.1	11000	197	90
NHU25241	30	2	20000	9	4
NHU25331	427	2	20000	45	21
NHU25411	549	2	20000	53	24
NHU25421	6191	1.1	11000	167	76
NHU25441	303	2	20000	37	17
NHU25641	9730	1.1	11000	17	101

Appendix C continued:

Lease / Facility	MCF/ Month	Mole % H2S	PPM H2S	ROE (ft) 100 PPM	ROE (ft) 500 PPM
NHU25642	5063	.82	8200	122	56
NHU25744	0	.82	8200	0	0
NHU27121	152	6.4	64000	49	23
NHU27131	549	6.4	64000	110	50
NHU27141	122	6.4	64000	43	20
NHU27231	213	6.4	64000	61	28
NHU28121	396	5.5	55000	82	37
NHU28122	122	5.5	55000	39	18
NHU28132	9455	.37	3700	110	50
NHU28141	29341	.37	3700	223	102
NHU28142	37515	.37	3700	260	119
NHU28241	640	5.4	54000	109	50
NHU28243	9943	.37	3700	113	52
NHU28321	213	5.5	55000	55	25
NHU28331	122	5.4	54000	39	18
NHU28341	457	5.4	54000	88	40
NHU28342	762	5.4	54000	122	56
NHU28411	152	5.5	55000	45	20
NHU28431	1342	5.5	55000	175	80
NHU28644	396	6.4	64000	90	41
NHU29131	16775	.73	7300	240	110
NHU29221	9211	.37	3700	108	49
NHU29231	9943	.37	3700	113	52
NHU29311	457	2.2	22000	50	23
NHU29323	8936	.37	3700	106	48
NHU29341	69082	.37	3700	381	174
NHU29431	13023	.37	3700	134	61
NHU29441	53893	.37	3700	326	149
NHU29533	9699	.37	3700	112	51
NHU29544	69052	.37	3700	381	174
NHU29623	21929	.37	3700	186	85
NHU29624	18239	.37	3700	166	76
NHU29625	91195	.37	3700	453	207
NHU29634	34465	.37	3700	247	113
NHU29636	0	.37	3700	0	0
NHU29643	9760	.37	3700	112	51
NHU29814	58682	.73	7300	526	241
NHU29923	9272	.37	3700	108	50
NHU30113	2135	2	20000	124	57
NHU30121	5856	1.1	11000	161	74
NHU30131	3873	2	20000	181	82
NHU30141	3660	.82	8200	100	46
NHU30211	8875	.73	7300	161	74
NHU30221	44530	.73	7300	443	202
NHU30231	18849	2	20000	486	222
NHU30242	12505	.82	8200	215	98

Appendix C continued:

Lease / Facility	MCF/ Month	Mole % H2S	PPM H2S	ROE (ft) 100 PPM	ROE (ft) 500 PPM
NHU30312	5185	2.4	24000	243	111
NHU30321	4148	.73	7300	100	46
NHU30341	8692	.73	7300	159	73
NHU30412	2806	.73	7300	79	36
NHU30421	15311	.73	7300	227	104
NHU30441	20770	.73	7300	275	126
NHU30525	45841	.73	7300	451	206
NHU30527	28639	.73	7300	336	154
NHU30538	25528	.73	7300	313	143
NHU30546	29493	.73	7300	342	156
NHU30547	66825	.73	7300	571	261
NHU30617	7167	1.1	11000	183	83
NHU30618	29907	.82	8200	365	167
NHU30621	65026	.73	7300	561	257
NHU30713	9180	.73	7300	165	75
NHU31111	55174	.82	8200	545	249
NHU31131	305	2	20000	37	17
NHU31211	21563	.82	8200	303	138
NHU31231	396	.82	8200	25	11
NHU31311	41846	.82	8200	458	209
NHU31321	21865	.82	8200	304	159
NHU31331	7472	.82	8200	156	71
NHU31411	41693	.82	8200	457	209
NHU31421	5795	.82	8200	133	61
NHU31422	8692	.82	8200	171	78
NHU31431	8326	.82	8200	167	76
NHU31722	21594	.82	8200	303	138
NHU31743	0	.82	8200	0	0
NHU32111	27328	.82	8200	351	160
NHU32131	10187	.82	8200	189	86
NHU32143	7442	.37	3700	95	43
NHU32211	33306	.37	3700	241	110
NHU32212	35563	.37	3700	252	115
NHU32221	9180	2.2	22000	329	150
NHU32231	7259	2.2	22000	284	130
NHU32232	31018	.37	3700	231	106
NHU32241	10461	.37	3700	117	53
NHU32313	52643	.37	3700	322	147
NHU32322	85705	.37	3700	436	199
NHU32332	884	2.2	22000	76	35
NHU32343	213	2.2	22000	31	14
NHU32411	62250	.37	3700	357	163
NHU32421	20404	.52	5200	220	100
NHU32424	22966	.52	5200	237	108
NHU32441	2623	.52	5200	61	28
NHU32512	19550	.37	3700	173	79

Appendix C continued:

Lease / Facility	MCF/ Month	Mole % H2S	PPM H2S	ROE (ft) 100 PPM	ROE (ft) 500 PPM
NHU32514	24278	.82	8200	326	149
NHU32531	13267	.52	5200	168	77
NHU32532	0	2.2	22000	0	0
NHU32537	89273	.37	3700	447	204
NHU32541	50386	.52	5200	387	177
NHU32542	1372	.52	5200	41	19
NHU32548	744450	5.1	51000	2063	942
NHU32844	701	2.2	22000	66	30
NHU32913	12322	.37	3700	130	59
NHU33114	7442	.52	5200	117	53
NHU33121	1555	.52	5200	44	20
NHU33123	2684	.52	5200	62	28
NHU33131	5215	.52	5200	94	43
NHU33141	244	2.2	22000	34	16
NHU33213	1677	5.4	54000	199	91
NHU33233	793	5.4	54000	125	57
NHU33234	1220	5.4	54000	163	75
NHU33241	579	5.4	54000	102	47
NHU33311	1098	5.4	54000	153	70
NHU33312	488	5.4	54000	92	42
NHU33321	305	5.4	54000	69	31
NHU33323	1799	5.4	54000	208	95
NHU33331	396	5.4	54000	81	37
NHU33341	671	5.4	54000	112	51
NHU33411	305	5.4	54000	69	31
NHU33412	457	5.4	54000	88	40
NHU33421	488	5.4	54000	92	42
NHU33431	457	5.4	54000	88	40
NHU33433	549	5.4	54000	99	45
NHU33511	1921	.52	5200	50	23
NHU33513	3599	.52	5200	74	34
NHU33521	15585	.52	5200	186	85
NHU33523	1372	.52	5200	41	19
NHU33524	579	5.4	54000	102	47
NHU33526	701	5.4	54000	115	53
NHU33535	549	5.4	54000	99	45
NHU33545	732	5.4	54000	119	54
NHU33734	671	5.4	54000	112	51
NHU33843	244	5.4	54000	60	27
NHU34211	366	6.4	64000	85	39
NHU34311	305	6.4	64000	76	35
NHU34341	305	6.4	64000	76	35
NHU36311	274	2	20000	34	16

Appendix C continued:

Lease / Facility	MCF/ Month	Mole % H2S	PPM H2S	ROE (ft) 100 PPM	ROE (ft) 500 PPM
SHU002	0	6.2	62000	0	0
SHU003	793	6.2	62000	136	62
SHY004	396	6.2	62000	88	40
SHU005	14914	5.4	54000	782	357
SHU006	701	6.2	62000	126	57
SHU007	671	6.2	62000	122	56
SHU014	640	3.5	35000	83	38
SHU015	0	5.4	54000	0	0
SHU016	640	3.4	34000	82	37
SHU017	61	3.4	34000	19	9
SHU018	1067	5.4	54000	150	69
SHU019	1037	5.4	54000	147	67
SHU020	671	6.2	62000	122	56
SHU021	310	6.2	62000	115	53
SHU044	2318	5.4	54000	244	111
SHU046	0	6.2	62000	0	0
SHU075	31	5.4	54000	16	7
SHU086	0	6.2	62000	0	0
SHU122	3141	5.4	54000	295	135
SHU124	91	3.4	34000	24	11
SHU130	61	3.4	34000	19	9
SHU131	122	3.4	34000	29	13
SHU132	1159	5.4	54000	158	72
SHU133	488	6.2	62000	100	46
SHU135	2104	3.4	34000	172	78
SHU136	91	3.4	34000	24	11
SHU137	2257	5.4	54000	240	110
SHU138	2928	5.4	54000	282	129
SHU140	0	5.4	54000	0	0
SHU141	122	3.4	34000	29	13
SHU142	1281	5.4	54000	168	77
SHU145	0	6.2	62000	0	0
SHU148	2440	5.4	54000	252	115
SHU150	0	6.2	62000	0	0
SHU156	0	5.4	54000	0	0
SHU157	0	6.2	62000	0	0
SHU162	2013	5.4	54000	223	1002
SHU177	640	3.5	35000	83	38
SHU178	396	3.5	35000	62	28
SHU179	457	3.5	35000	37	31
SHU180	0	5.4	54000	0	0
SHU181	0	5.4	54000	0	0
SHU183	1311	3.5	35000	130	59
SHU184	1006	3.5	35000	110	50
SHU185	0	5.4	54000	0	0
SHU186	0	5.4	54000	0	0

Appendix C continued:

Lease / Facility	MCF/ Month	Mole % H2S	PPM H2S	ROE (ft) 100 PPM	ROE (ft) 500 PPM
SHU189	396	3.5	35000	62	28
SHU190	0	5.4	54000	0	0
SHU191	0	5.4	54000	0	0
SHU194	427	3.5	35000	64	29
SHU197	1220	6.2	62000	178	81
SHU211	15860	3.5	35000	619	283
SHU214	213	3.4	34000	41	19
SHU220	61	3.4	34000	19	9
SHU221	274	3.4	34000	48	22
SHU222	305	6.2	62000	75	34
SHU224	3995	5.4	54000	343	157
SHU225	457	6.2	62000	96	44
SHU228	427	3.5	35000	64	29
SHU231	12962	3.4	34000	536	245
SHU232	1128	5.4	54000	155	71
SHU234	31	3.4	34000	12	6
SHU236	31	3.4	34000	12	6
SHU240	0	6.2	62000	0	0
SHU241	0	3.4	34000	0	0
SHU242	305	3.4	34000	51	23
SHU243	305	3.4	34000	51	23
SHU244	1220	6.2	62000	178	81
SHU246	2074	5.4	54000	227	104

Updated
11/23/2005

Appendix D

List of Hobbs RMT High Pressure Producing Wells and 100 & 500 ppm ROE's

Lease / Facility	MCF/ Month	Mole % H2S	PPM H2S	ROE (ft) 100 PPM	ROE (ft) 500 PPM
There are currently no High Pressure Producing Wells in the Hobbs RMT Updated 11/23/2005					

Appendix E

Proposed List of Hobbs RMT Produced Gas Injection Wells 100 & 500 ppm ROE's

Lease / Facility	MCF/ Month	Mole % H2S	PPM H2S	ROE (ft) 100 PPM	ROE (ft) 500 PPM
NHU 24-121	366000	.89	8900	1874	856
NHU 24-131	244000	.89	8900	1454	664
NHU 24-212	366000	.89	8900	1874	856
NHU 24-242	152500	.89	8900	1083	495
NHU 24-331	488000	.89	8900	2244	1025
NHU 24-432	244000	.89	8900	1454	664
NHU 30-222	274500	.89	8900	1565	715
NHU 30-223	274500	.89	8900	1565	715
NHU 30-233	213500	.89	8900	1337	611
NHU 30-333	244000	.89	8900	1454	664
NHU 30-442	152500	.89	8900	1083	495
NHU 30-444	366000	.89	8900	1874	856
NHU 30-536	305000	.89	8900	1672	764
Updated 11/23/2005					

Appendix F

List of Legal Descriptions of Hobbs RMT Facilities

Lease/Facitlity	Unit Letter	Section	Township	Range	North Latitude	West Longitude
SHU SAT 1	F	5	19-S	38-E	32°41'10.03"	103°10'22.17"
SHU SAT 2	B	9	19-S	38-E	32°40'49.33"	103°09'08.38"
SHU SAT 3	D	10	19-S	38-E	32°40'47.05"	103°08'33.64"
SHU SAT 5	K	4	19-S	38-E	32°41'17.81"	103°09'24.93"
SHU CTB	A	9	19-S	38-E	32°40'48.69"	103°08'52.64"
NHU SAT 19	K	19	18-S	38-E	32°43'45.51"	103°11'16.32"
NHU SAT 19-C	N	19	18-S	38-E	32°43'44.17"	103°11'23.49"
NHU SAT 24-C	O	24	18-S	37-E	32°43'43.51"	103°12'13.81"
NHU SAT 25	J	25	18-S	37-E	32°43'03.55"	103°12'02.04"
NHU SAT 27	M	27	18-S	38-E	32°42'49.16"	103°08'36.41"
NHU SAT 28	F	28	18-S	38-E	32°43'16.22"	103°09'14.86"
NHU SAT 29-C	G	29	18-S	38-E	32°43'11.56"	103°10'12.24"
NHU SAT 30-C	I	30	18-S	38-E	32°42'26.91"	103°11'01.36"
NHU SAT 31 E - C	J	31	18-S	38-E	32°42'13.73"	103°11'03.08"
NHU 32 SAT E - C	H	32	18-S	38-E	32°42'15.80"	103°09'48.46"
NHU SAT 32 W	K	32	18-S	38-E	32°42'03.73"	103°10'20.57"
NHU SAT 32 W - C	K	32	18-S	38-E	32°42'05.71"	103°10'23.39"
NHU SAT 33	K	33	18-S	38-E	32°42'13.28"	103°09'20.43"
NHU CTB	L	29	18-S	38-E	32°43'05.76"	103°10'46.14"
NHU NIB	E	33	18-S	38-E	32°42'23.54"	103°09'41.88"
NHU WIB	H	25	18-S	37-E	32°43'14.96"	103°11'59.65"
NHU RCF	H	25	18-S	37-E	32°43'14.96"	103°11'59.65"
STATE AB BTTY	H	32	18-S	38-E	32°42'20.74"	103°09'55.40"
STATE HF BTTY	B	9	19-S	38-E	32°40'55.40"	103°09'08.47"
TURNER TR. 2	D	10	19-S	38-E	32°40'47.05"	103°08'33.64"
Hobbs Deep #1	P	13	18-S	37-E	32°44'33.42"	103°11'55.71"
STATE A #11y	F	29	18-S	38-E	32°42'54.36"	103°09'59.49"
B. HARDIN #1	D	19	18-S	38-E	32°44'20.33"	103°11'40.63"
B. HARDIN #2	J	19	18-S	38-E	32°44'04.44"	103°11'40.18"
H. D. McKINLEY A #12	L	19	18-S	38-E	32°44'50.05"	103°11'36.48"

Section V Emergency Telephone Lists

TABLE OF CONTENTS

OXY PERMIAN HOTLINE	713-935-7210
CAPROCK ANSWERING SERVICE	505-397-8255
HOBBS OFFICE INTERCOM	56

HOBBS FLOOD MANAGEMENT TEAM
EMERGENCY TELEPHONE LIST

TEAM LEADERS AND ALTERNATES

Gary Bullock Team Leader	Office Cellular Phone Home Radio Call	505-397-8203 505-390-9144 432-697-2749 159
David Nelson 1st Alternate	Office Cellular Phone Home Radio Call	505-397-8211 505-631-5309 505-392-9236 126
Robert Gilbert 2nd Alternate	Office Cellular Phone Home Radio Call	505-397-8206 505-390-4704 505-392-5120 172

Appendix

HOBBS RESERVOIR MANAGEMENT TEAM
EMERGENCY TELEPHONE LIST

HES SUPPORT PERSONNEL

Steve Bishop **HES Technician**	**Office** **Cellular Phone** **Home**	**505-397-8251** **505-390-4784** **505-392-7428**
Roy Escobedo **HES Specialist** **(Located in Houston, Texas)**	**Office** **Cellular Phone** **Home**	**713-366-5325** **713-560-8031** **281-256-9656**

OXY PERMIAN HOUSTON OFFICE

Harry Hufft **Asset Manager**	**Office** **Cellular Phone** **Home**	**713-366-5022** **713-560-8071** **281-304-0994**
Greg Hardin **HES Team Leader**	**Office** **Cellular Phone** **Home**	**713-366-5324** **713-560-8037** **281-343-8452**
Trent Adcock **HES Specialist**	**Office** **Cellular Phone** **Home**	**713-366-5327** **713-557-1152** **281-646-8446**

Appendix

EMERGENCY SERVICES
OUTSIDE SUPPORT PHONE NUMBERS

MEDICAL

HOSPITAL NAME	ADDRESS	CITY	PHONE NUMBER
Lea Regional Hospital	5419 Lovington Highway	Hobbs, NM	505-492-5000
Memorial Hospital	209 NW 8th	Seminole, TX	432-758-5811
Nor-Lea General Hospital	1600 N. Main Street	Lovington, NM	505-396-6611
Yoakum County Hospital	412 Mustang Drive	Denver City, TX	806-592-5484
Brownfield Regional Medical Center	705 E. Felt	Brownfield, TX	806-637-3551
Covenant Health Systems	4000 24th Street	Lubbock, TX	806-725-6000
Covenant Medical Center	2615 19th Street	Lubbock, TX	806-725-1011
University Medical Center	602 Indiana	Lubbock, TX	806-743-3111

AMBULANCE

Hobbs, New Mexico	911 or 505-397-9308
Lovington, New Mexico	911 or 505-396-2811
Eunice, New Mexico	911
Seminole, Texas	432-758-9871
Denver City, Texas	911 or 806-592-3516

AIR AMBULANCE

AEROCARE Methodist Hospital Lubbock, Texas - Aerocare will respond to a call from any OXY personnel. ***ETA Lubbock to Hobbs 42 minutes.***	1-800-627-2376

Appendix

PHYSICIANS

DOCTOR	CITY	PHONE NUMBER
Dr. Bodindr Thepchatri	Denver City, Texas	806-592-3591
Dr. Carl Smith	Brownfield, Texas	806-637-2558
Dr. Morris Knox	Brownfield, Texas	806-637-2566
Dr. William Croom	Lubbock, Texas	806-799-4999

LAW ENFORCEMENT 911

POLICE

CITY	PHONE NUMBER
Hobbs, New Mexico	911 or 505-397-9265
Eunice, New Mexico	911 or 505-394-2112
Lovington, New Mexico	911 or 505-396-2811

SHERIFF

CITY/COUNTY	PHONE NUMBER
Lea County Sheriff - Hobbs	505-393-2515
Lea County Sheriff - Lovington	505-396-3611

STATE HIGHWAY PATROL

CITY	PHONE NUMBER
Hobbs, New Mexico	505-392-5588

FIRE DEPARTMENT

CITY	PHONE NUMBER
Hobbs, New Mexico	911 or 505-397-9308
Lovington, New Mexico	911
Denver City, Texas	911 or 806-592-3516
Seminole, Texas	911 or 432-758-9871

Appendix

GOVERNMENT AGENCIES

AGENCY	PHONE NUMBER
New Mexico Oil Conservation Division	505-393-6161
Bureau of Land Management	505-393-3612
Air Quality Bureau, Santa Fe, NM	505-827-1494
LEPC – Neil Gohr, Capt. HFD	505-397-9309 or FAX 505-397-9331

AIRPORTS

CITY	PHONE NO.
Lea County Airport - Carlsbad Hwy	505-393-4943
Lea County Lovington Airport	505-396-9911
Lubbock International Airport	806-762-6411
Midland International Airport	432-563-2033

POISON CONTROL CENTER	1-800-432-6866

CHEMTREC**	1-800-424-9300

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

ONDEO/NALCO 24 HR EMERGENCY	1-800-462-5378 or 1-800-IM-ALERT

ONDEO/NALCO 24 HR MSDS FAX	281-263-7245

Appendix

HOBBS RMT OPERATIONAL PERSONNEL

EMPLOYEE	CELL PHONE NUMBERS	HOME PHONE NUMBERS
Gilbert, Robert	505-390-4704	505-392-5120
Horne, Mike	505-390-5326	505- 397-4039
Hubbard, Glen	505-631-6881	505-392-7663
King, Jimmy	505-390-0068	505-392-8854
Ragsdale, Monty	505-390-3803	505-392-1740
Shaver, Stan	505-390-0196	505-392-3583
Shipman, Robert	505-390-2071	505-392-4135
Summers, Tony	505-390-9228	505-396-2955
Whitley, Chuck	505-631-6259	505-397-0018

Appendix

CORPORATE SECURITY

Security Representative		
Frank Zapalac**	**Office**	**713-215-7157**
	Home	**281-681-0559**
	Cell/Pager	**713-898-6099**
	Fax	**713-215-7538**
Alternate		
Hugo Moreno	**Office**	**713-215-7162**
	Home	**281-778-8111**
	Cell/pager	**713-817-3322**
	Fax	**713-215-7538**

****Must be notified to assist in providing site security for all major emergencies and spills or response for any bomb threats or terrorist activities.**

GREENWAY EMERGENCY OPERATION CENTER (EOC)

(713) 366-EXTENSION

5091	**Fax**
5095	**Receptionist**
5590	**EOC Coordinator**
5790	**HES Manager**
5791	**Incident Manager**
5792	**HR Manager**
5793	**Planning Manager**
5794	**Operations Manager**
5795	**Logistics Manager**

Appendix

CONTRACTOR SUPPORT

ELECTRIC SERVICE COMPANIES

COMPANY NAME	PHONE NUMBER(S)
Custom Submersibles	505-397-0271 24 hour 505-393-2146
Dixie Electric – Hobbs, NM	505-939-4466 24 hour
K & S Electric - Hobbs, NM	505-393-3114 24 hour

WATER SERVICE AND VACUUM TRUCKS

Key Energy Services – Hobbs , NM	505-397-4994 24 hour
Maclaskey Oilfield Services Hobbs, NM	505-393-1016 24 hour

ROUSTABOUT CREWS

Key Energy Services – Hobbs, NM	505-391-7725 24 hour
Banta Oilfield Service – Hobbs, NM	505-393-3875 24 hour

DIRT WORK EQUIPMENT

Key Energy Services – Hobbs, NM	505-391-7725 24 hour
B & H Construction – Eunice, NM	505-394-2588 24 hour

WELDERS

Custom Welding - Hobbs, NM	505-393-5904 24 hour

SAFETY EQUIPMENT

Callaway Safety Equipment – Hobbs, NM	505-392-2973 24 hour

Appendix

OUTSIDE PRODUCING COMPANIES

Amerada Hess	Office Phone After Hours	393-2144 or 393-2145 393-2144
Apache Corp	Office Phone Emergency Number Answering Service	505-394-2743 1-888-561-5516 1-888-257-6840
Bruton, Ralph	Business Phone	505-390-0366
Brothers	24 Hours	505-369-9135
Chevron	Office Phone After Hours	393-4121 393-4121
Conoco/Phillips	Office Phone	393-0130 24 hour
Dynegy	Office Phone Fax Phone Pager Randy Duncan (C) Floyd Evans (C)	505-393-2823 505-393-4780 505-370-6262 505-631-7065 505-631-7074
Duke	Office Phone After Hours	505-397-5600 505-393-4165
Equilon	Office Phone After Hours Rodney	806-592-9402 806-893-8611 806-893-8612
Marathon	Office Phone	393-7106 24 hour
Conoco/Phillips Pipeline	Office Phone CO2 Plan	505-396-7955 505-396-7923
Saga Petroleum	Office – Ans. Machine Ronny Long (Home) Ronny Long (Cell) Ronny Pryor (Home) Ronny Pryor (Cell)	505-391-9291 432-524-3822 432-638-6476 505-391-8698 432-638-5826
Texland Petroleum	Office Phone After Hours (24 Hours) Johnny Tarin Operator Kirk Jackson Foreman	505-397-7450 806-894-4316 432-894-1463 432-894-1461