H2S – 043

Revised H2S Contingency Plan (Linam Ranch GP & AGI Well Facility)

Accepted
Jan. 3, 2015

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary

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

David R. Catanach
Division Director
Oil Conservation Division

FEBRUARY 3, 2015

Julie W. Gutiérrez
Geolex, Inc®
500 Marquette Avenue, NW Suite 1350
Albuquerque, NM 87102

RE: DCP Midstream, L.P. (H2S-043): "Linam Ranch Gas Plant and Acid Gas Injection (AGI) Facility H2S Contingency Plan" dated January 2015 in Lea County, New Mexico

Dear Mrs. Gutiérrez:

The Oil Conservation Division (OCD) is in receipt of DCP Midstream Services, LLC's "**Linam Ranch Gas Plant and Acid Gas Injection (AGI) Facility H2S Contingency Plan"** (plan) dated January 2015.

OCD has completed its review of the plan and finds that it appears to meet the intent of the OCD Hydrogen Sulfide Gas Regulations (19.15.11 NMAC). Therefore, OCD hereby **accepts** the plan for record.

Please be advised that OCD approval of this plan does not relieve DCP Midstream, L.P. of responsibility should their operations fail to adequately detect, investigate, and/or undertake corrective actions to prevent or stop a hydrogen sulfide release(s) that may pose a threat to groundwater, surface water, human health, public safety or the environment. In addition, OCD approval does not relieve DCP Midstream, L.P. of responsibility for compliance with any other federal, state, or local laws and/or regulations.

If you have any questions, please contact Carl Chavez of my staff at (505) 476-3490, mail at the address below, or email at CarlJ.Chavez@state.nm.us. Thank you.

Sincerely,

Jim Griswold
Environmental Bureau Chief

JG/cjc

cc: OCD Hobbs District Office

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, February 03, 2015 9:07 AM
To: 'jwg@geolex.com'
Cc: 'Alberto A. Gutierrez'; 'Kirsten Houliston'; Griswold, Jim, EMNRD; Brown, Maxey G, EMNRD
Subject: RE: Revised Linam Ranch & AGI Well Facility (H2S-043) H2S Contingency Plan
Attachments: DCP Linam Ranch AGI Facility H2S CP Acceptance 2-3-2015.pdf

Mrs. Gutiérrez:

Please find attached the New Mexico Oil Conservation Division (OCD) acceptance of the above subject H2S Contingency Plan.

A hardcopy was sent to you via U.S. Mail today. Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Department
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Drive, Santa Fe, New Mexico 87505
O: (505) 476-3490
E-mail: CarlJ.Chavez@State.NM.US
Web: http://www.emnrd.state.nm.us/ocd/
"Why Not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward With the Rest of the Nation?" To see how, please go to: "Pollution Prevention & Waste Minimization" at http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental

From: Julie W. Gutierrez [mailto:jwg@geolex.com]
Sent: Thursday, January 29, 2015 4:40 PM
To: Chavez, Carl J, EMNRD
Cc: 'Alberto A. Gutierrez'; 'Kirsten Houliston'
Subject: RE: Revised Linam Ranch Plan

Carl,

Attached is what I hope is the final version of the Linam Ranch Plan. I have added SERC to Appendix G, reviewed syntax, spelling, spacing, etc. and added a glossary of terms for acronyms in the plan (see page iv).

Please let me know if you have any other questions or concerns. As always, once I receive approval of the plan from you I will insure that hard copies are conveyed to you via Fed Ex.

Best regards,

Julie

Julie W. Gutiérrez
Geolex, Inc®
500 Marquette Avenue, NW Suite 1350
Albuquerque, NM 87102
505-842-8000 Ext. 101
505-842-7380 Fax

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Thursday, January 29, 2015 8:21 AM
To: jwg@geolex.com
Cc: 'Alberto A. Gutierrez'; Kirsten Houliston
Subject: RE: Revised Linam Ranch Plan

Julie:

OCD has reviewed the above subject plan.

OCD has the following recommendations:

1) Add SERC to Appendix G Distribution List.
2) Review any final symantic, spacing, format issues in the plan.
3) Optional: Consider adding a glossary for terms and acronyms to the plan.

Please resubmit for OCD final review and acceptance at your earliest convenience.

Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Department
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Drive, Santa Fe, New Mexico 87505
O: (505) 476-3490
E-mail: CarlJ.Chavez@State.NM.US
Web: http://www.emnrd.state.nm.us/ocd/
"Why Not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward With the Rest of the Nation?" To see how, please go to: "Pollution Prevention & Waste Minimization" at
http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental

From: Julie W. Gutierrez [mailto:jwg@geolex.com]
Sent: Wednesday, January 28, 2015 3:06 PM
To: Chavez, Carl J, EMNRD
Cc: 'Alberto A. Gutierrez'; Kirsten Houliston
Subject: Revised Linam Ranch Plan

Good afternoon, Carl,

Attached is the revise H2S Contingency Plan for Linam Ranch, including the AGI Facility (AGI #1 and AGI #2), Road Crossing and Pipeline between the Plant and the AGI Facility. I have annotated the original checklist you sent me to show what has been done to address each of the items you identified on the checklist. I hope that this now complies with all of your requirements. I will await word from you about how to proceed.

I just got your comments on the Eunice Plan and am going to begin addressing those presently.

Best regards,

Julie

Julie W. Gutiérrez
Geolex, Inc®
500 Marquette Avenue, NW Suite 1350
Albuquerque, NM 87102
505-842-8000 Ext. 101
505-842-7380 Fax

Revised
H_2S Contingency Plan

Linam Ranch Gas Plant
And AGI Facility
Hobbs, New Mexico

DCP Midstream, LP

January 2015

TABLE OF CONTENTS

FIGURES

APPENDICES

GLOSSARY OF ACRONYMS UTILIZED IN THE PLAN

ACGIH	American Conference of Governmental Industrial Hygienists
AGI	Acid Gas Injection
ANSI	American National Standards Institute
API	American Petroleum Institute
CO_2	Carbon Dioxide
DCS	Distributed Control System
ERO	Emergency Response Officer
ESD	Emergency Shut-Down
H_2S	Hydrogen Sulfide
IC	Incident Commander
ICS	Incident Command System
ICC	Incident Command Center
IDLH	Immediately Dangerous to Life or Health
LEL	Lower Explosive Limit
LEPC	Local Emergency Planning Committee
MSDS	Materials Safety Data Sheets
NACE	National Association of Corrosive Engineers
NCP	National Contingency Plan
NIIMS	National Interagency Incident Management System
NIOSH	National Institute for Occupational Safety and Health
NGL	Natural Gas Liquid
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMOCC	New Mexico Oil Conservation Commission
OCD	Oil Conservation Division
OSHA	Occupational Safety and Health Administration
PLC	Programmable Logic Controller
PPE	Personal Protective Equipment
PPM	Parts Per Million
PSD	Process Shut-Down
ROE	Radius of Exposure
SCBA	Self-Contained Breathing Apparatus
SERC	State Emergency Response Commission
SO_2	Sulfur Dioxide
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weighted Average

Location of Facility

LINAM RANCH GAS PLANT

The Linam Ranch Gas Plant is located in Lea County, New Mexico and encompasses approximately 165 acres, which are securely fenced. The Plant is owned and operated by DCP Midstream, LP. The Plant is located in Section 6, Township 19S, Range 37E.

Coordinates are:
Latitude: 32.6953 N, Longitude: 103.2853 W

Physical address:
139 West Highway 62/180, Hobbs, New Mexico 88240

Mailing address:
139 West Highway 62/180, Hobbs, New Mexico 88240

Driving Directions from Hobbs, New Mexico to the Plant:
At intersection of Marland (Hwy 62/180) and West County Road, drive west on highway 62/180 for 6.3 miles, turn left (south) into Linam Ranch Gas Plant office parking lot.

AGI PIPELINE

A buried, low-pressure (50-80 psig), double-lined corrosion-resistant pipeline connects the plant with the AGI facility which is located approximately 1.25 miles north of the Plant. The AGI pipeline transmits the low pressure gas to the AGI Facility where the compression occurs prior to injection.

ACID GAS INJECTION (AGI) FACIILITY AND WELLS

The Linam AGI Facility and AGI Wells #1 and #2 are located approximately 1.25 miles north of the Plant. The AGI Facility is located within a secure fenced area on approximately 160 acres of land that is surface leased to DCP from the State of New Mexico in Section 30, Township 18S, Range 37E in Lea County.

Coordinates are:
Linam AGI #1: Latitude: 32.7167 N, Longitude: 103.2928 W (API # 30-025-38576)
Linam AGI #2: Latitude: 32.715698N Longitude: 103.293049W (API # 30-025-34786)

Driving Directions from Hobbs, New Mexico to the AGI:
At intersection of Marland (Hwy 62/180) and West County Road, drive west on highway 62/180 for 7.0 miles, turn right (north) on Maddox Road (County Road 41) drive 1.3 miles, turn right (east) at cattle guard and drive 0.2 miles to AGI Facility gate.

The location of the Plant, AGI Pipeline, and AGI Facility are shown in Figure 1.

I. INTRODUCTION [API RP-55 7.1]

The Linam Ranch Gas Plant (hereinafter the "Plant") is a natural gas processing plant which processes field gas containing hydrogen sulfide (H_2S) and handles and/or generates sulfur dioxide (SO_2). The Linam Ranch Plant has an associated Acid Gas Injection (AGI) Facility and AGI wells (Linam AGI #1 and Linam AGI #2) which it utilizes for disposal of H_2S. Linam has just completed AGI #2 which is a redundant AGI well that will be utilized for disposal of acid gas when AGI #1 is out of service for repair or maintenance. It is located approximately 500 feet south of AGI#1. This Hydrogen Sulfide Contingency Plan (the "H_2S Plan" or "the Plan") has been revised to include the addition of AGI #2 at the Linam Ranch Facility. The Plan documents procedures that are to be followed in the event of an H_2S release that occurs at any location on the Plant, the AGI Facility (including Linam AGI #1 and Linam AGI #2) or the connecting pipeline.

The plan complies with **New Mexico Oil Conservation Division (OCD) Rule 11*(§ 19.15.11 et. seq. NMAC).*** The plan and operation of the DCP Linam Facility conform to standards set forth in ***API RP-55 "Recommended Practice for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide" as well as API RP 49 "Recommended Practice for Drilling and Well Servicing Operations Involving Hydrogen Sulfide" and API RP 68 " Oil and Gas Well Servicing and Workover Operations involving Hydrogen Sulfide", and applicable NACE standards for sour gas service and current best management practices.*** The Linam Ranch Plant and the AGI Facility do not have any storage tanks in which H_2S or other gas or gas products are stored, and thus, API regulations and OCD regulations (specifically 19.15.11.12.E NMAC) relative to those types of storage are not applicable for this plant or the AGI Facility. Drilling and completion of the Linam Ranch AGI Wells was done in compliance with NMAC 19.15.11.11. The terms used in this Plan are used as defined in Title 19 Chapter 15 Part 11 of the New Mexico Administrative code (19.15.11.7- Definitions) unless otherwise defined herein. For the purposes of this Plan the term "shelter-in-place" means that individuals should go inside, turn off heating and air conditioning systems, close windows and put towels or tape around doors and/or windows that are not sealed and wait for further instruction.

II. SCOPE [API RP-55 7.2]

This revised Plan is being submitted because of the addition of a new/redundant AGI well at the Linam Ranch AGI Facility. ROE calculations, maps, etc. contained in the plan have been revised to include this second AGI Well (Linam AGI #2). This Plan is specific to the Linam Ranch Gas Processing Plant and AGI Facility. It contains procedures to provide an organized response to an unplanned release from the Plant, the AGI Facility or the pipeline between them and documents procedures that would be followed to alert and protect any members of the public, residents in surrounding areas and/or contractors working on or around the plant in the event of an unplanned release. This Plan has been prepared to minimize the hazard resulting from an H_2S release. It will be used to inform company personnel, local emergency responders and the public of actions to be taken before, during and after an H_2S release. All operations shall be performed with safety as the primary goal. The primary concern of the Linam Ranch Gas Plant, during an H_2S release, is to protect company employees, contractors and the public; the secondary concern is to minimize the damage and other adverse effects should an emergency occur. In the event of an H_2S release, any part of the operation that might compromise the safety of individuals will cease until the operation can be re-evaluated and the proper engineering controls to assure safety can be implemented. No individual should place the protection of the Plant property above his or her own personal safety.

It must be kept in mind that in a serious situation involving an H_2S release, not only Linam Ranch personnel are involved, but local Fire Departments, Law Enforcement, County and even State of New

Mexico agencies may be interested parties. Cooperation will expedite all decisions. In any emergency situation involving a H_2S release, delegation of duties will be made to appropriate employees and groups. These duties will be reviewed on an annual basis to ensure complete understanding and facilitate a well-coordinated response by all involved personnel to the emergency situation.

DCP recognizes that there are on-going oil and gas operations in close proximity to the Linam Ranch Plant and AGI Facility which are under the control of other operators. There is the potential that one of these operations—not under the control of DCP—could be responsible for an accidental release of H_2S. If such a release should trigger monitors at any of the DCP facilities described in this Plan, then the safety procedures and activation levels described in the plan would be applicable, regardless of the source of the release.

III. PLAN AVAILABILITY [API RP-55 7.3]

The H_2S Plan shall be available to all personnel responsible for implementation, regardless of their normal location assignment. A copy of the Plan will be maintained at the Linam Ranch Plant Control Room, in the Plant Supervisor's office at the plant, in the Asset Director's office at the Hobbs office, and at the Permian Region Safety Manager's office in Midland, Texas. See Appendix G for the H_2S Plan Distribution List, which lists all the additional entities that have been provided a copy of this H_2S Plan.

IV. EMERGENCY PROCEDURES [NMAC 19.15.11.9.B(2)(a)] [API RP-55 7.4 a] [29 CFR 1910.1200]

RESPONSIBILITIES AND DUTIES OF PERSONNEL DURING AN EMERGENCY

It is the responsibility of all personnel on-site to follow the safety and emergency procedures outlined in the Plan as well as in the following documents:

- DCP Midstream (DCP) Safe Work Practices
- DCP Midstream Linam Ranch Plant Emergency Response, Groundwater Discharge Plan, and Oil Spill Contingency Plan; and
- DCP Midstream Environmental Policies and Programs.

The Plant uses the Incident Command System (ICS) for emergency response. The ICS structure used is based on the National Interagency Incident Management System (NIIMS), and is consistent with the National Contingency Plan (NCP). All Plant employees shall be prepared to respond to an H_2S emergency at the Plant, the AGI pipeline, and the AGI Facility.

In the event of an accidental release that results in the activation of the H_2S Plan all personnel will have been evacuated out of the affected area, and the Plant Supervisor, or his designee, will be the on-scene Incident Commander (IC in this Plan). The IC will contact and coordinate with DCP Midstream's management.

The Plant Supervisor or his designee shall determine:

1) Plant Shutdowns
2) Isolation of pipeline segments
3) Repairs, tests or restarts as required

If an emergency occurs, the Plant Supervisor, or his designee, shall be notified first. The Plant Supervisor, or his designee, shall notify the Southeast New Mexico Asset Director who will notify the Regional Operations Vice President, and the Regional Operations Vice President shall contact the South Business Unit President to activate the DCP Midstream Crisis Management Plan. If any person in this chain of command is unavailable, the DCP Midstream employee shall elevate the communication to the next level. The intention of this process is to allow the IC to make one phone call and then be able to focus on the incident response.

Site Security NMAC 19.15.11.12.B

The Linam Ranch Plant and AGI Facility are secure, fenced, facilities, and access to them is strictly controlled. In order to have an accurate listing of all personnel on-site in the event of an emergency, a daily sign-in log sheet is utilized. The sign-in log sheet includes, at a minimum, the name of the individual entering the facility, the name of their company, their time of arrival and time of departure. All personnel are required to sign in at the Linam Ranch Plant Office and Control Room. The Plant Supervisor is responsible for assuring that all personnel sign-in upon arrival and sign-out upon departure

from the job site. The Plant Supervisor may at his discretion assign the responsibilities for the daily sign-in log sheet to an individual designated as the Record Keeper or another designee.

Discovery and Internal Reporting
All personnel, including contractors who perform operations, maintenance, and/or repair work in sour gas areas within the Plant, AGI pipeline, and AGI Facility wear H_2S monitoring devices to assist them in detecting the presence of unsafe levels of H_2S. When any person, while performing such work, discovers a leak or emission release they are to attempt to resolve the issue as long as H_2S levels remain below 10 ppm. The personal monitoring devices they wear will give off an audible alarm at 10 ppm. If the response action needed to resolve the issue is more than simply closing a valve or stopping a small leak, the personnel shall notify the Plant Supervisor or his designee and convey, at a minimum, the following information:

- Name, telephone number, and location of person reporting the situation
- Type and severity of the emergency
- Location of the emergency (area/block, mile markers, latitude & longitude, or building), and the distance to surrounding equipment and/or structures
- The cause of the spill or leak, name and quantity of material released, and extent of the affected area including the degree of environmental hazard
- Description of injuries and report of damage to property and structures
- Initiate and maintain a Chronological Record of Events Log (see Appendix H). This log should record the time, date, and a summary of the event.

If any person detects H_2S levels of 10 ppm or greater either as a result of an alarm from their personal monitoring device or the intermittent alarms and/or yellow flashing beacons from fixed monitors, they will immediately report this to the Control Room Operator who will contact the Plant Supervisor for assistance, and the responding operator will put on the 30-minute SCBA. All non-essential persons shall be notified of the release and evacuated from the area. The responding Operator wearing the SCBA will first assist any persons requiring assistance during the evacuation, then attempt to resolve the issue. The Control Room Operator is responsible for notifying the Plant Supervisor or his designee so that the H_2S Contingency Plan can be activated, if necessary.

Once the Plant Supervisor is contacted, he or his designee is to notify the appropriate DCP management and Plant emergency response personnel and advise them of the existing situation. Local emergency response providers will also be contacted, as deemed necessary by the IC. If necessary, the Control Room Operator will then conduct the notifications of state regulatory agencies including the OCD District Office and emergency response agencies listed in Appendix E. DCP operations personnel are to advise any contractor and all others on-site or attempting to enter the Plant that the H_2S Plan has been activated.

IMMEDIATE ACTION PLANS

Procedures and decision processes to be used in the event of an H_2S release are contained in **Appendix A through Appendix D**. These procedures and decision processes have been designed to ensure a coordinated, efficient and immediate action plan for alerting and protecting operating personnel and the public as well as to prevent or minimize environmental hazards and damage to property. Emergency response actions may be taken for a variety of situations that may occur. The Plan is activated in progressive levels (Levels 1 through 3), based on the concentration of H_2S that has been released, and the physical location where the release has occurred (See Section IX of this Plan as well as Appendices A through D for detail about activation levels). **Linam Ranch Plant Operators are authorized to elevate**

the level of response based on observed conditions if a lower level response may not be effective in protecting personnel, the public, or the environment.

To facilitate the Plan implementation, the release responses are site-specific. There are four potential response sites:

1) **Linam Ranch Plant (see Appendix A)**
2) **AGI Facility (see Appendix B)**
3) **Highway 62/180 Road Crossing (see Appendix C)**
4) **AGI Pipeline (see Appendix D)**

Immediate Action Plans as well as Response Flow Diagrams illustrating these Immediate Action Plans are contained in each Appendix. Additional or long- term response actions will be determined on a case-by-case basis, if needed, once the Incident Command Center and System is established following the immediate response.

TELEPHONE NUMBERS, COMMUNICATION METHODS AND MEDIA SITE

Telephone Numbers and Communication Methods

In the event of activation of the Plan, emergency responders, public agencies, local government and other appropriate public authorities must be contacted. **Telephone contact information for those entities in included in Appendix E.**

Media Site

The IC will designate a Media Site adjacent to the Emergency Assembly Area (see Figure 6). The IC will also designate a Media Liaison Officer or assume these duties personally. Under no circumstances will media personnel be allowed inside the warm or hot zone (road blocked area). Media personnel will only be allowed inside the road blocked area once the area has been monitored and restored to a cold zone (less than 10 ppm H_2S) and the IC has approved their entry. Media personnel shall not be allowed to enter DCP Midstream property without the approval of the DCP Midstream Asset Director or his designee, and shall be escorted by DCP Midstream personnel at all times.

LOCATION OF NEARBY RESIDENCES, ROADS AND MEDICAL FACILITIES

Public awareness and communication is a primary function of the H_2S Plan. DCP has compiled a list of various public, private, state and local contacts that are to be notified at various phases during the activation of the Plan (see Appendix E). Appendix E contains a listing of all entities that will be contacted in the event of activation of the H_2S Plan, and it provides the contact information for all residents, businesses and public places within the 500 ppm and 100 ppm ROE. DCP will inform all state and local response organizations of its Plan**.** All businesses and public places within the 500 ppm and 100 ppm ROE will be contacted by telephone by Plant personnel as designated by Plant Supervisor if the Plan is activated, and action will be based on response level as described in the Immediate Action Plans in Appendices A through D. All entities contacted will be advised of the following:

- The nature and extent of the release/emergency at the Plant, Pipeline or AGI Facility and recommendations for protective actions, such as evacuation or shelter-in-place
- Any other event specific information that is necessary to protect the public
- Updates as to the status of the release and continued safety measures to be taken, including but not limited to when to shelter in place and/or evacuate, when it is safe to return to the area, and any roadblocks that have been established.

Residences or Public Roads:
There are no residences located within 500 ppm ROE. There are two residences (the Carlin and Webber residences) within the 100 ppm ROE located east of the plant site on US Highway 62-180. There are also two residences located just outside the 100 ppm ROE (the Smith and Handley residences). These residences are included on all response notifications, and contact information for them is listed in Appendix E.

There are two public roads and one private ranch road (Smith Ranch) located within the 500 ppm ROE. US Highway 62-180 is located adjacent to the Plant site, and the AGI Pipeline also crosses the Highway adjacent to the Plant site. County Road 41 (Maddox Road) is located within the 500 ppm ROE of the AGI Facility and the pipeline. Both of these roads also have sections within the 100 ppm ROE of the AGI Facility, pipeline and Plant site. Additionally, a portion of NM Highway 8, south of US Highway 62-180, lies within the 100 ppm ROE of the AGI Pipeline and Plant site.

There are two automated, flashing warning signs located at the entrance to the AGI Facility, adjacent to County Road 41 (Maddox Road) and two automated, flashing warning signs located adjacent to the private ranch road (Smith road) to alert the public of hazardous conditions. Figure 4 is a photograph of those signs and Figure 6 shows their locations. There are two emergency trailers, equipped with flashing lights, windsocks, and roadblock signs for use in alerting the public of hazardous conditions on Highway 62/180 and the pipeline road crossing.

Businesses or Other Public Areas
There is one 24-hour manned business within the 500 ppm ROE--The Xcel Maddox Power Plant is located southwest of the AGI Facility and within the 500 ppm ROE of the AGI Facility and the AGI pipeline. The Dorado pump station, normally manned from 6 am to 6 pm, is located west of the Plant site and is within the 500 ppm ROE of the Plant Site and the AGI pipeline. There are two additional manned businesses within the 100 ppm ROEs. The Lea Power Partners Power Plant lies northwest of the AGI Facility and within the 100 ppm ROE of the AGI Facility and the AGI Pipeline. The DCP Hobbs Gas Plant lies within the 100 ppm ROEs of the AGI Facility, AGI Pipeline and the Plant site. All businesses on this list will be provided with a copy of the H_2S Plan and will be contacted about participation when local emergency response training events or drills occur.

Due to the overlapping nature of the ROE for the plant, pipeline and AGI Facility, all residences, manned and unmanned businesses and producers listed in Appendix E will be notified if the Plan is enacted. In addition to notifying the entities listed in Appendix E, DCP personnel, as designated by the IC, will make a visual inspection of the ROE area to insure that no individuals are seen inside the ROE; if any are observed they will be advised to immediately evacuate to one of the designated Emergency Evacuation Areas.

Medical Facilities:
There are no medical facilities located within the ROE.

EVACUATION ROUTES, EMERGENCY ASSEMBLY AREAS AND ROAD BLOCK LOCATIONS

Evacuation Routes and Emergency Assembly Areas
Figures 2, 3 and 4 show the Plant and AGI Facility Plot Plans and Evacuation Routes. The locations of Emergency Assembly Areas are shown on the ROE Map (Figure 6). Evacuation for all visitors and all personnel who are not operators begins at the 10 ppm H_2S and/or activation of the intermittent alarm and

flashing yellow beacon. The responding Plant Operator(s) are to put on the 30-minute Self Contained Breathing Apparatus (SCBA) and first determine if any personnel are in distress and assist any distressed personnel to evacuate the appropriate Emergency Assembly Area. Emergency services (911) will be contacted if there are injuries or as otherwise deemed necessary. The operators, wearing SCBA, will then, investigate the cause of the release. At the sound of the alarm and flashing yellow beacons, all other personnel in the Plant are to stop work, check the prevailing wind direction (using visible windsocks) and immediately proceed along designated evacuation routes and/or upwind to the pre-designated Emergency Assembly Area(s) that are shown in Figure 6. Prevailing winds for the area are from the southwest. Personnel should evacuate along the designated route unless that route is downwind of the release (based on the wind directions observed at the windsocks); in that event all evacuees should proceed perpendicular and then upwind to the Emergency Assembly Areas. Emergency Assembly Areas are in the following locations (see Figure 6):

- **PLANT EMERGENCY ASSEMBLY AREA 1 : Parking area on the north side of Plant Office Building**
- **AGI FACILITY EMERGENCY ASSEMBLY AREA 1: Southwest Corner of AGI Facility**
- **GENERAL EMERGENCY ASSEMBLY AREA 2: Parking Area at Hobbs Plant Office**
- **GENERAL EMERGENCY ASSEMBLY AREA 3: North Parking lot at intersection of Hwy 62/180 and Hwy 483**

Roll call shall be conducted at the Emergency Assembly Area to ensure all personnel (including contractors and visitors) are accounted for and have evacuated safely. The Linam Ranch Plant is a Process Safety Management (PSM) facility and requires all personnel to check in at the Plant Office or Plant Control Room before entering the Plant or AGI Facility, thus the sign-in sheet will be used at the Emergency Assembly Areas to make a full accounting of all personnel and visitors.

The ambient air quality at each Emergency Area will be monitored for H_2S concentration to ensure the area remains at less than 10 ppm. If the H_2S concentration rises to 10 ppm or greater, the assembly area will be relocated as specified in the detailed response description.

Road Block Locations
Pre-planned road block locations (which would be utilized in the event of a Level 2 or Level 3 response) are shown on the ROE Map (Figure 6). Each location will have prepositioned, portable road barriers with lights. The locations will have flashing lights and warning signs. The IC will designate representatives to staff each of the roadblocks. If deemed necessary by the IC, the State or Local Police will be asked to assist with maintaining the roadblocks. Roadblocks will be positioned at pre-planned locations (See Figure 6) regardless of wind direction.

MONITORING EQUIPMENT, ALARM SYSTEMS, SAFETY EQUIPMENT AND SUPPLIES

EMERGENCY SHUTDOWN SYSTEMS 19.15.11.12.D

The Linam Ranch Plant and AGI Facility have extensive Emergency Shutdown (ESD) and Process Shutdown (PSD) systems designed to isolate incoming and out-going gas and product streams in order to contain hydrocarbon and H_2S releases and safely depressurize equipment to flares. These systems are either automatically or manually initiated, depending on process conditions. There are manually activated ESD and PSD buttons located at exit locations at the Plant. The AGI Facility has PSD buttons that activate the PSD system for the AGI process which shuts down the AGI related equipment at both the

AGI Facility and Plant locations. The locations of the ESD and PSD activation buttons are shown in Figures 2, 3 and 4. The ESD and PSD systems are designed to prevent a Level 3 response.

Linam Ranch Plant
Pursuant to NMAC 19.15.11.12.D there are 17 ESD manual stations located at various points in the Plant (see Figure 2). These Plant ESD stations also activate the AGI PSD. Activation of these shut-down systems automatically sends an alarm to the Xcel Maddox control room. These alarm signals and the AGI Facility H_2S monitor alarms are sent via buried fiber optic cable to the Plant where the signal is sent via a dedicated radio system to the Xcel control room. The radio system utilizes a self-polling feature to ensure that communication is maintained at all times. (DCP and Xcel worked jointly on the hardware selection and installation and feel this is the most reliable means of sharing the alarm and monitor information.)

The Plant ESD can be activated at any time by the Linam Ranch Plant Operators and is to be activated based on this Plan after 20 ppm H_2S has been detected in the Plant and efforts to resolve the issue for 15 minutes have failed, or if a catastrophic release has occurred.

When any of the 17 manual stations are activated, the Plant equipment will be shutdown, the natural gas inlets, outlets, and NGL product pipelines will be blocked. The AGI equipment will be automatically shut down, and the acid gas will be diverted to the plant acid gas flare. The pipeline will be automatically blocked in on both ends, and the wing-valve on the AGI well tree along with the subsurface safety valve (SSV) located approximately 250 feet below the surface of both AGI wells will be automatically closed. The AGI Facility equipment will be automatically depressurized to the AGI Facility acid gas flare. An alarm signal is automatically sent to the Xcel Maddox control room when the ESD system is activated.

Block Valves
Additional isolating block valves outside the Plant perimeter on the Eddy County, Buckeye, and Shell 12" lines can be closed to prevent further gas flow into the Plant. These lines can be isolated even further upstream as shown in Figure 6. These block valves furthest upstream isolate the entire system from the field gathering lines coming into the Plant.

AGI Facility
Pursuant to NMAC 19.15.11.12.D(1)(2) There are six AGI PSD stations located at various points in the AGI Facility (see Figures 3, 3a and 3b). The AGI PSD system shuts down the AGI compressors and equipment, closes the pipeline and injection well isolation valve (wing-valves), the subsurface safety valves (SSVs), and depressurizes the AGI Facility equipment and piping to the AGI Facility flare. There are also three AGI PSD stations located within the Linam Ranch Plant.

The AGI PSD can be activated at any time by the Linam Ranch Plant Operators and must be manually activated after 20 ppm H_2S has been detected at the interior fixed monitors at the AGI Facility and efforts to resolve the issue for 15 minutes have failed. The AGI PSD is automatically activated if the perimeter monitors reach 10 ppm H_2S. Activation of the AGI PSD automatically sends an alarm signal to the Xcel Maddox control room. The AGI Facility interior monitors do not automatically activate an AGI PSD.

AGI Pipeline
The following AGI pipeline parameters will be monitored from the Linam Ranch Plant control room DCS:

- Pipeline flow differential alarm. Should the measured acid gas flow rate at the plant site (beginning of pipeline) vary from the measured flow rate at the AGI Facility (end of pipeline) by more than the set-point (10%), the pipeline inlet ESD valve will be closed and the acid gas stream will be diverted to the plant acid gas flare.
- Pipeline Low Pressure alarm. The pipeline normal operating pressure is projected to be 80 psig. Should the flowing pressure decrease below the set-point (50 psig), a low pressure shutdown switch will automatically close the inlet ESD valve, and the acid gas stream will be diverted to the plant acid gas flare.

When the pipeline ESD valve closes, the AGI Facility compressor will be automatically shut-down on a low suction pressure signal. Similarly, at the plant booster compressor, when the pipeline ESD valve is closed, the plant AGI booster compressor will be automatically shut-down on a high discharge pressure signal. An alarm signal is automatically sent to the Xcel Maddox control when the AGI PSD is activated and when the Linam Plant ESD is activated.

ALARM SYSTEMS, VISIBLE BEACONS AND WIND INDICATORS

Plant

Colored beacons, horns, and wind direction indicators are situated in various locations throughout the Plant and are shown in Figure 2. The audible signal for an emergency response and Plant evacuation is a repeating intermittent alarm that sounds at 10 ppm H_2S. The alarm will become continuous when the concentration of the H_2S release is 20 ppm or higher. A flashing yellow beacon signifies an H_2S release of 10 ppm. The horn and flashing yellow lights are redundant systems which function independently of one another so that should one system fail, the other would remain active. These systems incorporate backup battery capabilities as recommended in API RP 55 which insure their operation in the event of a power failure. Wind direction indicators are installed throughout the Plant and near the Plant Office Building. At least one wind direction indicator can be seen at any location within the Plant complex, as well as, from any point on the perimeter of the Plant.

AGI Facility

Colored beacons, horns, and wind direction indicators are situated in various locations throughout the AGI Facility and are shown on Figures 3, 3a and 3b. The audible signal for an emergency response and AGI Facility evacuation is a repeating intermittent alarm that sounds at 10 ppm H_2S. The alarm will become continuous when the concentration of the H_2S release is 20 ppm or higher. A flashing yellow beacon signifies an H_2S release of 10 ppm. These systems incorporate backup battery capabilities as recommended in API RP 55 which insure their operation in the event of a power failure. Wind direction indicators are installed throughout the AGI Facility. At least one wind direction indicator can be seen at any location within the AGI Facility, as well as, from any point on the perimeter of the Facility.

SIGNS AND MARKERS NMAC 19.15.11.10

Plant and AGI Facility have readily readable warning, caution and notice signs which conform to the current ANSI standard Z535.1-2002 (Safety Color Code). The Plant, AGI Facility, and AGI pipeline have numerous warning signs indicating the presence of H_2S/Poisonous Gas and high pressure gas at the entrances to the Plant, the AGI Facility, road crossings and along the pipeline right- of-way. Emergency response phone numbers are posted at the entrance to the Plant and AGI Facility. AGI pipeline markers also include emergency response numbers. Signs are located at the Plant and AGI Facility gate entrances indicating that all visitors are to sign in at the Plant office. Poison gas warning signs equipped with flashing lights have been installed adjacent to Maddox Road and the Smith Ranch private road (north of the AGI Facility) to alert the public of hazardous conditions. The flashing lights on these signs are

activated when the AGI Facility perimeter H_2S monitors detect a concentration of 10 ppm or greater (see Figure 4 for a photograph of one of these signs and Figure 6 for the location of the signs).

EMERGENCY EQUIPMENT

Emergency Trailers

Emergency trailers, equipped with flashing lights and windsocks will be utilized at the Hwy 62/180 pipeline road crossing to alert the public in the event of hazardous conditions.

First Aid Equipment

The first aid station will be located at the Emergency Assembly Area. (Also see Figures 2 and 3 for information relative to locations of the Plant and AGI Facility emergency and safety equipment.) First aid kits are also available in the following locations:

- Plant Superintendent Office Building
- Maintenance/Safety Office Building
- Each company vehicle
- Plant Supervisor's office
- Linam Ranch Plant Control Room
- Emergency Trailer
- AGI Facility

GAS DETECTION EQUIPMENT

Plant and AGI Facility

The Plant and AGI Facility areas utilize Det-tronics Remote H_2S Sensors. These sensors are a fixed point monitor to detect the presence of H_2S in ambient air. The sensors are connected to Det-tronics alarm panel Programmable Logic Controllers (PLCs), and then to the Linam Distributed Control System (DCS). The monitors are equipped with a yellow flashing beacon. The yellow flashing beacon is activated at 10 ppm. The plant and AGI Facility horns are activated with an intermittent alarm at 10 ppm and a continuous alarm at 20 ppm.

Fixed H_2S monitors are strategically located throughout the Plant and AGI Facility to detect an uncontrolled released of H_2S. The Plant operators are able to monitor the ppm level of H_2S of all the Plant and AGI Facility sensors on the DCS located in the control room. The AGI system monitors can also be viewed on the Det-tronics PLC displays located in the Plant and AGI Facility motor control center buildings. These sensors are all located on the plot plans (see Figures 2, 3 and 4). These sensors all have to be acknowledged and will not clear themselves. This requires immediate action for any occurrence or malfunction. All H_2S sensors are calibrated monthly.

Personal and Handheld H_2S Monitors

All personnel working in Linam Ranch Plant and the AGI Facility wear personal H_2S monitors. The personal monitors are set to alarm and vibrate at 10 ppm. Handheld gas detection monitors are available to plant personnel to check specific areas and equipment prior to initiating maintenance or work on the process or equipment. There are four handheld monitors in the control room that are used by individuals for special projects and maintenance work. The hand held gas detectors have sensors for oxygen, lower explosive limit (LEL) for explosive hydrocarbon atmospheres), H_2S, and carbon dioxide (CO_2).

RESPIRATORS

There are 30 minute SCBA respirators and cascade hose reel systems strategically located throughout the Plant and AGI Facility. The cascade hose reel systems have 2-4 compressed air cylinders hooked up in series to provide a sustained supply of breathing air for extended work time in a hazardous atmosphere. Each cylinder will supply a person 6-8 hours of breathing air at normal workloads or 3 hours at medium/heavy workloads. Several hose reels and masks may be attached to a cascade system. The system is equipped with a low pressure alarm to allow workers to safely exit the hazardous area with plenty of reserve air capacity. The respirator containers and equipment locations are shown in Figures 2, 3 and 4. All Plant personnel are trained and fit tested annually to use the SCBA respirators.

PROCESS PURGE SYSTEM

All vessels, pumps, compression equipment, and piping in the AGI process are designed and equipped to allow purging with pipeline quality gas to remove the acid gas prior to conducting maintenance or inspection work. The purge gas stream with residual acid gas is routed safely into the acid gas flares located at the plant and the AGI Facility. Operating procedures include this purging of all equipment to avoid acid gas exposure to personnel and to prevent acid gas from escaping to the environment.

FIRE FIGHTING EQUIPMENT

Plant personnel are trained only for incipient stage fire-fighting. The fire extinguishers located in the Plant process areas, compressor buildings, process buildings, and company vehicles are typically a 30# Ansul dry chemical fire extinguisher. The Plant does have a fire water system, utilized primarily at fixed monitors for equipment protection.

V. CHARACTERISTICS OF HYDROGEN SULFIDE (H_2S), SULFUR DIOXIDE (SO_2) and CARBON DIOXIDE (CO_2) [NMAC 19.15.11.9.B(2)(b)] [API RP-55 7.4 b.]

Hydrogen Sulfide (H_2S): The current inlet gas streams into the Plant contain approximately 4,387 ppm (or 0.44 mole percent) of H_2S based on data generated from sampling of the combined inlet gas streams (based on samples taken in November 2014 and analyzed by an independent laboratory). H_2S is a colorless, toxic and flammable gas, and has the odor of rotten eggs. It is heavier than air and presents a significant health hazard by paralyzing the respiratory system resulting in serious injury or death.

Hydrogen Sulfide Properties and Characteristics	
CAS No.	7783-06-4
Molecular Formula	H_2S
Molecular Weight	34.082 g/mol
Ceiling Concentration	20 ppm (OSHA)
Ceiling Peak Concentration	50 ppm (OSHA)
Threshold Limit Value (TLV)	15 ppm (ACGIH)
Time Weighted Average (TWA)	10 ppm (NIOSH)
Short Term Exposure Level (STEL)	15 ppm (ACGIH)
Immediately Dangerous to Life or Health (IDLH)	100 ppm
Specific Gravity Relative to Air (Air=1.0)	1.189
Boiling Point	-76.5F
Freezing Point	-121.8F
Vapor Pressure	396 psia
Auto-ignition Temperature	518F
Lower Flammability Limit	4.3%
Upper Flammability Limit	46.0%
Stability	Stable
pH in water	3
Corrosivity	Reacts with metals, plastics, tissues and nerves

Physical Effects of Hydrogen Sulfide		
Concentration		**Physical Effects**
Ppm	%	
1	0.00010	Can be smelled (rotten egg odor)
10	0.0010	Obvious & unpleasant odor; Permissible exposure level; safe for 8 hour exposure
20	0.0020	Acceptable ceiling concentration
15	.005	Short Term Exposure Limit (STEL); Safe for 15 minutes of exposure without respirator
50	0.0050	Loss of sense of smell in 15 minutes
100	0.0100	Immediately dangerous to life and health(IDLH) loss of sense of smell in 3-15 minutes; stinging in eyes & throat; Altered breathing
200	0.0200	Kills smell rapidly; stinging in eyes & throat
500	0.0500	Dizziness; Unconscious after short exposure; Need artificial respiration
700	0.0700	Unconscious quickly; death will result if not rescued promptly
1000	0.1000	Instant unconsciousness; followed by death within minutes

Sulfur Dioxide (SO_2): SO_2 is produced as a by-product of H_2S combustion. The waste gas stream consisting of H_2S and CO_2 is routed to the plant acid gas flare during abnormal conditions when the acid gas injection equipment is out of service. Waste gas is routed to the acid gas flare at the AGI Facility during maintenance operations when equipment needs to be blown down. It is colorless, transparent, and is non-flammable, with a pungent odor associated with burning sulfur. SO_2 is heavier than air, but can be picked up by a breeze and carried downwind at elevated temperatures. It can be extremely irritating to the eyes and mucous membranes of the upper respiratory tract.

Sulfur Dioxide Properties & Characteristics	
CAS No.	7446-09-5
Molecular Formula	SO_2
Molecular Weight	64.07 g/mol
Permissible Exposure Limit (PEL)	5 ppm(OSHA)
Time Weighted Average (TWA)	2 ppm(ACGIH)
Short Term Exposure Level (STEL)	5 ppm(ACGIH)
Immediately Dangerous to Life and Health (IDLH)	100 ppm
Specific Gravity Relative to Air (Air = 1.0)	2.26
Boiling Point	14°F
Freezing Point	-103.9°F
Vapor Pressure	49.1 psia
Auto-ignition Temperature	N/A
Lower Flammability Limit	N/A
Upper Flammability Limit	N/A
Stability	Stable
Corrosivity	Could form an acid rain in aqueous solutions

Physical Effects of Sulfur Dioxide	
Concentration	**Effect**
1 ppm	Pungent odor, may cause respiratory changes
2 ppm	Permissible exposure limit; Safe for an 8 hour exposure
3-5 ppm	Pungent odor; normally a person can detect SO_2 in this range
5 ppm	Short Term Exposure Limit (STEL); Safe for 15 minutes of exposure
12 ppm	Throat irritation, coughing, chest constriction, eyes tear and burn
100 ppm	Immediately Dangerous To Life & Health (IDLH)
150 ppm	So irritating that it can only be endured for a few minutes
500 ppm	Causes a sense of suffocation, even with first breath
1,000 ppm	Death may result unless rescued promptly.

Carbon Dioxide (CO_2): The current inlet gas streams to the Plant contain approximately 1.9% CO_2 (based on samples taken in November 2014 and analyzed by an independent laboratory). CO_2 is a colorless, odorless and non-flammable. It is heavier than air.

Carbon Dioxide Properties & Characteristics	
CAS No.	124-38-9
Molecular Formula	CO_2
Molecular Weight	44.010 g/mol
Time Weighted Average (TWA)	5,000 ppm
Short Term Exposure Level (STEL)	30,000 ppm
Immediately Dangerous to Life and Health (IDLH)	40,000 ppm
Specific Gravity Relative to Air (Air = 1.0)	1.5197
Boiling Point	-109.12°F
Freezing Point	-69.81°F
Vapor Pressure	830 psia
Auto-ignition Temperature	N/A
Lower Flammability Limit	N/A
Upper Flammability Limit	N/A
Stability	Stable
pH in Saturated Solution	3.7
Corrosivity	Dry gas is relatively inert & not corrosive; can be corrosive to mild steels in aqueous solutions

Physical Effects of Carbon Dioxide	
Concentration	**Effect**
1.0 %	Breathing rate increases slightly
2.0 %	Breathing rate increases to 50% above normal level. Prolonged exposure can cause headache, tiredness
3.0 %	Breathing rate increases to twice normal rate and becomes labored. Weak narcotic effect. Impaired hearing, headache, increased blood pressure and pulse rate
4 – 5 %	Breathing increases to approximately four times normal rate, symptoms of intoxication become evident, and slight choking may be felt
5 – 10 %	Characteristic sharp odor noticeable. Very labored breathing, headache, visual impairment, and ringing in the ears. Judgment may be impaired, followed within minutes by loss of consciousness
10 – 100 %	Unconsciousness occurs more rapidly above 10% level. Prolonged exposure to high concentrations may eventually result in death from asphyxiation

VI. RADII OF EXPOSURE [NMAC 19.15.11.7. K]

For the Linam Ranch Plant and AGI Facility operations, the "Radius of Exposure" for both 500 ppm and 100 ppm of H_2S gas was determined using the "escape rate" which is calculated using the maximum daily rate of the gaseous mixture that is handled by the Plant and the AGI Facility. **The rates and other variables used to calculate the ROE are discussed in greater detail in Appendix F – Worst Case Scenario and ROE calculations. Also refer to Figure 6 - ROE Map showing 500 and 100 ppm ROE for the Plant, AGI Facility and pipeline connecting them.**

	500-ppm ROE	100-ppm ROE
Plant, Pipeline and AGI Facility	**3,443 ft.**	**7,535 ft.**

VII. FACILITY DESCRIPTION, MAPS AND DRAWINGS [NMAC 19.15.11.9.B (2)(c)] [API RP-55 7.4 c.]

Description of Plant Operations

The Linam Ranch Plant is located on 165 acres of land and is completely fenced and secured. The Plant operations include gas compression, treating and processing, as well as flow lines and storage tanks. The Plant gathers and processes produced natural gas from Lea and Eddy Counties in New Mexico. Once gathered at the Plant, the produced natural gas is compressed, treated in an amine process for the removal of CO_2 and H_2S, dehydrated to remove the water content and processed to remove and recover natural gas liquids. The processed natural gas and recovered natural gas liquids are then sold and shipped to various customers.

Because the natural gas that is gathered and processed at the Plant contains H_2S ("sour gas") it must be treated or processed to remove these and other impurities. The CO_2 and H_2S stream that is removed from the natural gas in the amine treating process is compressed to approximately 90 psi and then sent via a high density polyethylene lined 8" steel pipeline to the Acid Gas Injection Facility, approximately 2 miles from the Plant, where the Linam AGI #1 and Linam AGI #2 are located.

Description of AGI Facility Operations

The acid gas stream is received at the AGI Facility where it is further compressed to 1500 - 2644 psi. This is accomplished using electric driven, reciprocating compressors. Water vapor contained in the gas stream is removed during compression and cooling and is pumped back to the Plant location via a polyethylene lined 4" steel pipeline for disposal through the existing wastewater disposal system.

At the AGI Facility acid gas is injected into the Lower Bone Spring formation at a depth of 8,710 feet to 9085 feet below the surface. The wellbore of each well is constructed with three casing strings, all with cement circulated to the surface. Both AGI #1 and AGI #2 are constructed consistent with requirements of applicable NMOCC orders. Pursuant to NMAC 19.15.11.12.D(2) in each well there is internal control equipment: the injection tubing is attached to the packer and is equipped with a check valve located below the packer and a hydraulically operated SSV located approximately 250 feet below the surface. Linam AGI #2 has been installed to provide redundancy in the event that Linam AGI #1 is shut in for repairs or upgrades. Linam AGI #2 is located within 500 feet of Linam AGI #1, and thus, the depth

intervals of the injection zone are approximately the same as for Linam AGI #1. Figures 7 and 8 show the wellbore schematic for both AGI #1 and AGI #2.

In compliance with NMAC 19.15.11.12.B the AGI Facility is secure and fenced. It is normally unmanned but is fully automated and is connected to the Linam Ranch Plant control room DCS via a fiber optic line. The AGI Facility operations are monitored and are controlled from the Linam Ranch Plant. Video cameras located at the Facility provide visibility throughout the AGI Facility to the Linam Ranch Plant control room.

Map of Plant and AGI Facility

Figure 1 shows the Plant and AGI Facility, including Linam AGI #1, Linam AGI #2 and the pipeline that connects the plant and the AGI Facility.

VIII. TRAINING AND DRILLS [NMAC 19.15.11.9.B(2)(d)] [API RP-55 7.4 d.]

DCP will conduct training for its own personnel as well as for the public and emergency responders, as detailed below. Training will include:

- Characteristics of H_2S and safety precautions
- An overview of the Linam Ranch Plant and AGI operations
- A review of their roles in responding to activation of the Linam Ranch Plant H_2S Contingency Plan
- Location of the Radii of Exposure and how to protect the public within the Radii of Exposure
- Potential roadblock locations, potential evacuation routes, and how they can assist in implementing the Plan.

Duties and Responsibilities of Essential Personnel

Training for DCP personnel shall include the Linam Ranch Plant work group – consisting of plant operators, mechanics, instrument and electrical technicians, and maintenance support personnel. Plant Operators will be responsible for initiating and implementing the H_2S Contingency Plan. In addition, all Plant personnel will receive:

- Annual training on the H_2S Contingency Plan. This training will include a review of all aspects of the Plan and will include, at a minimum, one table top drill involving activation of the H_2S Contingency Plan.
- Plant Orientation Training - All Plant personnel, visitors, and contractors must attend a Plant overview orientation prior to obtaining permission to enter the Plant. A refresher course on this training is required annually for all persons. Included as part of this orientation is how to respond and evacuate safely in the event of a H_2S alarm or release. This training also complies with the requirements of the DCP and Linam Ranch Plant's Process Safety Management Program and Procedures Manuals.
- All Plant personnel are also trained annually on the Linam Ranch Emergency Response Plan.
- H_2S and SO_2 Training - All Plant personnel receive annual refresher training on H_2S and SO_2, which is conducted by DCP personnel. If an individual is unable to attend, they may be required to attend a third party training session. All contract employees are required to have had H_2S training and to provide the Plant a copy of their certification card prior to obtaining permission to enter the Plant.
- Respirators - All Plant personnel are trained annually on the proper use of respirators. In addition to the annual training, all Plant personnel are fit tested annually on the respirators. All Plant personnel must have medical clearance for respirator use.

- Hazard Communication - All Plant personnel are trained annually on Hazard Communication. The annual training includes, at a minimum, the use of material safety data sheets (MSDS) for those materials that are present at the Plant.
- Personal Protective Equipment (PPE) - All Plant personnel are trained annually on the DCP requirements for PPE. The training includes, at a minimum, a review of all the types and levels of personal protective equipment and how to select the correct equipment for the job.

On-Site or Classroom Emergency Response Drills

- The Plant will conduct, at least, one tabletop drill annually. Multiple drills during the year may be scheduled at the discretion of the Plant Supervisor.
- The annual drill will execute this Plan and include, at a minimum, the Public Officials and Local Emergency Response Agencies listed below and will also include making contact with the entities that are identified as being within the 500 ppm and 100-ppm ROE (see Appendix E) to make sure contact information for them in is current. The drills will also include briefing of public officials on issues such as evacuation or shelter-in-place plans.

Notification and Training of Business, Individuals, and Producers Located Within the ROE

DCP Midstream will provide annual training to the businesses, individuals and producers listed in Appendix E that includes:

- An overview of the Linam Ranch Plant and AGI operations
- Design and operating safety features on the Linam Ranch Plant
- A review of the H_2S alarms and significance
- Notification procedures
- Roadblock locations
- Potential evacuation routes,
- Procedures for sheltering in place
- Radii of exposure

Training of Public Officials and Emergency Response Agencies

All of the Emergency Response Agencies listed in Appendix E will have copies of the H_2S Contingency Plan, and DCP Midstream will provide annual training to the following Emergency Response Agencies:

- NM State Police-Hobbs Office
- Lea County 911 Emergency Response
- Lea County Emergency Planning Committee
- Hobbs Police Department
- Lea County Sherriff's Department
- Hobbs Fire Department
- New Mexico Oil Conservation Division-Hobbs District Office

Training will include:

- An overview of the Linam Ranch Plant and AGI Facility operations
- Design and operating safety features on the Linam Ranch Plant and AGI Facility
- A review of the H_2S alarms and their significance
- Notification procedures
- Roadblock locations
- Potential evacuation routes,
- Procedures for sheltering in place
- Radii of exposure

Training and Attendance Documentation
Drill training will be documented, and records of that training will be maintained at the Plant. The documentation shall include at a minimum the following:

- Description or scope of the drill, including date and time
- Names of attendees and participants in the drill
- Summary of activities and responses
- Post-drill debriefing and reviews

IX. COORDINATION WITH STATE EMERGENCY PLANS [NMAC 19.15.11.9.B(2)(e)]

NOTIFICATIONS AND REPORTS

The Plant has various notification and reporting obligations. Some are related to its state air quality permit that is overseen by NMED as well as state and federal spill reporting obligations. In addition to the regulatory obligations noted above, Plant personnel also have internal and external notification and reporting obligations associated with the activation of this Plan. Reporting obligations are as follows:

New Mexico Oil Conservation Division (OCD) [NMAC 19.15.11.16]
As soon as possible, but no later than four hours after plan activation, (recognizing that a prompt response should supersede notification), OCD will be notified by the IC or the IC's designee via email or fax to the District II Office of the activation of the H_2S Contingency Plan. In the event of a power failure, a phone call will be made within four hours. A full report of the incident to the OCD, utilizing Form C-141 shall be made no later than 15 days following the release.

New Mexico State Police/ New Mexico Hazardous Materials Emergency Response Plan
The New Mexico State Police are responsible for overall scene management and coordination of all resources. A designated Emergency Response Officer (ERO) will establish the National Interagency Incident Management System (NIIMS) Incident Command System (ICS) as the IC (IC) and be responsible for management of all response resources on scene. Off-scene coordination of response resources will be handled through designated Headquarters Emergency Response Officers. Law enforcement-related activities will be coordinated by State Police.

PLAN ACTIVATION [NMAC 19.15.11.9.C] [API RP-55 7.4 d]

The plan will be activated as described in the Immediate Action Plan Section of this document **(see Appendices A through D for Immediate Action Plans and associated Response Flow Diagrams)**. **At a minimum, Per NMAC 19.15.11.8.C, the Plan also shall be activated whenever a release may create an H_2S concentration of more than 100 ppm in a public area, 500 ppm at a public road or 100 ppm 3,000 feet from the site of release.**

Activation Levels
The Plan has three (3) activation levels that are described in detail in the Immediate Action Plan Section of this Plan (see Appendices A through D) and in outline form in the Response Flow Diagrams in each of the appendices.

Level 1:
Intermittent alarm sounded and flashing yellow beacons activated for H_2S greater than 10 ppm at personal or fixed monitor.

Level 2:
Continuous alarm sounded and flashing yellow beacons activated for H_2S greater than 20 ppm; or release 10 ppm or greater of H_2S detected for longer than 15 minutes; corrective actions at Level 1 have been unsuccessful. Operators activate AGI PSD and/or Linam Ranch Plant ESD, depending on location of the release. Notification of the public including individual residences, businesses, and state agencies is initiated.

Level 3:
Catastrophic release; fire; explosion; a continuous release of maximum volume for 24 hours; or Rule 11 mandatory activation for 100 ppm in any defined public area; 500 ppm at any public road; or 100 ppm at a distance greater than 3000 feet from the site or the release. Operators activate ESD system at the Plant. Notification of the public, individuals and businesses and state agencies is initiated.

Events that Could Lead to a Release of H_2S

- Inlet and plant piping failure
- Amine still failure (This would be a leak in the amine process equipment or amine still utilized to separate methane from H_2S and CO_2.)
- Flange/gasket leaks on inlet and plant piping
- Flange/gasket leak on the acid gas compressors
- Flange/gasket or valve packing leak at the AGI Well or associated piping
- Valve packing failure
- Seal failure on acid gas compressors
- Failure of flare to ignite during Plant emergency blow down
- Damage to AGI Wellhead
- Damage to Pipeline between Plant and AGI Facility

X. SUBMISSION OF H_2S CONTINGENCY PLANS [NMAC 19.15.11.9.D]

Submission
DCP Midstream, LP submitted this revised H_2S Contingency Plan to the OCD for review and approval in January 2015.

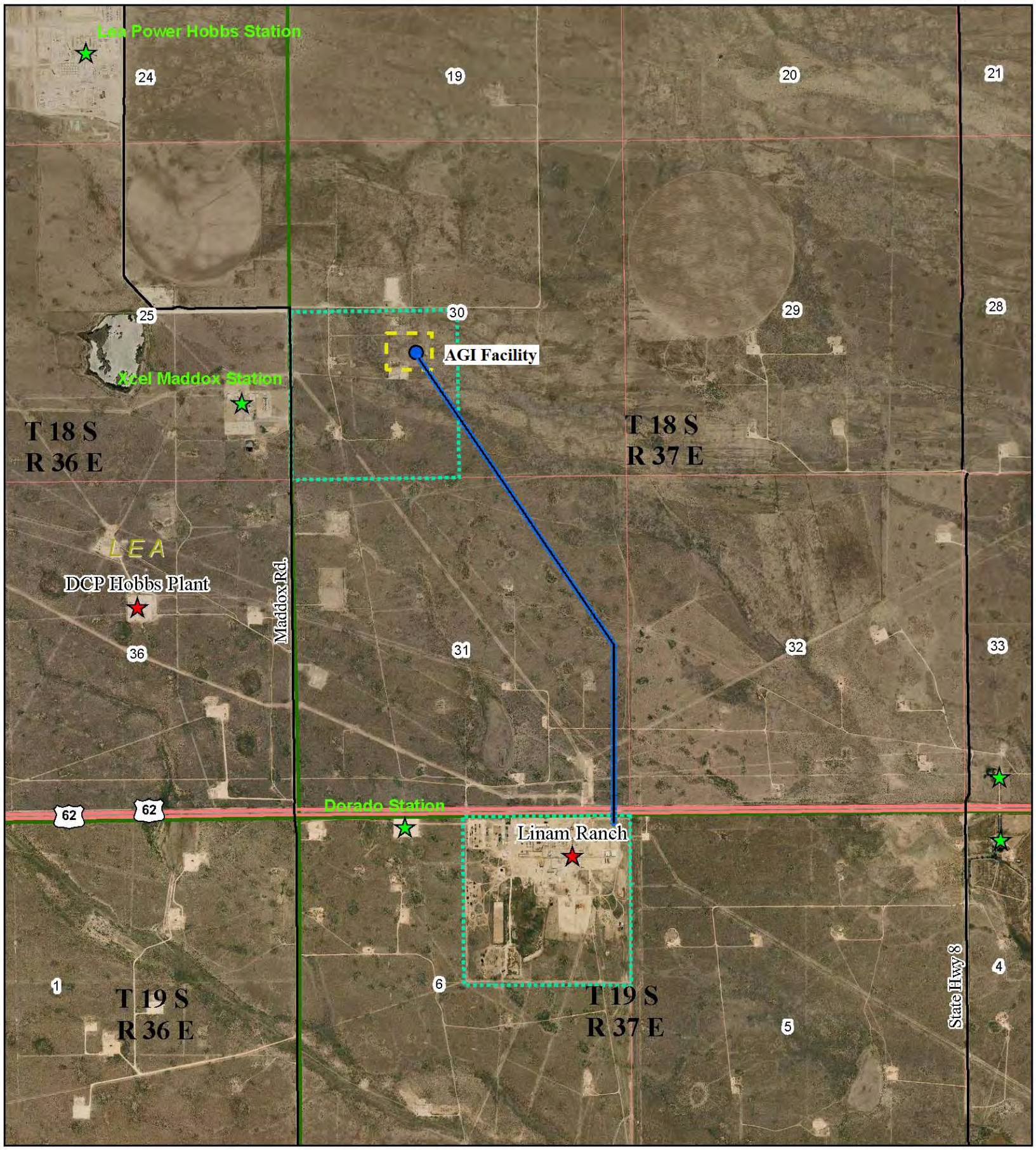
Retention
DCP Midstream shall maintain a copy of the contingency plan at the Linam Ranch Gas Plant, at DCP Headquarters in Hobbs, NM and at DCP Headquarters office in Denver, CO. The plan as approved by the OCD will be readily accessible for review by the OCD at the facility upon request.

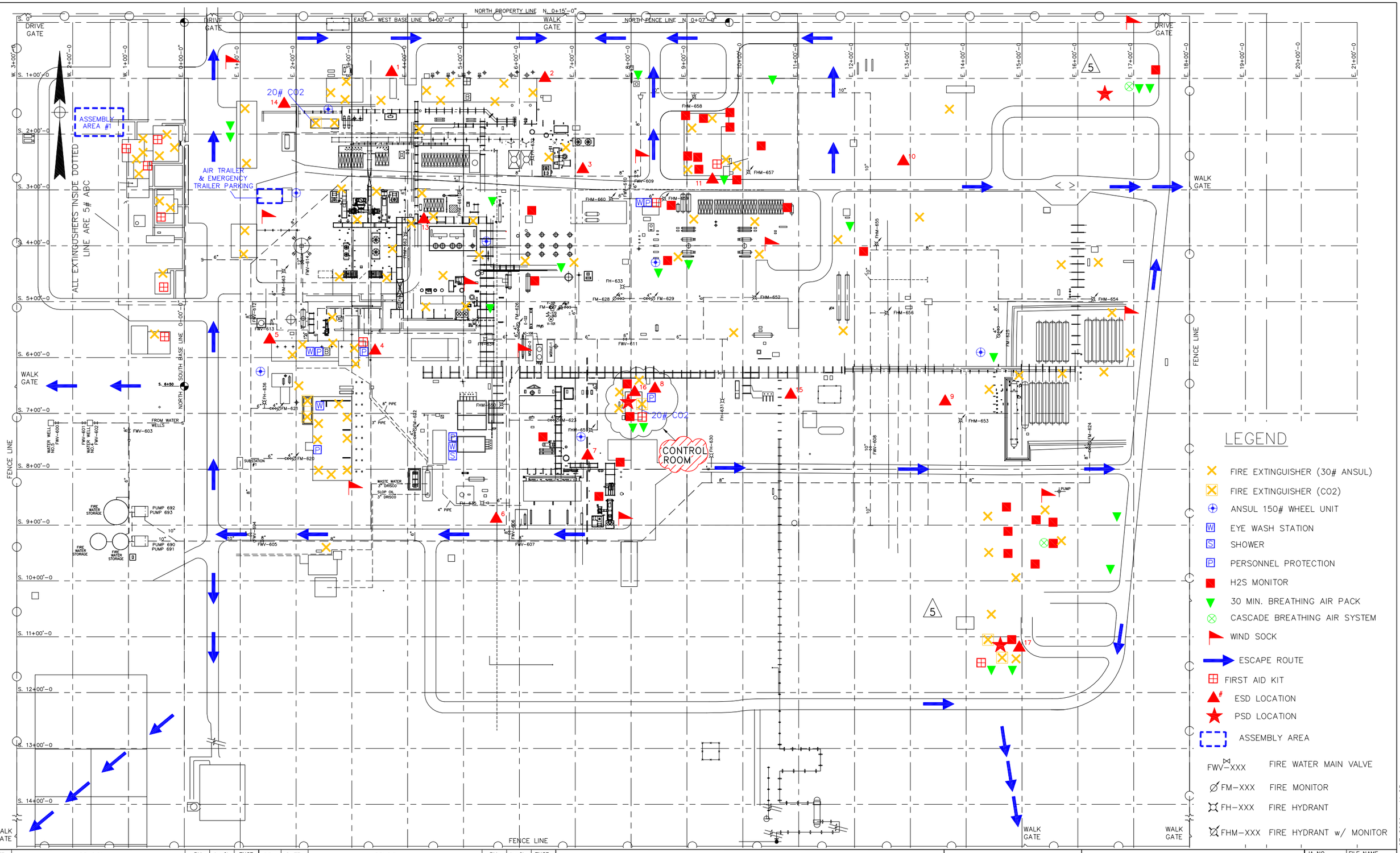
Revisions to the Plan
The H_2S Plan will be reviewed annually and revised at that time as necessary to address changes to the Plant facilities, operations, or training requirements, contact information and the public areas including roads, businesses, or residents potentially affected by the operations of the Plant and AGI Facility, specifically those areas within the radii-of-exposure.

Annual Inventory of Contingency Plans
DCP Midstream, LP will file an annual inventory of wells, facilities and operations for which H_2S Contingency Plans are on file with the OCD with the appropriate Local Emergency Planning Committee (LEPC) and the State Emergency Response Commission as per NMAC 19.15.11.9H. The inventory shall include the name, address, telephone number, and point of contact for all operations for which H_2S Contingency Plans are on file with the OCD.

FIGURES

FIGURE 1
Linam Ranch Gas Plant &
Acid Gas Injection Property





REV.	DATE	REVISION	BY	CHK'D	ENGR.
1	1/12/99	ADDED FIREMAINS	JC		
2	9/21/04	UPDATED SAFETY EQUIPMENT LOCATIONS	P.L.		
3	3/08/06	ADDED WIND SOCKS	P.L.		
4	8/23/06	REVISED PER EQUIPMENT REMOVAL	wrt		
5	3/13/09	ADDED AGI EQUIPMENT	MAC		
6	10/7/09	REVISED EMERGENCY EQUIPMENT	wrt		

NOTES:

FIGURE 2

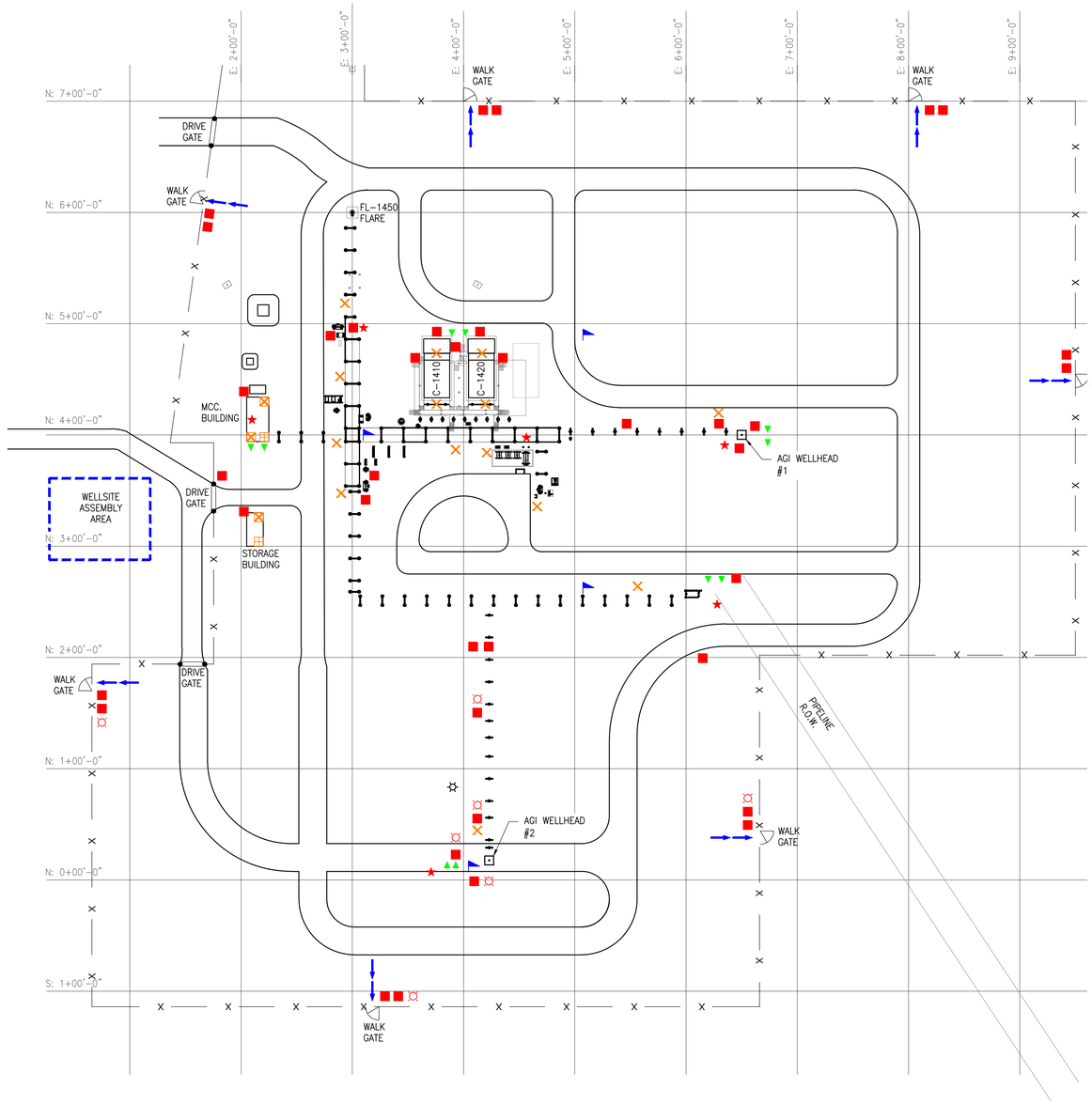
dcp Midstream

SAFETY EQUIPMENT LOCATION PLAN
LINAM RANCH PLANT

DRAWN: COLEMAN | DATE: 5/14/96

JA NO. | FILE NAME 07307MP002
AFE NO. | SCALE 1"=80'
BASE NO. 07-3-07
DWG. NO. M-5 | 6

PLOT TIME: October 27 2009 - 11:25 am



SAFETY EQUIPMENT LOCATION PLAN

SCALE: 1/64"=1'-0"

NOTE:

1. REFER TO VENDOR DRAWING FOR EQUIPMENT DETAILS.

LEGEND:

- FIRE EXTINGUISHER (30 # ANSUL)
- FIRE EXTINGUISHER (002)
- H2S
- ALARM STROBE
- MIN BREATHING AIR PACK
- CASCADE BREATHING AIR SYSTEM
- ESCAPE ROUTE
- PSD LOCATION
- FIRST AID KIT
- WIND SOCKS

FIGURE 3

AGI #1 and AGI #2

REFERENCE DRAWINGS		NO.	REVISION	BY	CHK	APVD	DATE
NO.	TITLE						
		2	ISSUED FOR CONSTRUCTION	WBH	JJH	JJH	01/27/15
		1	ISSUED FOR CONSTRUCTION	AS	JTS	JJH	10/3/14
		0	ISSUED FOR CONSTRUCTION	WSG	JJH	JJH	08/12/14

dcp Midstream

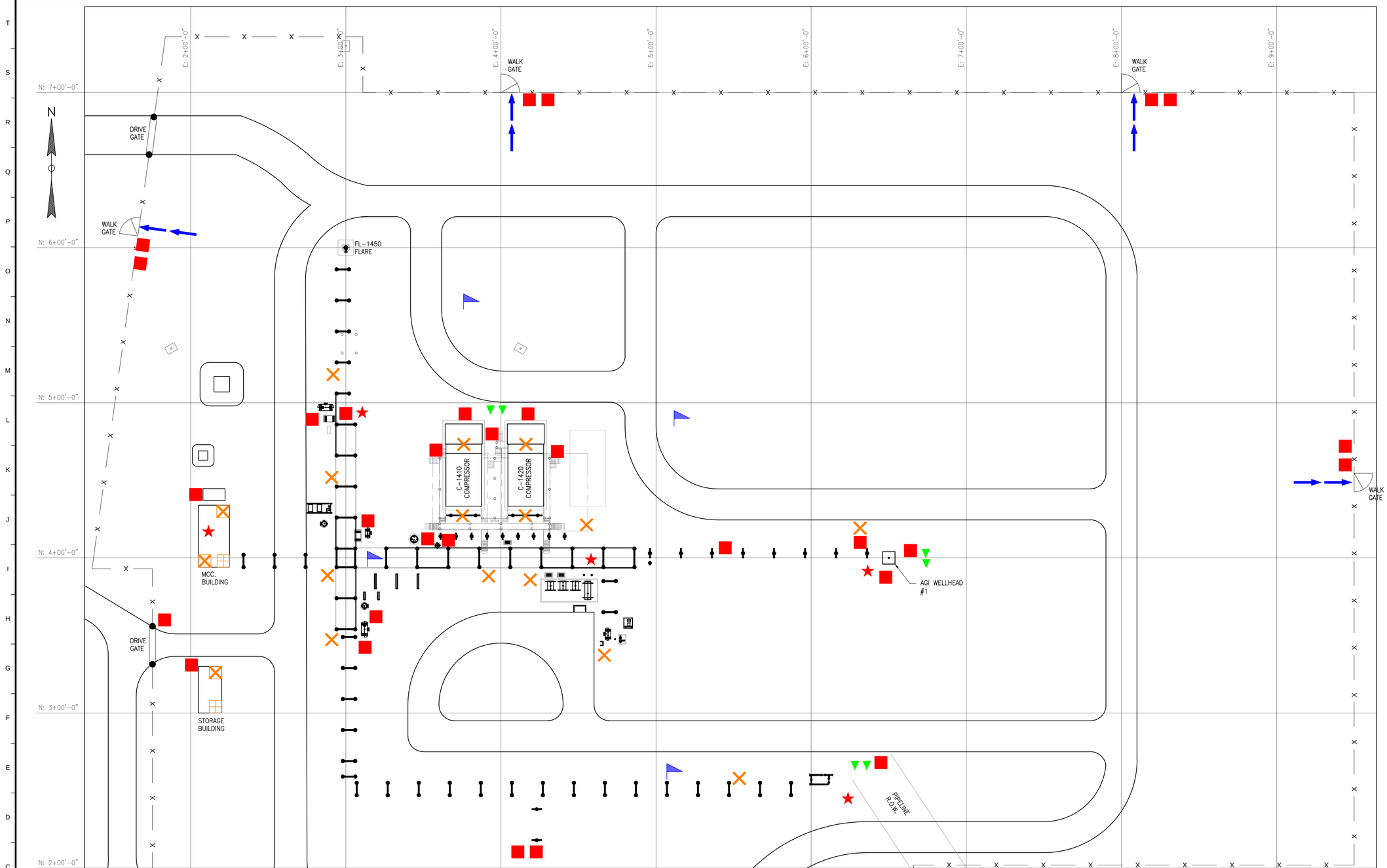
PREPARED BY
ZAP
ENGINEERING & CONSTRUCTION SERVICES, INC.
333 S. Allison Parkway Suite 100 Lakewood, CO 80226
(720) 529-4430 ◦ ZAPECS.com

ENG. RECORD	DATE
DRAWN BY: GT	02/07/13
CHECKED BY: JRE	02/14/13
APPROVED BY: JJH	02/14/13
PLOT SCALE: ANSI D	
SCALE: AS NOTED	

SAFETY EQUIPMENT LOCATION PLAN (OVERALL)

JOB NO. 12067

DRAWING NO. 12067-C02-1002 REV. 2



NOTE:

1. REFER TO VENDOR DRAWING FOR EQUIPMENT DETAILS.

LEGEND:

- FIRE EXTINGUISHER (30 # ANSUL)
- FIRE EXTINGUISHER (002)
- H2S
- ALARM STROBE
- MIN BREATHING AIR PACK
- CASCADE BREATHING AIR SYSTEM
- ESCAPE ROUTE
- PSD LOCATION
- FIRST AID KIT
- WIND SOCKS

SAFETY EQUIPMENT LOCATION PLAN

SCALE: 1/32"=1'-0"

FIGURE 3a
Linam Ranch AGI Facility
AGI #1 Detail

REFERENCE DRAWINGS	
NO.	TITLE

NO.	REVISION	BY	CHK	APVD	DATE
1	ISSUED FOR CONSTRUCTION	WBH	JJH	JJH	01/27/15
0	ISSUED FOR CONSTRUCTION	WSG	JJH	JJH	08/12/14

dcp Midstream.

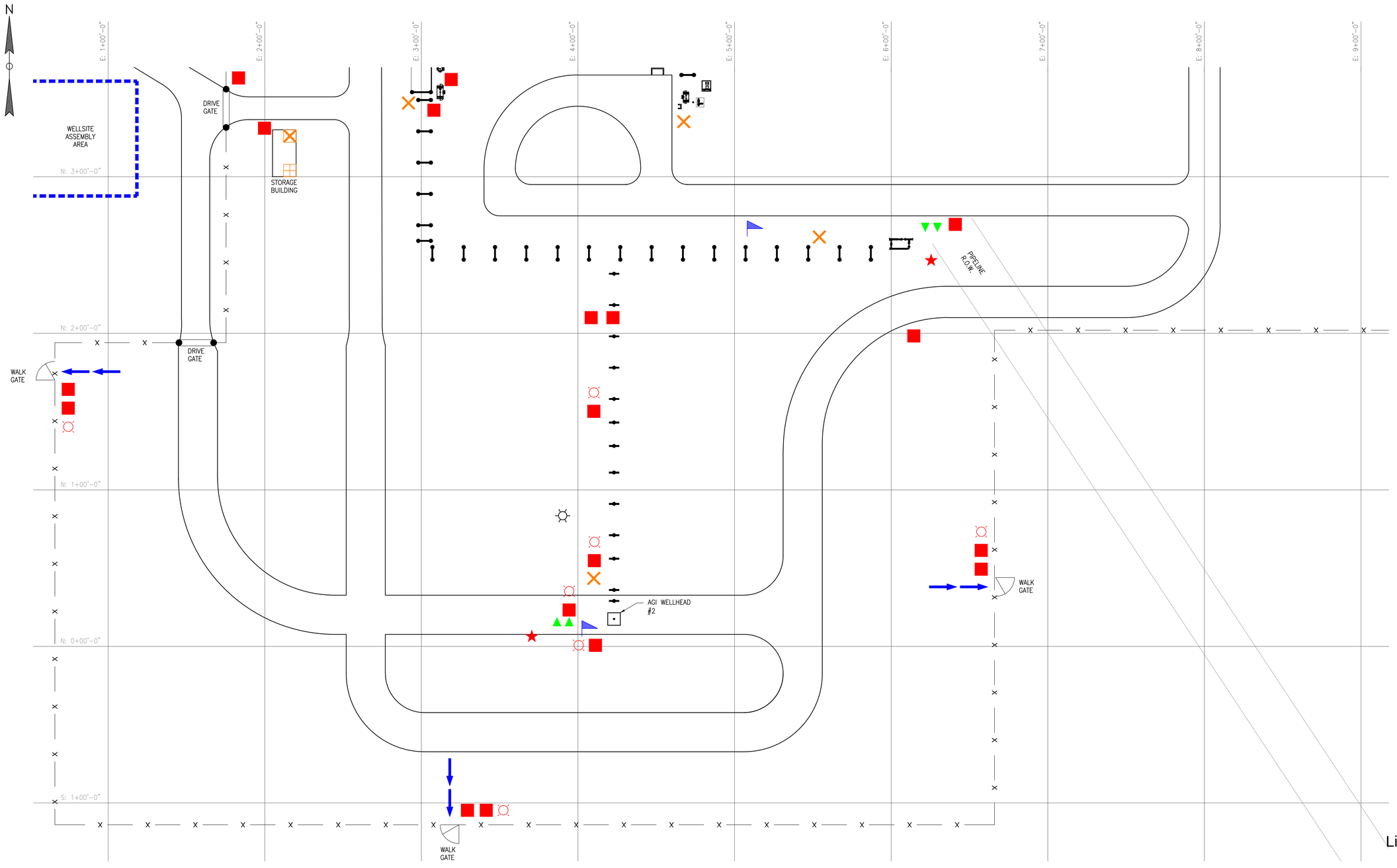
PREPARED BY
ZAP
ENGINEERING & CONSTRUCTION SERVICES, INC.
333 S. Allison Parkway Suite 100 Lakewood, CO 80226
(720) 529-4430 ◦ ZAPECS.com

ENG. RECORD		DATE
DRAWN BY:	GT	02/07/13
CHECKED BY:	JRE	02/14/13
APPROVED BY:	JJH	02/14/13
PLOT SCALE:	ANSI D	
SCALE:	AS NOTED	

SAFETY EQUIPMENT LOCATION PLAN
(ENLARGED PLAN – NORTH)

JOB NO. 12067

DRAWING NO. 12067-C02-1003 REV. 1



NOTE:

1. REFER TO VENDOR DRAWING FOR EQUIPMENT DETAILS.

LEGEND:

- FIRE EXTINGUISHER (30 # ANSUL)
- FIRE EXTINGUISHER (002)
- H2S
- ALARM STROBE
- MIN BREATHING AIR PACK
- CASCADE BREATHING AIR SYSTEM
- ESCAPE ROUTE
- PSD LOCATION
- FIRST AID KIT
- WIND SOCKS

FIGURE 3b
Linam Ranch AGI Facility
AGI #2 Detail

SAFETY EQUIPMENT LOCATION PLAN

SCALE: 1/32"=1'-0"

REFERENCE DRAWINGS		NO.	REVISION	BY	CHK	APVD	DATE
NO.	TITLE						
		2	ISSUED FOR CONSTRUCTION	WBH	JJH	JJH	01/27/15
		1	ISSUED FOR CONSTRUCTION	AS	JTS	JJH	10/3/14
		0	ISSUED FOR CONSTRUCTION	WSG	JJH	JJH	08/12/14

dcp Midstream

PREPARED BY
ZAP
ENGINEERING & CONSTRUCTION SERVICES, INC.
333 S. Allison Parkway Suite 100 Lakewood, CO 80226
(720) 529-4430 ◦ ZAPECS.com

ENG. RECORD		DATE
DRAWN BY:	GT	02/07/13
CHECKED BY:	JRE	02/14/13
APPROVED BY:	JJH	02/14/13
PLOT SCALE:	ANSI D	
SCALE:	AS NOTED	

SAFETY EQUIPMENT LOCATION PLAN
(ENLARGED PLAN – SOUTH)

JOB NO. 12067

DRAWING NO. 12067-C02-1004 REV. 2

FIGURE 4
PHOTO OF FLASHING SIGN

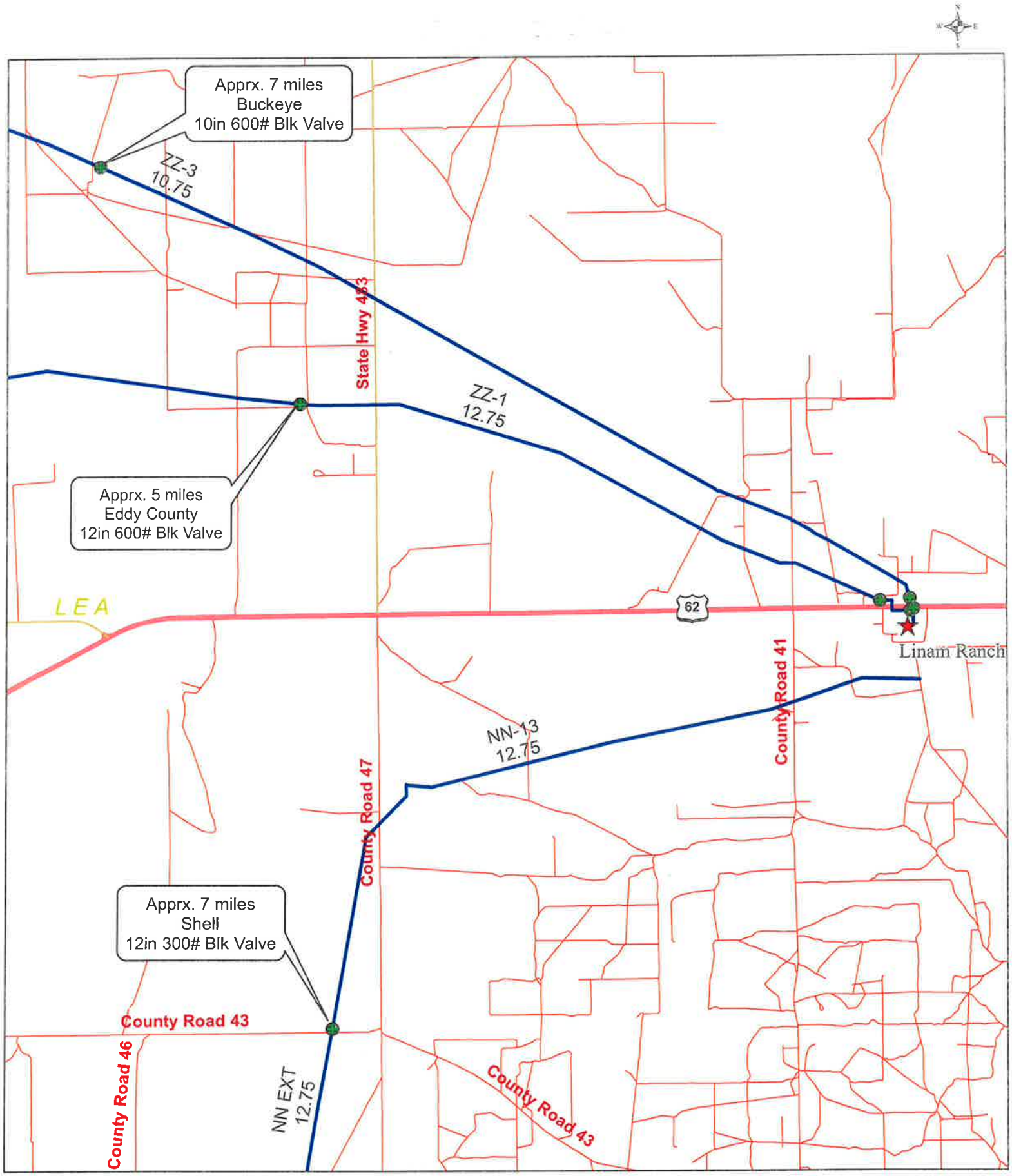


FIGURE 5

Block Valve Locations

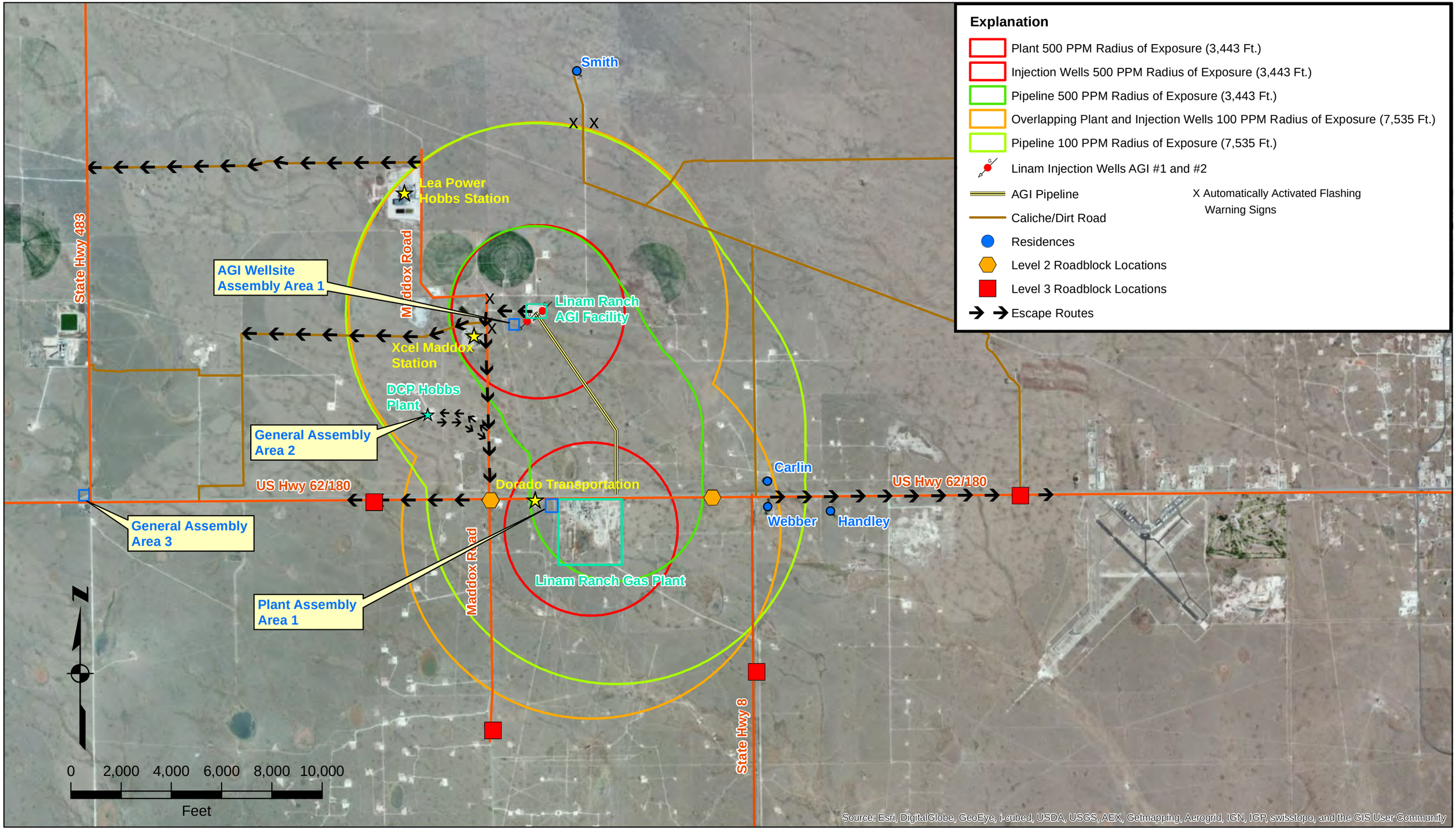


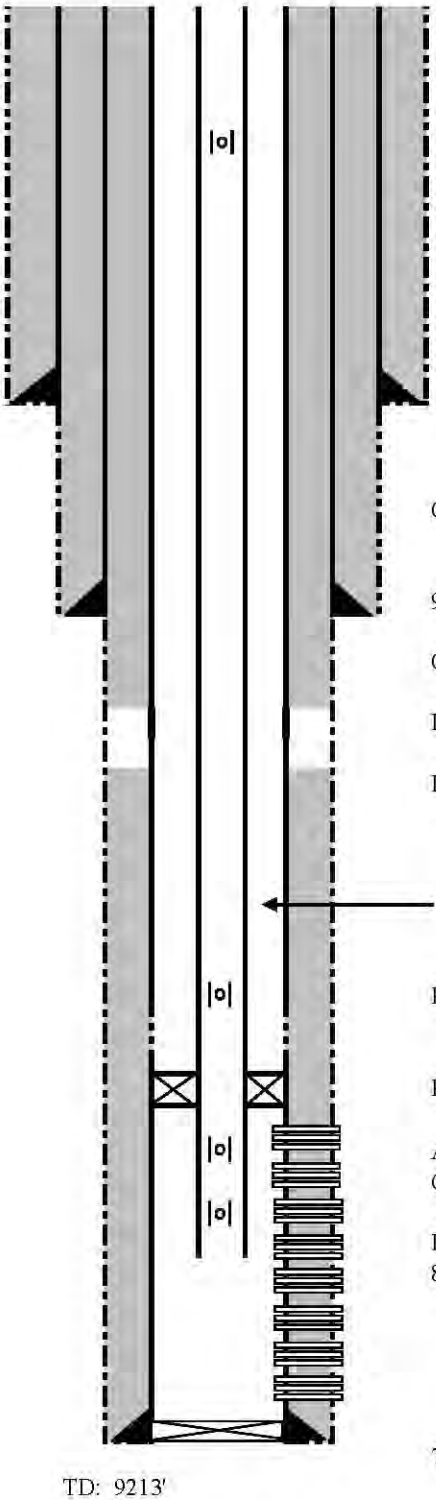
Figure 6: Linam Ranch Plant and AGI Facility
500 and 100 ppm ROE with Roadblock, Warning Sign Locations, Assembly Areas and Escape Routes

Figure 7

DCP Midstream
API # 30-025-38576

DCP LINAM AGI #1
WELLBORE SCHEMATIC

Location: 1980' FSL, 1980' FWL
STR 30-T18S-R37E
County, St.: LEA, NEW MEXICO



SURFACE CASING:
13 3/8", 48.00#/ft, H40, STC at 530'

INTERMEDIATE CASING:
9 5/8", 40.00#/ft, J55, LTC at 4212'

PRODUCTION CASING:
7", 26.00#/ft, L80, STC at 9200'
PBTD = 9137'

TUBING:
Subsurface Safety Valve at 250 ft
3 1/2", 9.2#/ft, L80, Hunting SLF at 8650'

PACKER:
Permanent Production Packer
Adjustable Choke
Check valve

PACKER FLUID (CORROSION INHIBITED):
Diesel w/ Cortron R-2525 (Corrosion inhibitor and oxygen scavenger)

PERFORATIONS:

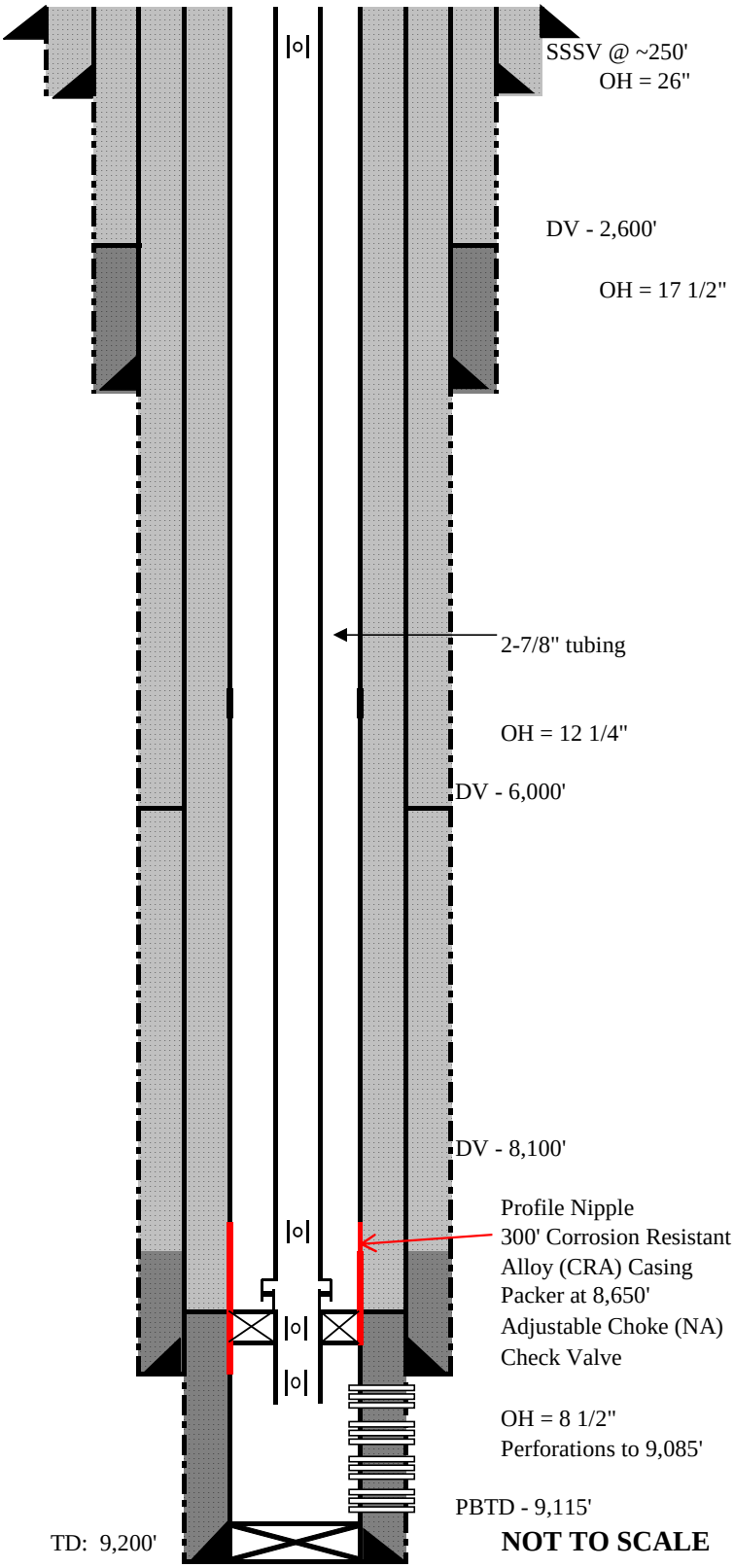
Primary Target	Secondary Target
Lower Bone Springs	Brushy Canyon
8710' - 8730'	5000' to 5300'
8755' - 8765'	(Not perforated)
8780' - 8795'	
8780' - 8890'	
8925' - 8930'	
8945' - 8975'	
8985' - 9000'	
9045' - 9085'	

GEOLEX INCORPORATED

FIGURE 8: DCP Linam AGI #2
WELL DESIGN

DCP Midstream
API # 30-025-34786

Location:	2120' FSL, 2120' FWL
STR	Section 30, T18S-R37E
County, St.:	Lea County, New Mexico



NOT TO SCALE

CONDUCTOR CASING
30" Conductor at 40'

SURFACE CASING
20", 94#/ft, J55, BTC at 500'

INTERMEDIATE CASING:
13 3/8", 54.5 #/ft, J55, STC at 3,200'

SECOND INTERMEDIATE CASING:
9 5/8", 40.0 #/ft, HCL--80, LTC at 7,500'
9 5/8", 47.0 #/ft, HCL--80, LTC at 8,600'

PRODUCTION CASING:
7", 26 #/ft, HCL-80, LTC to 8,500'
7", 26 #/ft, SM-2535, USF to 8,800'
7", 26 #/ft, HCL-80, USF to 9,200' TD

TUBING:
2-7/8", 6.5#/ft, L-80 TTS8 (Fiberglass Lined) Tb

ANNULAR FLUID:
Diesel Fuel from top of packer to surface

PACKER:
Permanent Production Packer @ 8,650'
Adj. Choke (if needed, placed in nipple below pa
Check valve (if needed, placed in nipple below p

PERFORATIONS:	
Primary Targets:	
8,710'-9,085'	

APPENDIX A

IMMEDIATE ACTION PLANS AND RESPONSE FLOW DIAGRAMS

LINAM RANCH PLANT

Linam Ranch Plant
Immediate Action Plan/Emergency Procedures

LEVEL 1 ACTIVATION

Activating Conditions:

- **H_2S of 10 ppm or greater detected at any fixed monitor.**

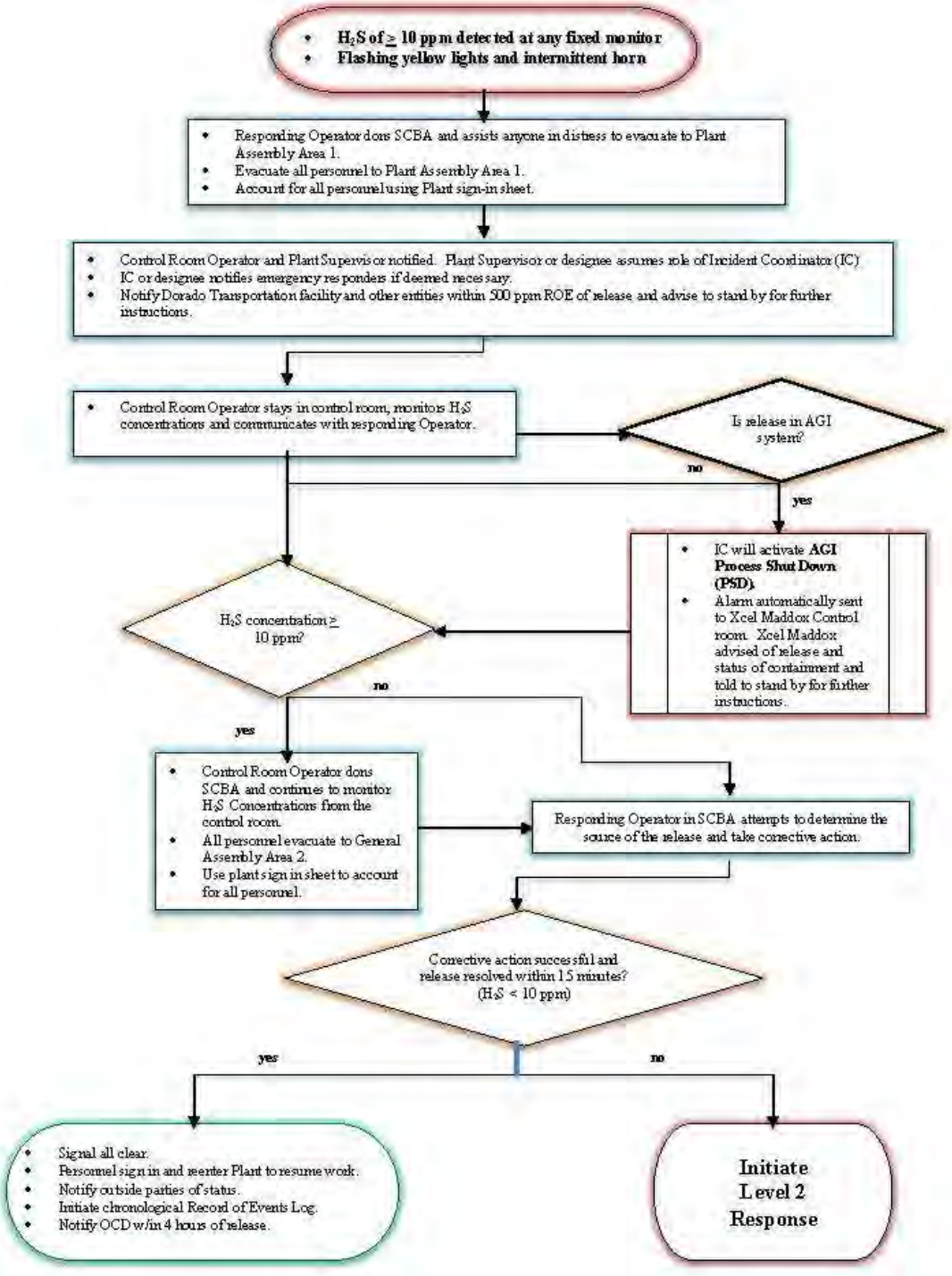
Alarms and Automated Activations:

- **Flashing yellow lights and an intermittent horn are activated at any fixed monitor that senses H_2S at 10ppm or greater. The horn and flashing yellow lights are redundant systems which function independently of one another so that should one system fail, the other would remain active. These systems incorporate backup battery capabilities as recommended in API RP 55 which insure their operation in the event of a power failure.**
- **All employees also wear personal monitors that sound an audible alarm at 10ppm H_2S or greater.**

Actions:

1. At the initial sound of an audible alarm or the sight of a flashing yellow beacon, assigned responding Operator(s) in the vicinity of the alarm will put on 30 minute Self-Contained Breathing Apparatus (SCBA), help any person in distress evacuate to Plant Assembly Area 1.
2. All other personnel in the Plant complex shall immediately evacuate the Plant using the designated evacuation routes to Plant Assembly Area 1 (see Figures 2 and 6).
3. At Plant Assembly Area 1, all personnel will be accounted for using the Plant sign in sheet.
4. Donning the SCBA, the responding Operator(s) will attempt to determine the source of the release and if possible take corrective actions.
5. Control Room Operator and Plant Supervisor shall be notified of the release. Plant Supervisor or designee will assume the role of IC. Control Room Operator will remain in the control room and monitor H_2S concentrations throughout the Plant.
6. If deemed necessary, Plant personnel as designated by the IC will contact local emergency response service providers (phone numbers provided in Appendix E) and advise them of the release and status of containment.
7. The Dorado Transportation Facility and any other entities located within the 500 ppm ROE (see Figure 6) will be notified by the IC or designee that a release is occurring and to stand by for further instructions (see Appendix E for phone numbers).
8. Control Room Operator will monitor H_2S levels and communicate with responding Operator(s).
9. Air quality will be monitored to insure it remains less than 10 ppm H_2S; if H_2S rises to 10 ppm or above, all personnel will move to General Assembly Area 2 via designated routes (see Figure 6).
10. If the concentration of H_2S in the control room reaches 10 ppm, the Control Room Operator will also put on a 30 minute SCBA.
11. If the release has occurred within the AGI system, the IC will activate the AGI process shut down (PSD), which shuts down and isolates the AGI compressors and equipment and routes the acid gas to the plant acid gas flare. Activating the AGI PSD automatically sends an alarm to the Xcel Maddox Control Room, which is continuously manned.
12. If corrective actions are successful, the release is resolved and the monitored H_2S levels in the Plant return to less than 10 ppm, the IC or designee will signal all clear, and personnel will be allowed to sign in and reenter the Plant to resume work.
13. The IC will initiate and maintain a Chronologic Record of Events Log (see Appendix H).
14. The Plant Supervisor or designee will contact the Oil Conservation Division (OCD) district office within 4 hours of a release that activates the plan. **Per 19.15.11.16 NMAC, notification of Contingency Plan implementation will be submitted to the OCD via form C-141 within 15 days of release.**
15. If the release is not resolved and H_2S levels continue to rise or remain above 10 ppm for 15 minutes, IC will initiate a Level 2 Response.

LINAM RANCH PLANT—LEVEL 1 RESPONSE



Linam Ranch Plant

LEVEL 2 ACTIVATION

Activating Conditions:

- **Corrective actions at Level 1 are unsuccessful;**
- **10 ppm of H_2S or greater is detected at any fixed monitor for greater than 15 minutes;**
- **20 ppm of H_2S or greater is detected at any fixed monitor.**

Alarm and Automated Activations:

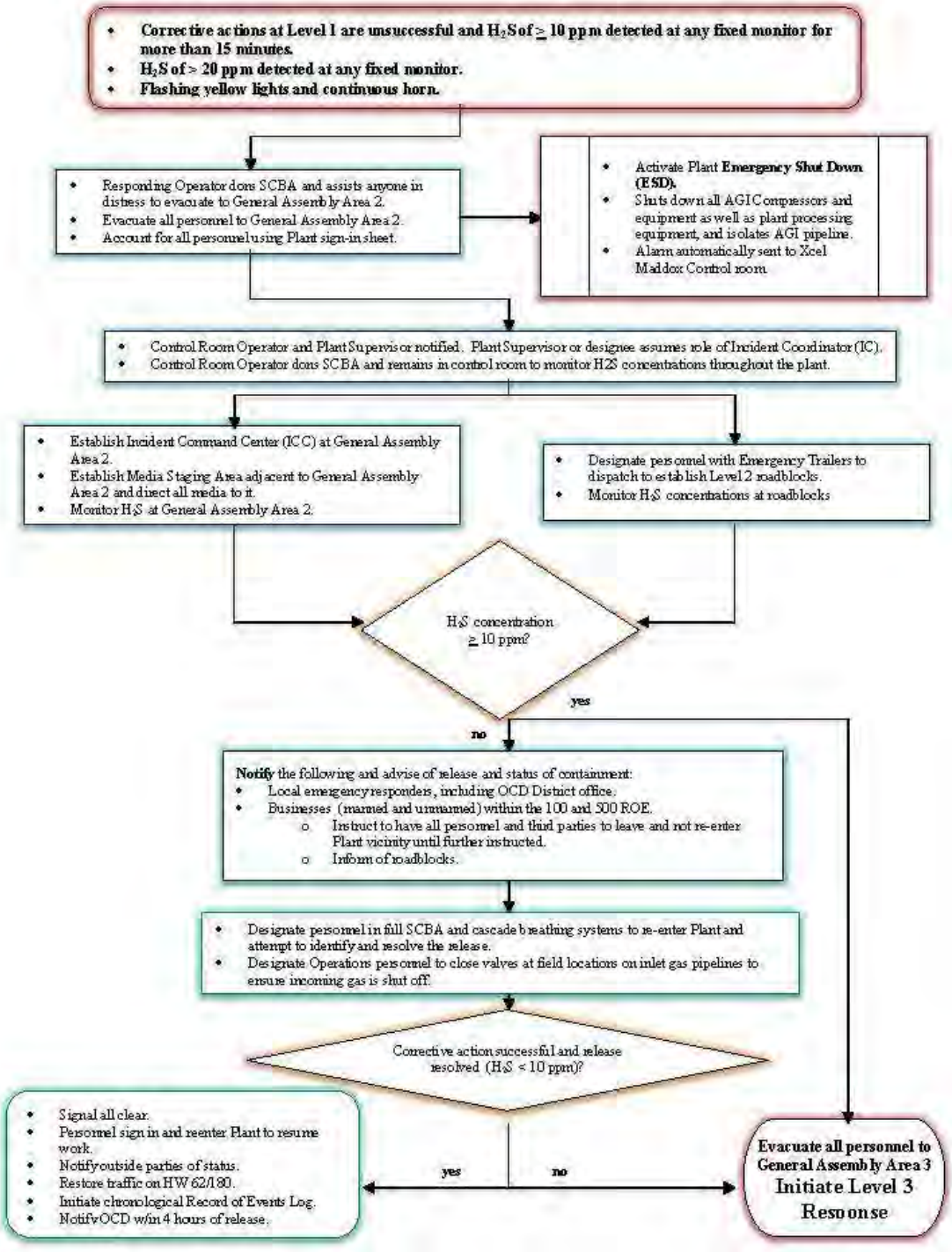
- **If 20 ppm of H_2S or greater is detected at a fixed monitor, a continuous horn and flashing yellow lights will occur. The horn and flashing yellow lights are redundant systems which function independently of one another so that should one system fail, the other would remain active. These systems incorporate backup battery capabilities as recommended in API RP 55 which insure their operation in the event of a power failure.**

Actions:

1. The responding Operator(s), donning the SCBA, will help any persons in distress to evacuate to General Assembly Area 2 (see Figure 6).
2. All personnel will be evacuated to General Assembly Area 2 via designated routes. Air quality will continue to be monitored for H_2S at General Assembly Area 2.
3. At General Assembly Area 2, all personnel will be accounted for using the Plant sign-in list.
4. Responding Operator will activate the Plant ESD shutting off all incoming and outgoing gas and natural gas liquid (NGL) product streams, shutting down all AGI compressors and equipment, as well as all plant processing equipment, and isolating AGI pipeline between Plant and AGI Facility. Activating the Plant ESD automatically sends an alarm to the Xcel Maddox control room.
5. The Plant Supervisor and the Control Room Operator will be notified. The Plant Supervisor or designee will assume the role of IC. The Control Room Operator will put on SCBA, remain in the control room and monitor H_2S concentrations throughout the Plant.
6. Incident Command Center (ICC) will be established at General Assembly Area 2.
7. A media staging area adjacent to General Assembly Area 2 will be established and all media will be directed to it.
8. IC will designate personnel with H_2S monitors and emergency trailers to be dispatched to establish Level 2 roadblocks and monitor for H_2S concentrations (see Figure 6).
9. Emergency Responders, local law enforcement and state agencies, including the OCD District Office (phone numbers provided in Appendix E) will be notified of the release and the status of containment by the IC or designee.
10. Designated personnel will notify individuals, area businesses and producers within the 500 and 100 ppm ROE, both manned and unmanned (phone numbers provided in Appendix E), of the nature of the release and status of containment. All entities will be instructed to standby for further instruction and may be asked to evacuate or shelter in place, depending on wind conditions, etc. They will be instructed to immediately alert all company personnel, third party contractors and/or service companies working in the area and those imminently scheduled to work in the area, of the release. Those individuals will be instructed to immediately leave and not re-enter the Plant vicinity until further instruction. All shall be informed of the roadblocks on HW 62/180.
11. Re-entry will occur in full SCBA and cascade breathing air systems at the direction of the IC until IC determines problem has been resolved. Additional operations personnel may be directed by IC to close valves at field locations on inlet gas pipelines to ensure incoming gas is shut off.
12. If release is resolved and monitored levels of H_2S in the Plant are less than 10 ppm, IC or designee may authorize personnel to return to the Plant.
13. All businesses, individuals and producers previously notified will be informed that the release has been resolved and advised of the current monitored H_2S levels. Highway traffic will be restored.
14. The IC will initiate and maintain a Chronologic Record of Events log. (Appendix H)

15. The Plant Supervisor or designee will contact the Oil Conservation Division (OCD) district office within 4 hours of a release that activates the plan. **Per 19.15.11.16 NMAC, notification of Contingency Plan implementation will be submitted to the OCD via form C-141 within 15 days of release.**
16. If monitored H_2S levels at General Emergency Assembly Area 2 exceed 10 ppm, all personnel will evacuate to General Emergency Assembly Area 3 via designated route, and IC will initiate a Level 3 Response.
17. If H_2S concentrations reach 10 ppm at designated Level 2 roadblocks, initiate Level 3 response.
18. If the release is not resolved or H_2S levels continue to increase, the IC will initiate a Level 3 Response.

LINAM RANCH PLANT—LEVEL 2 RESPONSE



Linam Ranch Plant

LEVEL 3 ACTIVATION

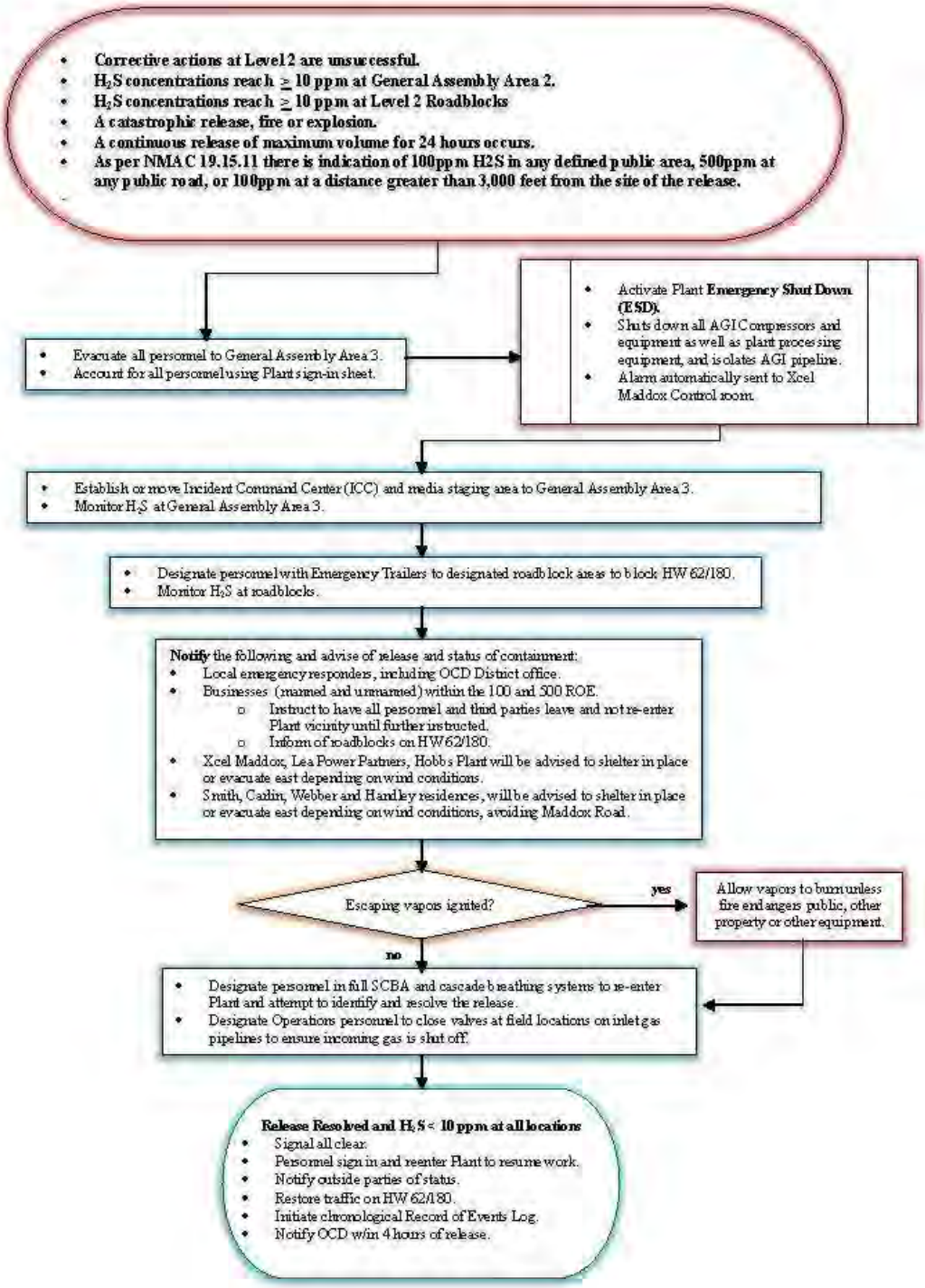
Activating Conditions:

- **Corrective actions at Level 2 are unsuccessful;**
- **H_2S concentrations reach 10 ppm or greater at Assembly Area 2;**
- **H_2S concentrations reach 10 ppm or greater at designated Level 2 Road Blocks;**
- **A catastrophic release, fire, explosion;**
- **A continuous release of maximum volume for 24 hours occurs;**
- **As per NMAC 19.15.11 there is indication of 100ppm H_2S in any defined public area, 500ppm at any public road, or 100ppm at a distance greater than 3,000 feet from the site of the release.**

Actions:

1. All personnel should be evacuated to and accounted for at General Assembly Area 3 using the Plant sign in sheet, and air quality will be monitored for H_2S concentrations (see Figure 6).
2. IC shall have activated the Plant ESD system on evacuation from Plant facilities. Activating the Plant ESD automatically sends an alarm to the Xcel Maddox control room.
3. Emergency Responders, local law enforcement and State agencies, including the OCD District Office will be notified of the release and status of containment (phone numbers provided in Appendix E).
4. The ICC and media staging area shall be established and/or moved to General Assembly Area 3.
5. IC will designate personnel with H_2S monitors and emergency trailers to move to the designated roadblock areas shown on ROE map and HW 62/180 will be blocked (see Figure 6).
6. Designated personnel will notify area businesses, individuals and producers within the 500 and 100 ppm ROE, both manned and unmanned (phone numbers provided in Appendix E), of the nature of the release and status of containment. All entities will be advised to shelter in place or evacuate, depending on wind conditions, etc. and will be instructed to immediately alert all company personnel, third party contractors and/or service companies working in the area and imminently scheduled to work in the area, of the release. Those individuals will be instructed to immediately leave and not re-enter the Plant vicinity until further notice. All shall be informed of the roadblocks on HW 62/180. Notifications will include but not be limited to:
   a) Xcel Maddox, DCP Hobbs Plant and Lea Power Partners facilities will be advised to shelter in place or evacuate west at the discretion of the IC depending on wind conditions, avoiding Maddox Road.
   b) Smith, Carlin, Webber and Handley residences will be advised to shelter in place or evacuate east at the discretion of the IC, depending on wind conditions etc., avoiding Maddox Road.
7. If escaping vapors have been ignited, the vapors should be allowed to continue to burn unless the fire endangers personnel, the public, other property, or other equipment.
8. Re-entry will occur in full SCBA and cascade breathing air systems at the direction of the IC until IC determines problem has been resolved. Additional operations personnel may be directed by IC to close valves at field locations on inlet gas pipelines to ensure incoming gas is shut off.
9. Once release is resolved and monitored levels of H_2S in the Plant are less than 10 ppm, IC or designee may authorize personnel to return to the Plant.
10. All businesses, individuals and producers previously notified will be informed that the release has been resolved and advised of the current monitored H_2S levels at the Plant. Highway traffic will be restored.
11. The IC will initiate and maintain a Chronologic Record of Events log. (Appendix H)
12. The Plant Supervisor or designee will contact the Oil Conservation Division (OCD) district office within 4 hours of a release that activates the plan. **Per 19.15.11.16 NMAC, notification of Contingency Plan implementation will be submitted to the OCD via form C-141 within 15 days of release.**

LINAM RANCH PLANT—LEVEL 3 RESPONSE



APPENDIX B

IMMEDIATE ACTION PLANS AND RESPONSE FLOW DIAGRAMS

AGI FACILITY

AGI Facility
Immediate Action Plan/Emergency Procedures

LEVEL 1 ACTIVATION

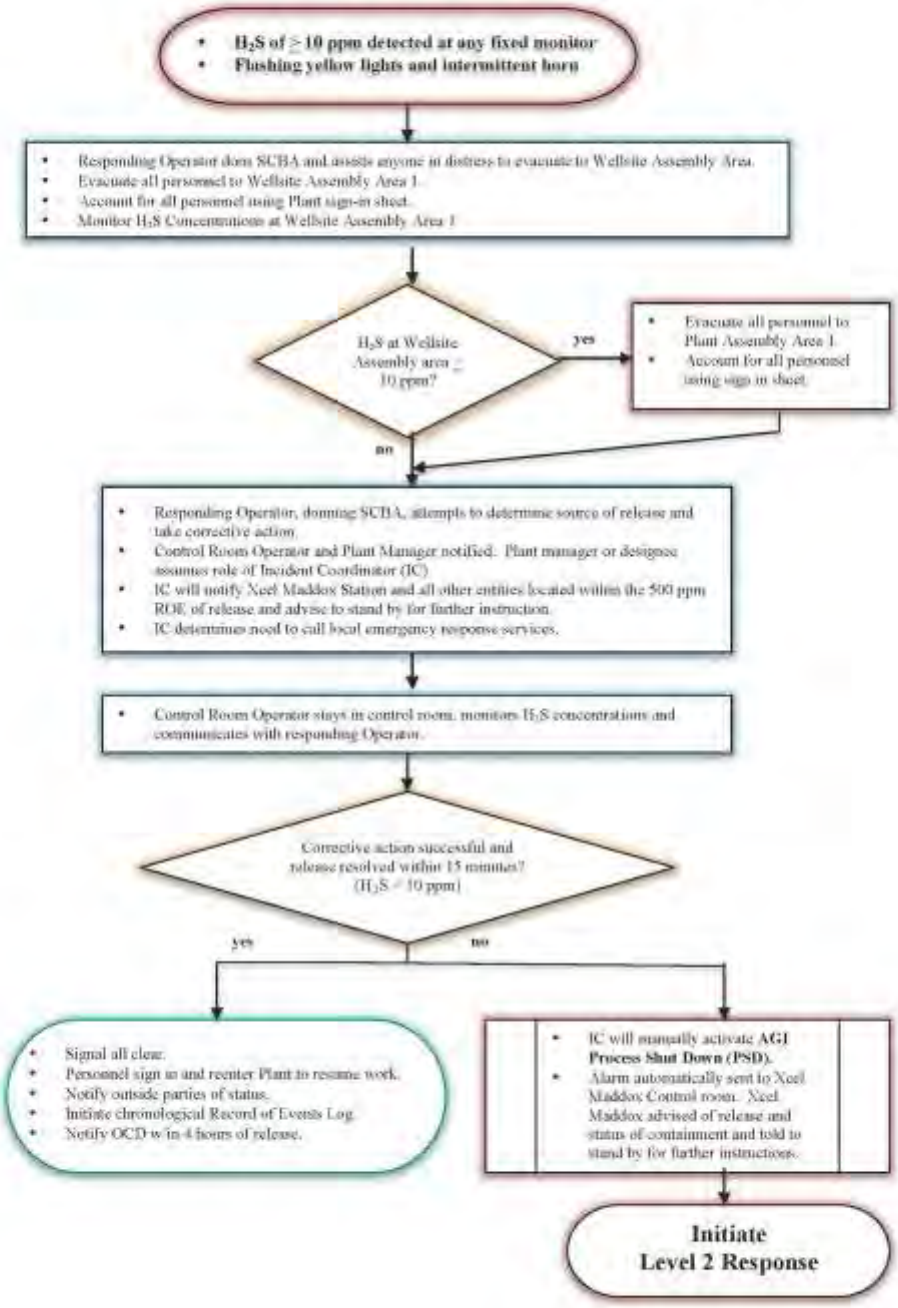
Activating Conditions/Alarms:

- **Any fixed monitor that senses H_2S at 10 ppm or greater.**
- **Flashing yellow lights and an intermittent horn are activated at**
- **The horn and flashing yellow lights are redundant systems which function independently of one another so that should one system fail, the other would remain active. These systems incorporate backup battery capabilities as recommended in API RP 55 which insure their operation in the event of a power failure.**
- **All employees also wear personal monitors that sound an audible alarm at 10 ppm H_2S or greater.**

Actions:

1. At the initial sound of an audible alarm or the sight of flashing yellow beacons, Responding operator shall put on a 30 minute Self Contained Breathing Apparatus (SBCA) and help any person in distress to evacuate to Wellsite Assembly Area (see Figure 6).
2. All personnel at the AGI Facility shall immediately evacuate the using the designated evacuation routes to the Wellsite Assembly Area (see Figure 6).
3. At the Wellsite Assembly Area, all personnel will be accounted for using the sign in sheet.
4. Air quality at the Wellsite Assembly area will be monitored to insure it remains less than 10 ppm H_2S; if it rises to 10 ppm H_2S, all personnel will move to General Assembly Area 2 (see Figure 6).
5. The Linam Plant Control Room Operator and Plant Supervisor shall be notified of the release. Plant Supervisor or designee will assume the role of IC. Control Room Operator will monitor H_2S levels and communicate with IC.
6. Donning SCBA, responding Operator(s) will re-enter the AGI Facility, to determine the source of the release and take corrective action if possible.
7. If deemed necessary, local emergency response service providers (phone numbers provided in Appendix E) will be contacted by IC or designee and advised of the release and status of containment.
8. The Xcel Maddox Station and any other entities located within the 500 ppm ROE (see Figure 6) will be notified by the IC or designee that a release is occurring and to standby for further instructions (see Appendix E for phone numbers).
9. If the release is contained and the monitored H_2S levels at the AGI Facility are less than 10 ppm, the Plant Supervisor or his designee will signal all clear and personnel will be allowed to sign in and re-enter the AGI Facility to resume work. Priority will be given to restoring the AGI compressors and equipment to normal operations.
10. The IC will initiate and maintain a Chronologic Record of Events log. (Appendix H)
11. The Plant Supervisor or his designee will contact the Oil Conservation Division (OCD) district office within 4 hours of a release that activates the plan. **Per 19.15.11.16 NMAC, notification of Contingency Plan implementation will be submitted to the OCD via form C-141 within 15 days of release.**
12. If the Responding operator(s) are unsuccessful in containing the release and H_2S levels continue to rise, or remain above 10 ppm for 15 minutes, the IC will initiate Level 2 response and manually activate the AGI process shut down (PSD). PSD shuts down the AGI compressors and equipment, closes the pipeline and injection well isolation valves and depressurizes the AGI Facility equipment and piping to the AGI Facility flare. At Linam Ranch Plant, the acid gas stream from the amine system is routed to the plant acid gas flare.
13. When the AGI PSD is activated, an alarm is automatically sent to the Xcel Maddox control room. The Xcel Maddox control room is manned continuously and will receive an audible and visual signal on their DSC system of the DCP alarms.

AGI WELLSITE RELEASE—LEVEL 1 RESPONSE



AGI Facility

LEVEL 2 ACTIVATION

Activating Conditions:

- **Corrective actions at Level 1 are unsuccessful;**
- **A Wellsite perimeter monitor has reached 10 ppm H_2S;**
- **20 ppm of H_2S or greater is detected at an interior fixed monitor;**

Automated Activations:

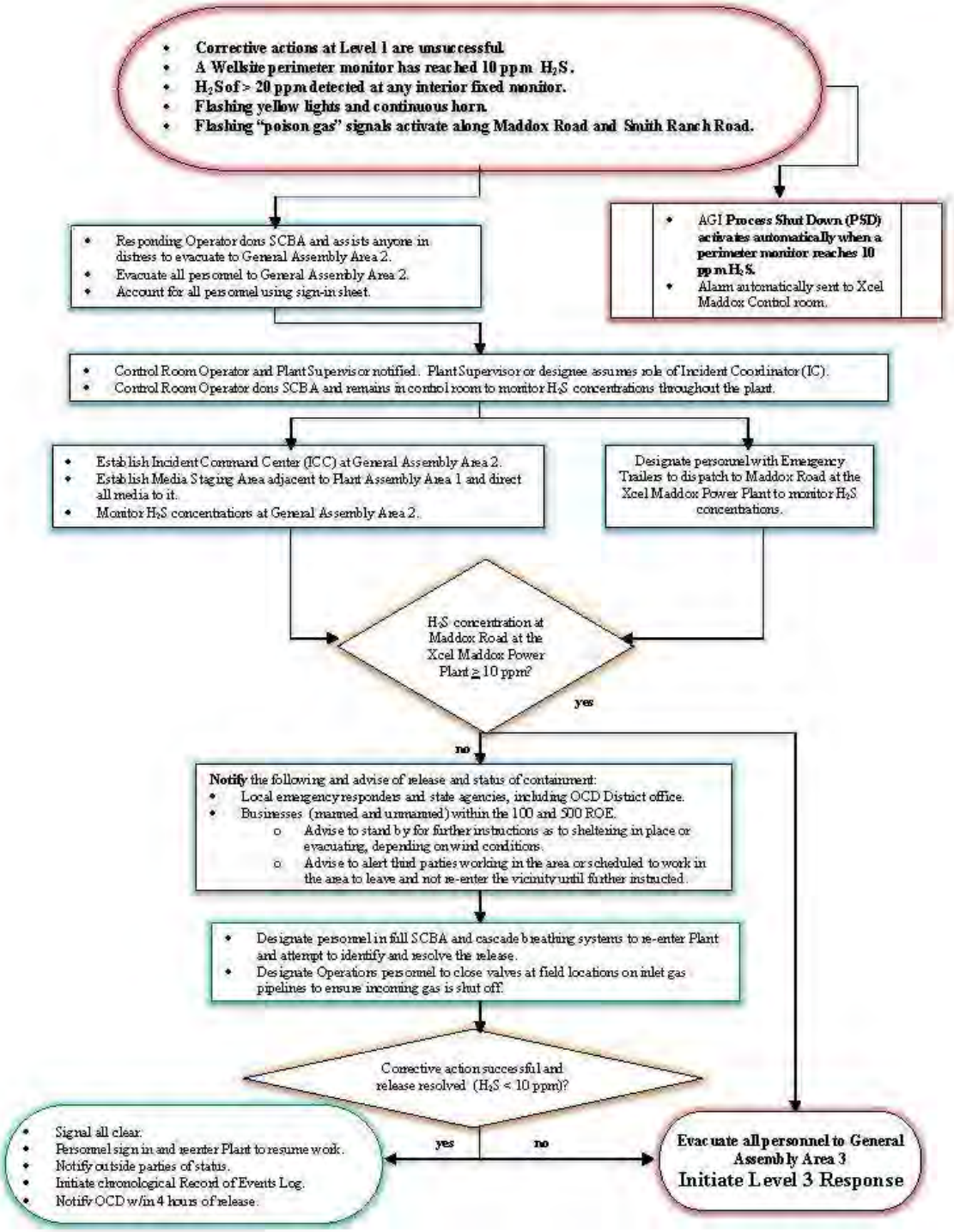
- **Continuous horn and flashing yellow beacons. The horn and flashing yellow lights are redundant systems which function independently of one another so that should one system fail, the other would remain active. These systems incorporate backup battery capabilities as recommended in API RP 55 which insure their operation in the event of a power failure.**
- **AGI PSD will be automatically activated when a perimeter monitor reaches 10 ppm H_2S.**
  - **Shutting down the compressor equipment, closes pipeline and injection well isolation valves and depressurizes the AGI Facility equipment and piping to the AGI Facility acid gas flare.**
  - **At Linam Ranch Plant, the acid gas stream from the amine treater will be routed to the Linam Ranch Plant acid gas flare.**
- **When the AGI PSD is activated an alarm, including an audible and visual signal on their DSC system of the DCP alarms, is automatically sent to the Xcel Maddox control room to alert them of the 10 ppm H_2S concentration at the DCP AGI Facility perimeter.**
- **Flashing poison gas signals are activated along Maddox Road and Smith Ranch Road to alert approaching vehicles and personnel of potential danger.**

Actions:

1. The responding Operator(s), donning SBCA will help any person in distress to evacuate to the General Assembly Area 2 along the designated routes. (See figures 2 and 5)
2. All personnel will be evacuated to General Assembly Area 2 along the designated routes and accounted for using the sign in sheets. (See figures 2 and 5)
3. The Linam Plant Control Room Operator and Plant Supervisor shall be notified of the release. Plant Supervisor or designee will assume the role of IC. Control Room Operator will monitor H_2S levels and communicate with IC.
4. Incident Command Center (ICC) will be established at the General Assembly Area 2 and air quality will be monitored for H_2S concentrations.
5. A media staging area adjacent to General Assembly Area 2 will be established, and all media will be directed to it.
6. IC will designate personnel with emergency trailers will to be dispatched to monitor H_2S concentrations on Maddox Road at the Xcel Maddox Power Plant.
7. Emergency responders, local law enforcement and State agencies, including the OCD District Office (phone numbers provided in Appendix E) will be notified of the release and the status of the containment by IC or designee.
8. Designated personnel will notify individuals, area businesses and producers within the 500 and 100 ppm ROE, both manned and unmanned (phone numbers provided in Appendix E), of the nature if the release and status of containment. All entities will be instructed to standby for further instruction and may be asked to evacuate or shelter in place, depending on wind conditions, etc. They will be instructed to immediately alert all company personnel, third party contractors and/or service companies working in the area and those imminently scheduled to work in the area of the release. Those individuals will be instructed to immediately leave and not re-enter the vicinity until further instruction.
9. Re-entry will occur in full SCBA and cascade breathing air systems at the direction of the IC until IC determines problem has been resolved. Additional operations personnel may be directed by IC to close valves at on AGI pipeline

10. If release is resolved and monitored levels of H_2S in the AGI Facility are less than 10 ppm, the Plant Supervisor or his designee will signal all clear and personnel will be allowed to sign in and re-enter the AGI Facility to resume work.
11. All businesses, individuals and producers previously notified will be informed that the release has been resolved and advised of the current monitored H_2S levels.
12. The IC will initiate and maintain a Chronologic Record of Events log. (Appendix H)
13. The Plant Supervisor or his designee will contact the Oil Conservation Division (OCD) district office within 4 hours of a release that activates the plan. **Per 19.15.11.16 NMAC, notification of Contingency Plan implementation will be submitted to the OCD via form C-141 within 15 days of release.**
14. If monitored H_2S levels rise to 10 ppm at General Assembly Area 2 or at the pipeline road crossing, IC will initiate a Level 3 response and evacuate to General Assembly Area 3.
15. If H_2S concentrations reach 10 ppm at the Maddox Road and Xcel Maddox Station.
16. If release is not resolved, a Level 3 response is initiated.

AGI FACILITY—LEVEL 2 RESPONSE



AGI Facility

LEVEL 3 ACTIVATION

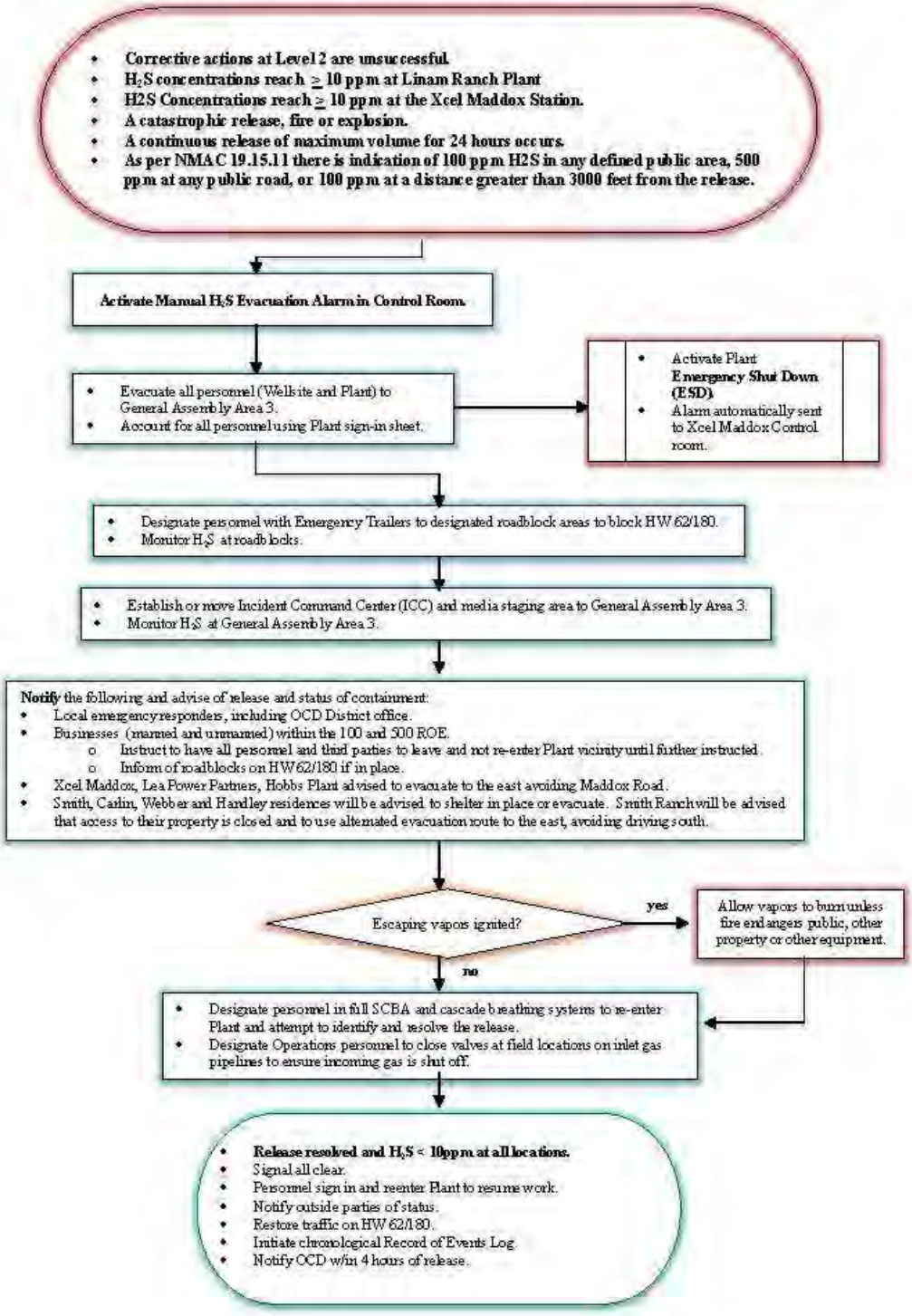
Activating Conditions:

- **Corrective actions at Level 2 are unsuccessful;**
- **H_2S concentrations reach 10 ppm or greater at the Linam Ranch Plant;**
- **H_2S concentrations reach 10 ppm or greater at the Xcel Maddox Station;**
- **H_2S detectors at pipeline road crossing indicate 10 ppm H_2S from an AGI Wellsite release;**
- **A catastrophic release, fire or explosion occurs.**
- **A continuous release of maximum volume for 24 hours occurs;**
- **As per NMAC 19.15.11 there is indication of 100 ppm H_2S in any defined public area, 500 ppm at any public road, or 100 ppm at a distance greater than 3,000 feet from the site of the release.**

Actions:

1. Activate manual H_2S evacuation alarm in Control Room.
2. All personnel at AGI Facility and Plant evacuate via the designated routes to General Assembly Area 3.
3. All personnel will be accounted for at General Assembly Area 3 using the sign in sheet, and air quality will be monitored for H_2S concentrations.
4. IC designates personnel with H_2S monitors and emergency trailers to move to the designated roadblock areas shown on ROE map (see Figure 6) and HW 62/180 will be blocked.
5. ICC and media staging area shall be established or moved to General Assembly Area 3. All media will be directed to the media staging area at General Assembly Area 3.
6. IC shall have activated the Plant ESD system on evacuation from Plant facilities. Activating the Plant ESD automatically sends an alarm to the Xcel Maddox control room.
7. Emergency responders, local law enforcement and State agencies, including the OCD District Office (phone numbers provided in Appendix E), will be notified of the release and status of containment.
8. Designated personnel will notify area businesses, individuals and producers within the 500 and 100 ppm ROE, both manned and unmanned (phone numbers provided in Appendix E), of the nature of the release and status of containment. All entities will be advised to shelter in place or evacuate, depending on wind conditions, etc. and will be instructed to immediately alert all company personnel, third party contractors and/or service companies working in the area and imminently scheduled to work in the area of the release. Those individuals will be instructed to immediately leave and not re-enter the vicinity until further notice. All will be informed of the roadblocks on HW 62/180. Notifications will include but are not limited to the following:
   a) Xcel Maddox and Lea Power Partners and DCP Hobbs Plant will be notified of the release and advised to shelter in place or evacuate to the west, avoiding Maddox Road.
   b) Smith, Carlin, Webber and Handley residences will be advised to evacuate or shelter in place. Smith Ranch will be advised that the access road to their property is closed and if to use an alternate evacuation road to the east, avoiding driving south.
9. If escaping vapors have been ignited, the vapors should be allowed to continue to burn unless the fire endangers personnel, the public other property or other equipment.
10. Re-entry will occur in full SCBA and cascade breathing air systems at the direction of the IC until IC determines problem has been resolved. Additional operations personnel may be directed by IC to close valves at field locations on inlet gas pipelines to ensure incoming gas is shut off.
11. Once release is resolved and monitored levels of H_2S in the Plant are less than 10 ppm, the Plant Supervisor will signal all clear and allow personnel to sign in and re-enter the Plant site and AGI Facility.
12. All businesses previously notified will be informed that the release has been resolved and advised of the current monitored H_2S levels at the AGI Facility and Linam Ranch Plant.
13. Highway traffic will be restored.
14. The IC will initiate and maintain a Chronologic Record of Events log. (Appendix H)
15. The Plant Supervisor or his designee will contact the Oil Conservation Division (OCD) district office within 4 hours of a release that activates the plan. **Per 19.15.11.16 NMAC, notification of Contingency Plan implementation will be submitted to the OCD via form C-141 within 15 days of release.**

AGI WELLSITE RELEASE—LEVEL 3 RESPONSE



APPENDIX C

IMMEDIATE ACTION PLANS AND RESPONSE FLOW DIAGRAMS

HIGHWAY 62/180 ROAD CROSSING

Highway 62/180 Road Crossing
Immediate Action Plan/Emergency Response Procedures

LEVEL 1 ACTIVATION

Activating Condition:

- **10 ppm H_2S or greater at a road crossing fixed monitor.**

Alarm and Automated Activations:

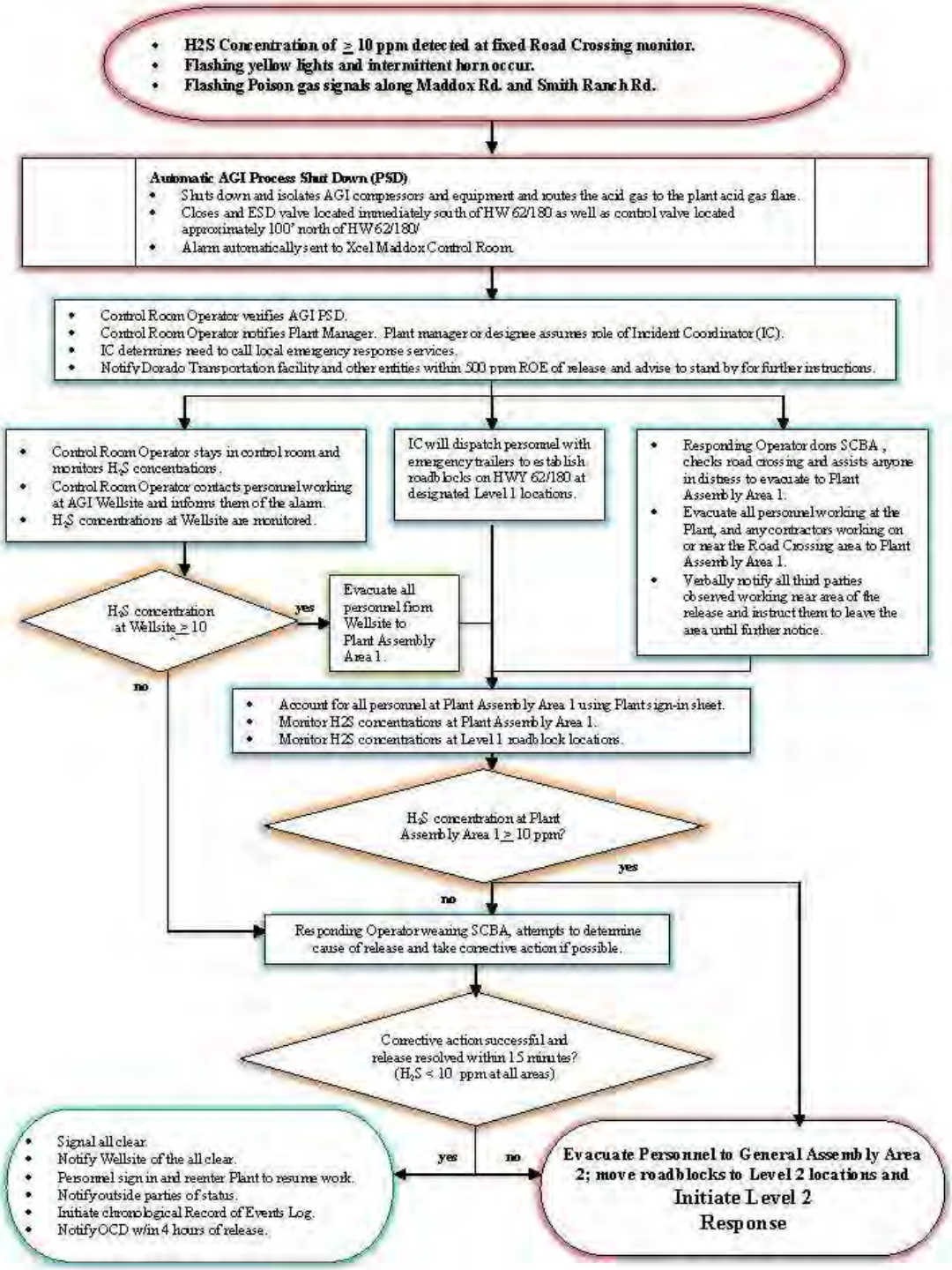
- **Flashing yellow light and intermittent horn occur. The horn and flashing lights are redundant systems which function independently of one another so that should one system fail, the other would remain active. These systems incorporate backup battery capabilities as recommended in API RP 55 which insure their operation in the event of a power failure.**
- **All personnel wear personal monitors that sound an audible alarm at 10 ppm H_2S or greater.**
- **AGI Process Shut Down (PSD) will be automatically activated when a fixed monitor at the Road Crossing reaches 10 ppm H_2S.**
  - **Shuts down and isolates the AGI compressors and equipment, and routes the acid gas to the plant acid gas flare.**
  - **Automatically close an ESD valve located immediately south of HW 62/180 as well as a control valve located approximately 100' north of HW 62/180. (See Figure 6)**
- **When the AGI PSD is activated, an alarm is automatically sent to Xcel Maddox control room.**

Actions:

1. Control Room Operator will remain in control room, verify AGI PSD and activate manually if necessary.
2. Control Room operator will remain in the control room and notify Plant Supervisor of release. Plant supervisor or designee will assume the role of IC. Control Room Operator monitors H_2S concentrations throughout the plant and communicates with IC.
3. Responding Operator will put on SCBA, check the road crossing, and assist any persons in distress to evacuate to Plant Assembly Area 1.
4. IC will designate personnel with emergency trailers to block HW 62/180 at designated Level 1 locations (see Figure 6).
5. All employees or contractors who may be working at the Plant or in the area near the road crossing shall evacuate to Plant Assembly Area 1. (See Figures 2 and 6*).*
6. Any third parties observed working near the road crossing will be advised verbally of the situation and instructed to leave the area and not return until further notice.
7. Control Room Operator will contact any personnel working at AGI Facility, alert them to road crossing alarm conditions, and direct them to monitor air quality (H_2S concentrations) using the AGI Facility fixed monitors. If H_2S levels at any AGI Facility fixed monitor increases to 10 ppm, all personnel working on there should evacuate to and Plant Assembly Area 1.
8. At the Plant Assembly Area 1 all personnel will be accounted for using the sign in sheet.
9. Air quality at Plant Assembly Area 1 and Level 1 roadblocks will be monitored for H_2S. If H_2S concentrations exceed 10 ppm, all personnel will be moved to General Assembly Area 2 along the designated route, road blocks will be moved to designated Level 2 locations, (see Figure 6) and a Level 2 Response will be initiated.
10. Once all personnel are evacuated, responding Operator, donning SCBA will attempt to determine source of leak and take corrective action if possible.
11. The Dorado Transportation facility and all other entities located within the 500 ppm ROE (see Figure 6) will be notified by the IC or designee that a release is occurring and to stand by for further instructions (see Appendix E for phone numbers).
12. If deemed necessary, local emergency response providers (phone numbers provided in Appendix E) will be contacted by IC or designee and advised of the release and status of containment.
13. If corrective actions are successful, release is resolved, and monitored H_2S levels in the Plant and AGI pipeline (including fixed monitors at HW 62/180 road crossing) return to less than 10 ppm, Plant Supervisor or designee will signal all clear and personnel will be allowed to sign in and re-enter the plant to resume work.

14. Personnel working at the Wellsite will be notified of the all clear.
15. The IC will initiate and maintain a Chronologic Record of Events log. (Appendix H)
16. The Plant Supervisor or his designee will contact the Oil Conservation Division (OCD) district office within 4 hours of a release that activates the plan. **Per 19.15.11.16 NMAC, notification of Contingency Plan implementation will be submitted to the OCD via form C-141 within 15 days of release.**
17. If Level 1 release is not resolved and H_2S levels continue to increase, initiate Level 2 Response.

ROAD CROSSING—LEVEL 1 RESPONSE



Highway 62/180 Road Crossing

LEVEL 2 ACTIVATION

Activating Conditions:

- **Level 1 corrective actions are unsuccessful;**
- **More than one AGI pipeline fixed monitor reaches 10 ppm H_2S;**
- **Any fixed monitor at road crossing reaches 20 ppm H_2S or greater;**
- **Any one of the AGI pipeline fixed monitors reaches 20 ppm H_2S**

Alarms and Automated Activations:

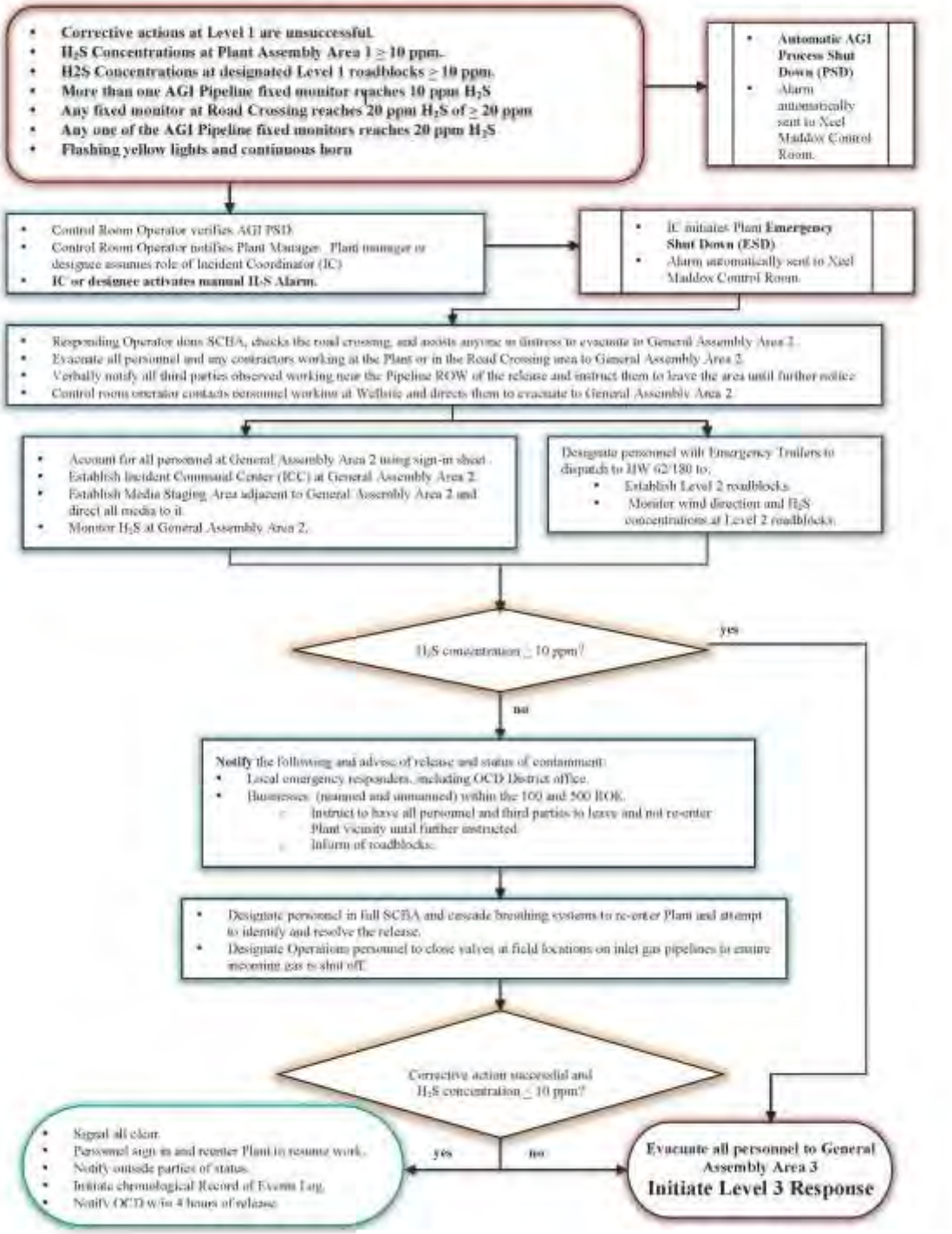
- **Flashing yellow light and continuous horn occur. The horn and flashing lights are redundant systems which function independently of one another so that should one system fail, the other would remain active. These systems incorporate backup battery capabilities as recommended in API RP 55 which insure their operation in the event of a power failure.**
- **All personnel wear personal monitors that sound an audible alarm at 10 ppm H_2S or greater.**
- **AGI Process Shutdown (PSD) will be automatically activated when a fixed monitor at the Road Crossing reaches 10 ppm H_2S.**
    - **Shuts down and isolates the AGI compressors and equipment, and routes the acid gas to the plant acid gas flare.**
    - **Automatically close an ESD valve located immediately south of HW 62/180 as well as a control valve located approximately 100' north of HW 62/180. (See Figure 6)**
    - **Activating AGI PSD automatically sends an alarm to Xcel Maddox control room.**
- **Plant Emergency Shut Down (ESD)**
    - **Shuts off all incoming and outgoing gas and NGL product streams.**
    - **Shuts down all AGI compressors and equipment as well as plant processing equipment.**
    - **Isolates AGI pipeline between Plant and AGI Facility.**
    - **Activating Plant ESD automatically sends an alarm to the Xcel Maddox control room.**

Actions:

1. Control Room operator will remain in the control room, verify AGI PSD and activate manually if necessary.
2. Control room operator will notify Plant Supervisor of release. Plant supervisor or designee will assume the role of IC.
3. IC or designee will activate continuous H_2S alarm and IC will activate Plant ESD.
4. The responding Operator, will put on SCBA, check road crossing, help any persons in distress, and evacuate any employees or contractors who may be working on or near the road crossing to General Assembly Area 2.
5. IC will designate personnel with emergency trailers to block HW 62/180 at designated Level 2 locations shown on ROE Map (see Figure 6).
6. All plant personnel will be evacuated to General Assembly Area 2 along the designated routes (see Figures 2 and 6).
7. Any third party visibly observed working near the pipeline will be advised verbally of the situation and instructed to leave the area and not return until further notice.
8. The Control Room Operator will contact personnel working at the AGI Facility and direct them to evacuate to General Assembly Area 2 along the designated routes (see Figure 6).
9. All personnel will be accounted for using the Plant sign-in list.
10. Incident Command Center will be established at General Assembly Area 2 as long as H_2S levels remain less than 10 ppm.
11. A media staging area adjacent to General Assembly Area 2 will be established, and all media will be directed to it.
12. Air quality at General Assembly Area 2 will continue to be monitored for H_2S.
13. Air quality will be monitored at the roadblocks for H_2S concentrations.
14. State agencies, including OCD District Office and emergency responders will be notified of the release and status of containment. (Phone numbers provided in Appendix E).

15. Designated personnel will notify individuals, area businesses and producers within the 500 and 100 ppm ROE, both manned and unmanned (phone numbers provided in Appendix E), of the nature of the release and status of containment. All entities will be instructed to standby for further instruction and may be asked to evacuate or shelter in place, depending on wind conditions, etc. They will be instructed to immediately alert all company personnel, third party contractors and/or service companies working in the area and those imminently scheduled to work in the area, of the release. Those individuals will be instructed to immediately leave and not re-enter the Plant vicinity until further instruction. All shall be informed of the roadblocks on HW 62/180.
16. Re-entry will occur in full SCBA and cascade breathing air systems at the direction of the IC until IC determines problem has been resolved.
17. Additional operations personnel may be directed by IC to close valves at field locations on inlet gas pipelines to ensure incoming gas is shut off.
18. If monitored H_2S levels at General Assembly Area 2 rise to 10 ppm, evacuate to General Assembly Area 3 along the designated routes (See Figure 6) and initiate Level 3 response
19. If H_2S levels at the designated Level 2 roadblocks rise to 10 ppm, move road blocks to designated Level 3 locations (See Figure 6) and initiate a level 3 response.
20. If release is resolved and monitored levels of H_2S in the Plant, the monitors at HW 62/180 road crossing, and the AGI Facility are less than 10 ppm, the IC or designee may authorize personnel to sign in and return to the Plant and AGI Facility.
21. Traffic will be restored on HW 62/180.
22. All businesses, public receptors and producers previously notified will be informed that the release has been resolved and advised of the current monitored H_2S levels.
23. The IC will initiate and maintain a Chronologic Record of Events log. (Appendix H)
24. The Plant Supervisor or his designee will contact the Oil Conservation Division (OCD) district office within 4 hours of a release that activates the plan. **Per 19.15.11.16 NMAC, notification of Contingency Plan implementation will be submitted to the OCD via form C-141 within 15 days of release.**
25. If the release is not resolved and/or H_2S levels continue to increase, initiate Level 3 Response.

ROAD CROSSING—LEVEL 2 RESPONSE



Highway 62/180 Road Crossing

LEVEL 3 ACTIVATION

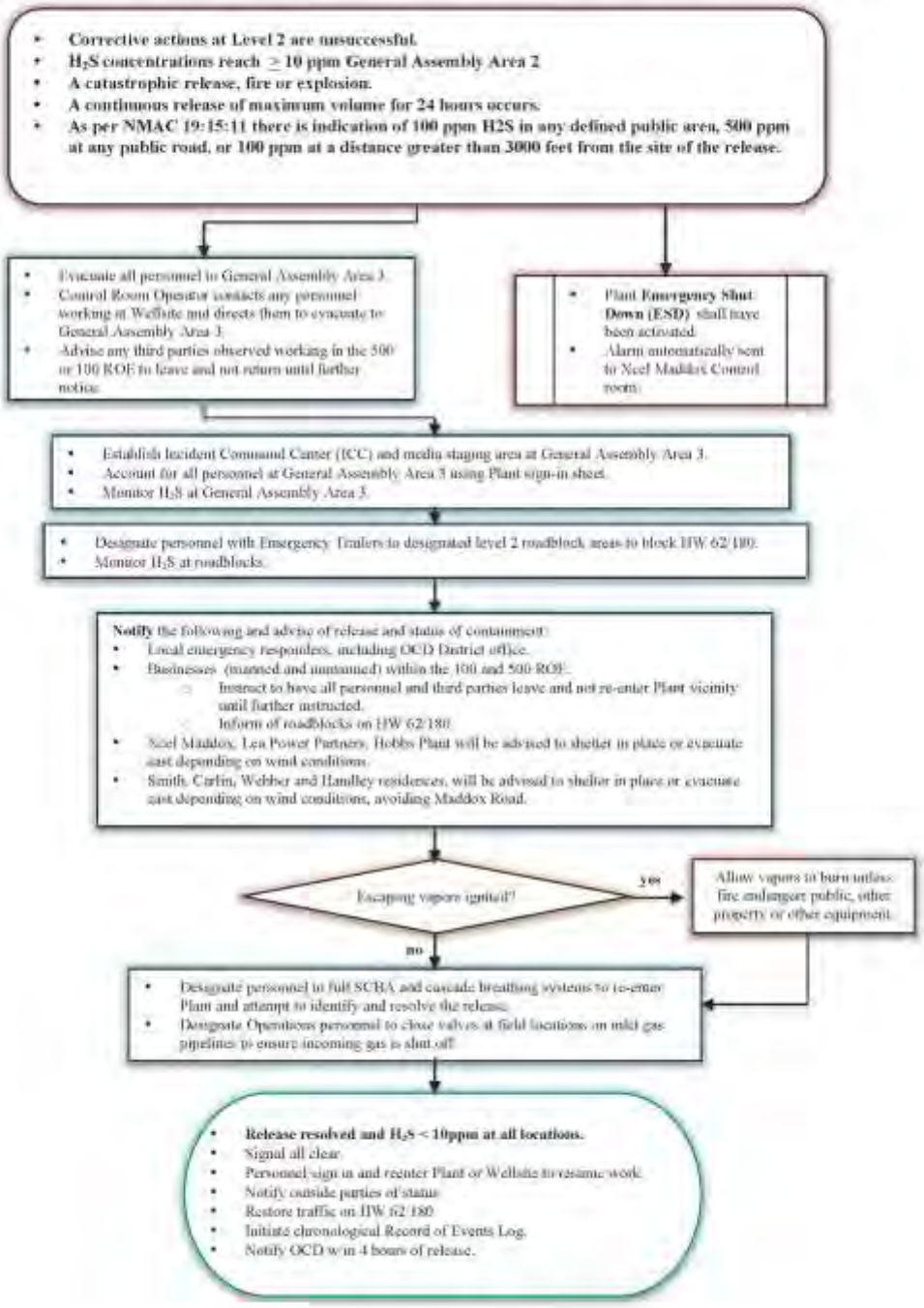
Alarms:

- **Corrective actions at Level 2 are unsuccessful;**
- **H_2S concentrations reach 10 ppm or greater at Assembly Area 2;**
- **There is a catastrophic release, fire, explosion;**
- **A continuous release of maximum volume for 24 hours occurs;**
- **As per NMAC 19.15.11 there is indication of 100ppm H_2S in any defined public area, 500ppm at any public road, or 100ppm at a distance greater than 3,000 feet from the site of the release.**

Actions:

1. IC or designee shall have activated the Plant ESD system on evacuation from Plant facilities. When Plant ESD is activated, an alarm is automatically sent to the Xcel Maddox control room.
2. All personnel will E be evacuated to General Assembly Area 3.
3. Control Room operator will contact any personnel working at the AGI Wellsite and direct them to evacuate to Emergency Assembly Area 3.
4. Any third parties observed working in the 500 or 100 ppm ROE area will be advised verbally of the situation and instructed to leave the area and not return until further notice.
5. ICC and media staging area and shall be established at General Assembly Area 3.
6. All personnel will be accounted for at General Assembly Area 3 and H_2S concentrations at General Assembly Area 3 will be monitored.
7. IC will designate personnel with emergency trailers to block HW 62/180 at designated level 2 locations. (See Figure 6) Personnel will monitor air quality at designated roadblocks**.**
8. Emergency Responders, local law enforcement, and state agencies, including the OCD District Office, will be notified of the release and status of containment. (Phone numbers listed in Appendix E).
9. Designated personnel will notify area businesses, individuals and producers within the 500 and 100 ppm ROE, both manned and unmanned (phone numbers provided in Appendix E), of the nature of the release and status of containment. All entities will be advised to shelter in place or evacuate, depending on wind conditions, etc. and will be instructed to immediately alert all company personnel, third party contractors and/or service companies working in the area and imminently scheduled to work in the area, of the release. Those individuals will be instructed to immediately leave and not re-enter the Plant vicinity until further notice. All shall be informed of the roadblocks on HW 62/180. Notifications will include but not be limited to:
   a) Xcel Maddox, DCP Hobbs Plant and Lea Power Partners facilities will be advised to shelter in place or evacuate west at the discretion of the IC depending on wind conditions, avoiding Maddox Road.
   b) Smith, Carlin, Webber and Handley residences will be advised to shelter in place or evacuate east at the discretion of the IC, depending on wind conditions etc., avoiding Maddox Road.
10. If escaping vapors have been ignited, they should be allowed to continue to burn unless the fire endangers personnel, the public, other property or other equipment.
11. Re-entry will occur in full SCBA and cascade breathing air systems at the direction of the IC until IC determines problem has been resolved.
12. Additional operations personnel may be directed by IC to close valves at field locations on inlet gas pipelines to ensure incoming gas is shut off
13. Once release is resolved and monitored levels of H_2S at the Plant, the monitors at the HW 62/180 road crossing, roadblocks, and Assembly Areas are less than 10 ppm, the Plant Supervisor or his designee may authorize personnel to sign in and return to the Plant and AGI Facility.
14. Traffic will be restored on Highway 62/180
15. All businesses, individuals and producers previously notified will be informed that the release has been resolved and advised of the current monitored H2S levels.
16. The IC will initiate and maintain a Chronologic Record of Events log. (Appendix H)
17. The Plant Supervisor or his designee will contact the Oil Conservation Division (OCD) district office within 4 hours of a release that activates the plan. **Per 19.15.11.16 NMAC, notification of Contingency Plan implementation will be submitted to the OCD via form C-141 within 15 days of release.**

ROAD CROSSING RELEASE—LEVEL 3 RESPONSE



APPENDIX D

IMMEDIATE ACTION PLANS AND RESPONSE FLOW DIAGRAMS

AGI PIPELINE LINAM RANCH PLANT

AGI Pipeline
Immediate Action Plan/Emergency Procedures

LEVEL 1 ACTIVATION

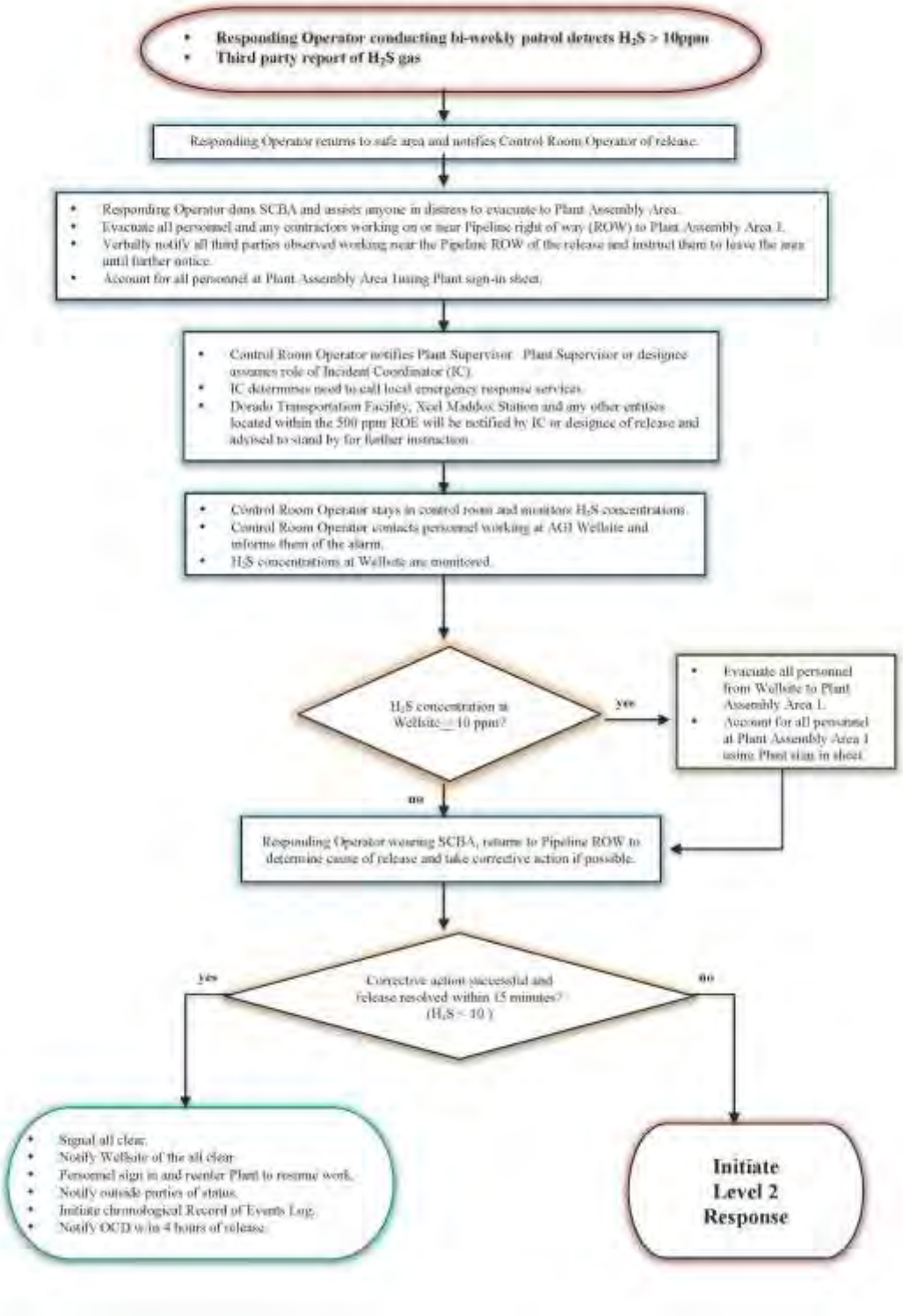
Activating Conditions/Alarms:

- **Operator conducting biweekly line patrol detects H_2S concentration of 10 ppm or greater;**
- **Third party reports H_2S gas leak.**

Actions:

1. Responding operator returns to safe area and notifies Control Room Operator of release
2. Responding operator dons SCBA and first helps any persons in distress to evacuate to Plant Assembly Area 1.
3. Evacuate any employees or contractors who may be working on or near the Pipeline right of way (ROW) to Linam Plant Assembly Area 1 along designated routes (see Figure 6).
4. Any third parties observed working near the pipeline ROW will be advised verbally of the situation and instructed to leave the area and not return until further notice.
5. All personnel will be accounted for using the sign in sheets.
6. Wearing SCBA, responding Operator will return to the Pipeline ROW and attempt to determine the source of the release and take corrective actions if possible.
7. Control Room Operator notifies Plant Supervisor of the release. Plant Supervisor or designee will assume the role of IC. Control Room Operator will remain in the control room and monitor H_2S concentrations throughout the Plant.
8. If deemed necessary, IC or designee will contact local emergency response service providers (phone numbers listed in Appendix E) and advise them of the release and status of containment.
9. The Dorado Transportation Facility and Xcel Maddox Station and any other entities located within the 500 ppm ROE (see Figure 6) will be notified by the IC or designee that a release is occurring and to standby for further instructions (see Appendix E for phone numbers).
10. Control Room Operator will contact any personnel working at AGI Facility, to inform them of the H_2S alarm on the pipeline, and direct them to monitor air quality (H_2S concentrations) using the AGI Facility fixed monitors.
11. If levels increase to 10 ppm at AGI Facility monitors, personnel will evacuate to Plant Assembly Area 1 along the designated routes (see Figure 6).
12. If corrective actions are successful, release is resolved and monitored H_2S levels on the pipeline and road crossing fixed monitors return to less than 10 ppm, Plant Supervisor or designee will signal all clear, and personnel will be allowed to sign in and resume work on the pipeline.
13. Personnel working at the AGI Facility will be notified of the all clear.
14. The IC will initiate and maintain a Chronologic Record of Events log. (Appendix H)
15. The Plant Supervisor or his designee will contact the Oil Conservation Division (OCD) district office within 4 hours of a release that activates the plan. **Per 19.15.11.16 NMAC, notification of Contingency Plan implementation will be submitted to the OCD via form C-141 within 15 days of release.**
16. If Level 1 release is not resolved within 15 minutes and H_2S levels continue to increase, initiate Level 2 Response.

AGI PIPELINE RELEASE—LEVEL 1 RESPONSE



AGI Pipeline

LEVEL 2 ACTIVATION

Activating Conditions/Alarms:

- **Level 1 corrective actions are unsuccessful;**
- **H_2S concentration is increasing above 10 ppm or is detected at 20 ppm;**
- **Pipeline leak is visible.**

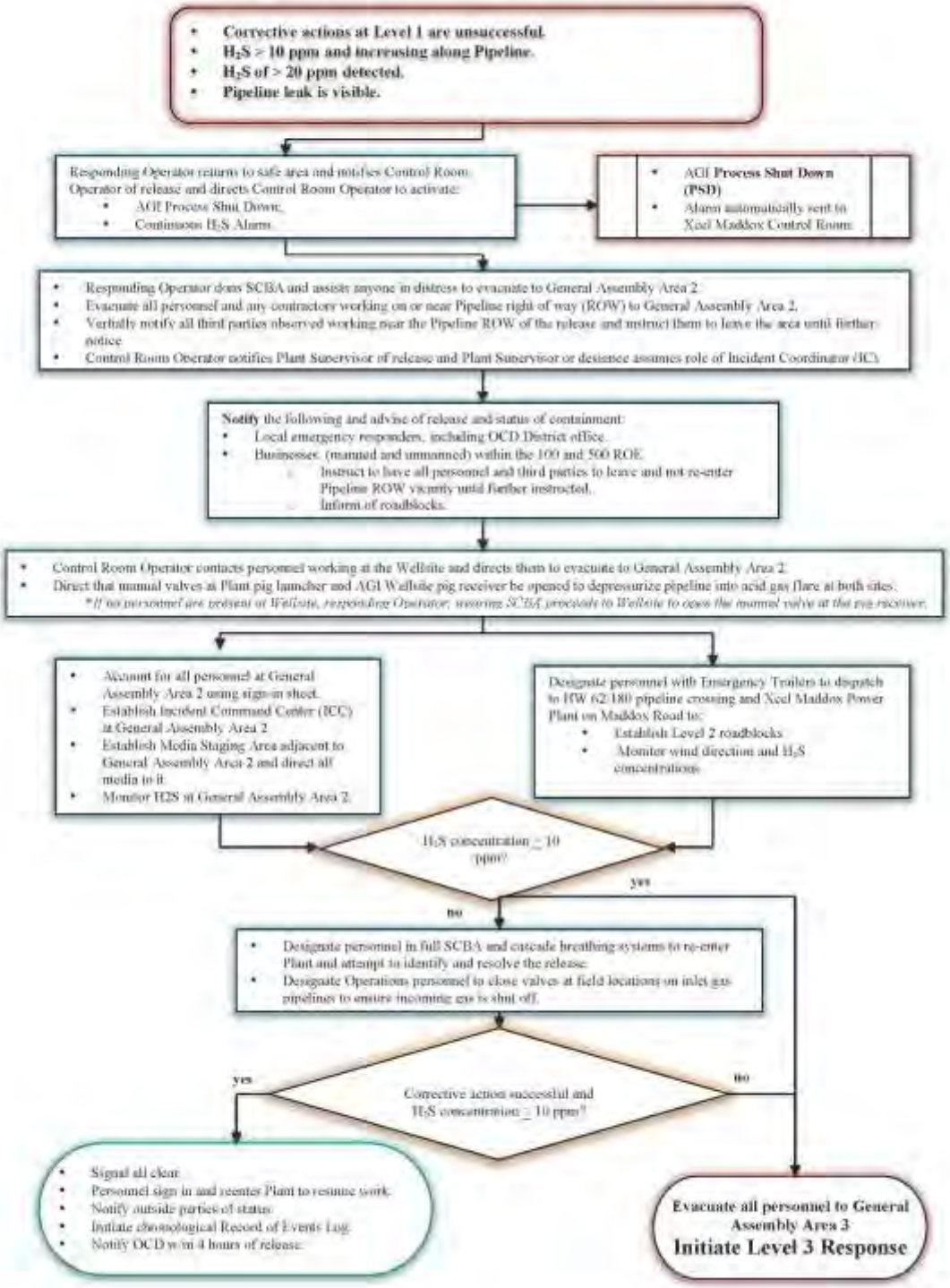
Actions:

1. Responding operator, on detecting H_2S equal to or greater than 10 ppm returns to safe area and immediately contacts control room operator to activate the AGI PSD which shuts down and isolates the AGI compressors and equipment, and routes the acid gas to the plant acid gas flare. When the AGI PSD is activated, an alarm is automatically sent to the Xcel Maddox control room.
2. Control Room Operator activates continuous H_2S alarm.
3. The responding Operator, upon donning SCBA, will check the pipeline ROW, help any persons in distress, and evacuate any employees or contractors who may be working on or near the pipeline ROW to General Assembly Area 2 (see Figure 6).
4. All personnel will evacuate to General Assembly Area 2 along designated routes (see Figure 6).
5. Any third party visibly observed working near the pipeline ROW will be advised verbally of the situation and instructed to leave the area and not return until further notice.
6. Control Room operator will remain in the control room and notify Plant Supervisor of release. Plant Supervisor or designee will assume the role of IC.
7. The Control Room Operator will contact personnel working at the AGI Facility and direct them to evacuate to General Assembly Area 2.
8. The control room operator will direct that the manual valves at both the Linam Ranch Plant pig launcher and the AGI Facility pig receiver be opened. The pipeline will be depressurized into the acid gas flares located at both sites. **Note:** *The responding operator, donning SCBA, may, if no personnel are present at the AGI Facility, proceed to the Facility, using H_2S monitors to insure safety to open the manual valve at the pig receiver.*
9. IC will designate personnel with H_2S monitors and emergency trailers to be dispatched to the HW 62/180 pipeline crossing and to the Xcel power plant on Maddox Road to establish Level 2 roadblocks and monitor H_2S concentrations (see Figure 6).
10. IC or designee will notify emergency responders, local law enforcement and state agencies, including OCD District Office (phone numbers listed in Appendix E) of the release and status of containment.
11. Designated personnel will notify individuals, area businesses and producers within the 500 and 100 ppm ROE, both manned and unmanned (phone numbers provided in Appendix E), of the nature of the release and status of containment. All entities will be instructed to standby for further instruction and may be asked to evacuate or shelter in place, depending on wind conditions, etc. They will be instructed to immediately alert all company personnel, third party contractors and/or service companies working in the area and those imminently scheduled to work in the area, of the release. Those individuals will be instructed to immediately leave and not re-enter the vicinity until further instruction. All shall be informed of the roadblocks on HW 62/180.
12. All personnel will be accounted for at General Assembly Area 2 using the plant sign-in list.
13. Incident Command Center (ICC) will be established at the General Assembly Area 2.
14. A media staging area adjacent to General Assembly Area 2 will be established, and all media will be directed to it.
15. Air quality will be monitored for H_2S concentrations at General Assembly Area 2.
16. If monitored H_2S levels at General Assembly Area 2 exceed 10 ppm, all personnel evacuate to General Assembly Area 3 using designated routes and initiate a Level 3 Response (see Figure 6).
17. If H_2S concentrations reach 10 ppm at roadblocks on HW 62/180 or at Xcel power plant on Maddox Road, a Level 3 response is initiated.
18. Re-entry will occur in full SCBA and cascade breathing air systems at the direction of the IC until IC determines problem has been resolved.
19. If release is resolved and monitored levels of H_2S in the Plant, the monitors at the HW 62/180 road crossings, the pipeline ROW, and the AGI Wellsite are less than 10 ppm, the IC or his designee may

authorize personnel to sign in and return to the Plant and AGI Wellsite. Third Parties evacuated from the ROW will be advised of the all clear.

20. Traffic will be restored on HW 62/180.
21. The IC will initiate and maintain a Chronologic Record of Events log. (Appendix H)
22. The Plant Supervisor or his designee will contact the Oil Conservation Division (OCD) district office within 4 hours of a release that activates the plan. **Per 19.15.11.16 NMAC, notification of Contingency Plan implementation will be submitted to the OCD via form C-141 within 15 days of release.**
23. If the release is not resolved and/or H_2S levels continue to increase, initiate Level 3 Response.

AGI PIPELINE RELEASE—LEVEL 2 RESPONSE



AGI Pipeline

LEVEL 3 ACTIVATION

Alarms:

- **Corrective actions at Level 2 are unsuccessful;**
- **H_2S concentrations reach 10 ppm or greater at Xcel Power Plant, Lea Power Partners, DCP Hobbs Plant, or HW 62/180, or any other public area or road;**
- **A catastrophic release, fire, or explosion occurs;**
- **A continuous release of maximum volume for 24 hours occurs;**
- **As per NMAC 19.15.11 there is indication of 100ppm H_2S in any defined public area, 500ppm at any public road, or 100ppm at a distance greater than 3,000 feet from the site of the release.**

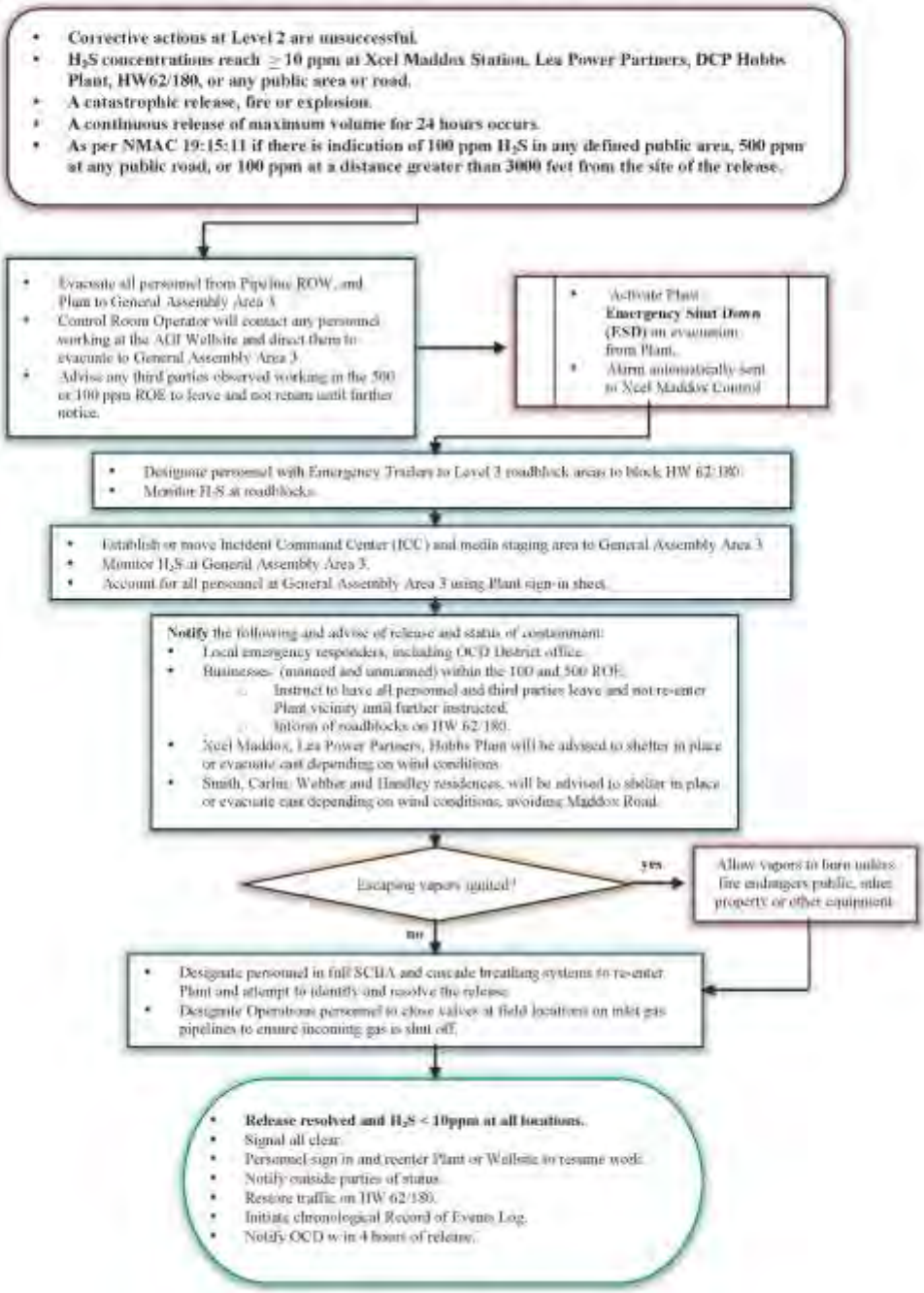
Actions:

1. Evacuate all personnel from Pipeline ROW and Plant to General Assembly Area 3 (see Figure 6).
2. Plant operators will activate the plant ESD system on evacuation from Plant facilities. When Plant ESD is activated, an alarm is automatically sent to the Xcel Maddox control room.
3. Control Room operator will contact any personnel working at the AGI Facility and direct them to evacuate to General Assembly Area 3 along designated routes (see Figure 6).
4. Any third parties observed working in the 500 or 100 ppm ROE will be advised verbally of the situation and instructed to leave the area and not return until further notice.
5. The Incident Command Center, media staging area shall be re-established at General Assembly Area 3.
6. All personnel will be accounted for at General Assembly Area 3 using the plant sign-in sheet.
7. H_2S concentrations at General Assembly Area 3 will be monitored.
8. IC will designate personnel with emergency trailers will to be dispatched to block HW 62/180 at designated locations shown on the ROE Map (see Figure 6). Personnel will monitor air quality at the designated roadblocks.
9. State agencies including the OCD District Office and Emergency Responders (phone numbers listed in Appendix E) will be notified of the release and status of containment.
10. Designated personnel will notify area businesses, individuals and producers within the 500 and 100 ROE, both manned and unmanned (phone numbers provided in Appendix E) , of the nature of the release and status of containment. All entities will be advised to shelter in place or evacuate depending on wind conditions etc., and will be instructed to immediately alert all company personnel, third party contractors and/or service companies working in the area and imminently scheduled to work in the area of the release. Those individuals will be instructed to immediately leave and not re-ender the Pipeline ROW vicinity until further notice. All shall be informed of the roadblocks on HW 62/180. Notifications will include but are not limited to the following:

a) Xcel Maddox Station, Lea Power Partners and DCP Hobbs Plant will be advised to shelter in place, or evacuate to the west at the discretion of the IC depending on wind conditions, avoiding Maddox Road.
b) Smith, Carlin, Webber and Handley residences will be notified and advised to shelter in place or evacuate to the east at the discretion of the IC depending on wind conditions, avoiding Maddox Road.

11. If escaping vapors have been ignited, they should be allowed to continue to burn unless the fire endangers personnel, the public other property or other equipment
12. Re-entry will occur in full SCBA and cascade breathing air systems at the direction of the IC until IC determines problem has been resolved.
13. Once release is resolved and monitored levels of H_2S at the Plant, the monitors at the HW 62/180 road crossing, road blocks and Assembly Areas are less than 10 ppm, the Plant Supervisor or his designee may authorize personnel to sign in and return to the Plant and AGI Wellsite.
14. Traffic will be restored on Highway 62/180.
15. All businesses, individuals and producers previously notified will be informed that the release has been resolved and advised of the current monitored H_2S levels.
16. The IC will initiate and maintain a Chronologic Record of Events log. (Appendix H)
17. The Plant Supervisor or his designee will contact the Oil Conservation Division (OCD) district office within 4 hours of a release that activates the plan. **Per 19.15.11.16 NMAC, notification of Contingency Plan implementation will be submitted to the OCD via form C-141 within 15 days of release.**

AGI PIPELINE RELEASE—LEVEL 3 RESPONSE



APPENDIX E
TELEPHONE NUMBERS
EMERGENCY CALL LIST

BUSINESSES AND PUBLIC RECEPTORS WITHIN THE ROE

NAME	ADDRESS	CONTACT	PHONE NUMBER
Xcel Maddox Station On border of ROE	9 Miles W of Hobbs on Hwy 62/180	Maddox Control	575-391-3410 or 575-391-3411
		Maddox Cell	575-631-4966
		Cunningham Control Room	575-391-3711 or 575-391-3710
		Cunningham Cell	575-631-4967
DCP Hobbs Plant	139 W. US Hwy 62-180 Hobbs, NM	Control Room	575-393-5826
Bill Carlin	9800 W. Carlsbad Hwy., Hobbs, NM		575-393-2766
L.S. Webber	9801 W. Carlsbad Hwy., Hobbs, NM		575-393-4784
Lea Power Partners – Hobbs Generating Station	98 N. Twombly Lane Hobbs, NM 88242	Control Room	575-397-6788 or 575-779-5037
		Roger Schnabel	575-397-6706 or 801-360-4189
Dorado Transportation	169 W. US Hwy 62-180 Hobbs, NM 88240	Richard Lentz Hobbs Michael Brandon Midland	575-399-4070 432-269-8120
El Paso	2316 Bender Blvd Hobbs, NM	Kenny Morrow Bill Havenan Tim Howell	575-492-2380 (o) 575-390-3716 (c) 806-592-4150 (o) 806-893-1479 (c) 575-492-3128 (o) 575-390-7980 (c)
Northern Natural	801 South Fillmore Suite 210 Amarillo, Tx 79101	Control Center Randy Lebeau	888-367-6671 (24 hr) 402-530-3501 (o) 806-679-3650 (c)
Targa	P.O. Box 1909 Eunice, NM 88231	James Lingnau	575-602-0251
Joe Handley (Located on border of ROE)	9201 W. Carlsbad Hwy., Hobbs, NM		575-397-6546
Randy & Naomi Smith	NNE of Maddox Road Hobbs NM (Sec 18, 18S,37E)		575-885-9011 575-361-1512 (cell)

PRODUCERS WITH WELLS WITHIN THE ROE

PRODUCER	OFFICE LOCATION	CONTACT	Office Phone	Contact Phone
Oxy USA	1017 W Stanolind Rd., Hobbs, NM 88240	Steve Bishop Herbie Bruton	575-397-8237	575-390-4784 432-634-6152
Bradley McInroe	P.O. Box 669, Levelland 79336	Bradley McInroe	806-894-1511	806-778-4705
Apache Corp.	800 W Broadway, Hobbs, NM 88240	Tony Chanault	575-394-2743	432-556-1774
Morexco, Inc.	306 W. Wall, Midland, TX 79701	Willie Dean	432-684-4344	575-631-6730
Alternate (Owner)		Deeg Becker		432-934-7042
Lanexco, Inc.	Jal, NM 88252	Robert Lansford	575-395-3056	
Lewis B. Burleson, Inc.	200 N. Loraine, Midland, TX 70701	Buddy Raymond	432-683-4747	575-631-9301
Alternate (Field Sup)		Wayne Jarvis		432-557-5559
XTO Energy, Inc.	200 N. Loraine, Midland, TX 70701	Jerry Parker	432-682-8873	575-441-1628
Chevron USA	Eunice, NM 88231	Larry Williams	575-394-2764	575-390-7165
Sahara Operating Co.	306 W Wall, Midland, TX 79701	Buddy Raymond	432-697-0967	575-631-9301
Mack Energy Corp.	11367 Lovington Hwy., Artesia, NM 88210	Mark Brewer	575-748-1288	575-748-7794
Westbrook Oil Corp.	1320 NW County Rd., Hobbs, NM 88240	Pat Westbrook	575-393-9714	
ConocoPhillips	1410 NW Co. Rd., Hobbs, NM 88240	Kenny Kidd	575-393-2153	575-391-3107
Southwest Royalties, Inc.	1708 N. Dal Paso, Hobbs, NM 88240	Al Perry	575-393-5577	575-390-0194

DCP COMPANY INTERNAL NOTIFICATIONS

NAME	TITIE	OFFICE	CELL
Linam Ranch Plant	Control Room	575-391-5792 575-391-5793 575-391-5794	575-802-5187
Jacob Strickland	Linam Ranch Plant Supervisor	575-394-5003	575-973-7317
John Cook	SENM South Asset Director	575-397-5597	432-238-8875
Russ Ortega	SENM North Asset Director	575-397-5597	575-390-7160
Tom Tomlinson	SENM Asset Safety Coordinator	575-391-5752	575-631-5532
Steve Harless	GM Operations SENM	575-397-5505	970-396-0333
Greg Smith	President Mid-Con and Permian Business Unit		720-480-4941
Glenn Bowhay	Safety Manager Permian Region	432-620-4009	432-425-7635
	DCP Gas Control – Houston, TX	800-435-1679	

EMERGENCY RESPONDERS

AGENCY	PHONE
EMERGENCY DISPATCH	911
HOBBS FIRE DEPARTMENT	575-397-9308
HOBBS AMBULANCE SERVICE	575-397-9308
NEW MEXICO STATE POLICE (Hobbs)	575-392-5588
LEA COUNTY SHERIFF'S OFFICE	575-396-3611
HOBBS-LEA REGIONAL MEDICAL CENTER	575-392-6581
LUBBOCK UNIVERSITY MEDICAL CENTER (UMC) (Level 1 Trauma Center)	806-775-8200
POISON CONTROL (Albuquerque)	800-222-1222
HELICOPTER SERVICES Southwest Medivac (Hobbs) AeroCare (Lubbock) Air Med (El Paso)	 800-971-4348 800-823-1991 915-772-9292

COUNTY AND LOCAL LAW ENFORCEMENT AND PUBLIC AGENCIES

AGENCY	PHONE NUMBER
OIL CONSERVATION DIVISON – DISTRICT Santa Fe Office District 1 Office, Lea County (Hobbs)	 505-476-3440 575-370-3186
LOCAL EMERGENCY PLANNING COMMITTEE (LEPC) Lea County	 575-396-8602
NEW MEXICO STATE POLICE (Hobbs)	575-392-5588
LEA COUNTY SHERIFF'S OFFICE	575-396-3611
NATIONAL RESPONSE CENTER (NRC)	800-424-8802
NEW MEXICO DEPARTMENT OF HOMELAND SECURITY & EMERGENCY MANAGEMENT (NMDHSEM)	505-476-9600
NEW MEXICO EMERGENCY RESPONSE COMMISSION CONTACT IN NMDHSEM	505-476-0617

APPENDIX F

WORST CASE SCENARIO AND RADIUS OF EXPOSURE (ROE) CALCULATIONS

WORST CASE SCENARIO

The basis for Linam Ranch Plant worst case calculations is 4,387 parts per million (ppm) or 0.44 mole percent of H_2S and a maximum daily (24 hour) processing volume of 225,000 MSCF. The basis for the AGI Facility and Pipeline worst case calculation is 185,434 ppm or 18.54 mole percent and a maximum daily processing volume of 5,323 MSCF. The ROE calculations assume an uncontrolled instantaneous release from the area near the amine contact towers, the center of the AGI Facility or any location along the pipeline between the Plant and AGI Facility. Calculations using the ROE formula pursuant to NMAC 19.15.1 1 are provided on the next page.

Plant
It should be noted that relative to the Plant ROE calculations the above escape rate, though used as worst case in this Plan, would be very unlikely due to the fact that the Plant has an ESD systems that when activated shuts down the Plant. ESD valves on the inlet pipelines to prevent gas from entering the Plant. In addition, each inlet pipeline has field located shutdown valves as follows:

- Eddy Co. Line – pipeline shutdown valve, capable of remote or manual closing, 300 ft. north of Hwy 62/180. Second pipeline shutdown valve, manual closing, 5 miles west of Linam Ranch Plant.
- Buckeye Line – pipeline shutdown valve, manual closing, 300 ft. north of Hwy 62/180. Second pipeline shutdown valve 7 miles northwest of Linam Ranch Plant.
- Shell 12' Line – pipeline shutdown valve, manual closing at south fence line of Linam Ranch Plant. Second pipeline shutdown valve 7 miles southwest of Linam Ranch Plant.

The secondary, "outside-of-the ROE" valve locations are shown with roads on Figure 5 of this Plan. These valves, when closed, shut off all gas from the gathering systems flowing into Linam Ranch Plant. These valves would be closed as directed by the IC in the event that Plant ESD valves failed to function properly.

AGI Facility and Pipeline
It should also be noted that although the above referenced escape rate has been utilized to calculate the AGI Facility and Pipeline ROE worst case scenario for purposes of this Plan, this escape rate for either the AGI Facility or pipeline would also be extremely unlikely because:

- The AGI has a PSD which, when activated, shuts down and isolates the AGI compressors and equipment and routes the acid gas safely to the plant acid gas flare.

- The Plant ESD systems which, when activated, shut down the Plant and close ESD valves on the inlet pipelines preventing all gas from entering the Plant.

RADIUS OF EXPOSURE CALCULATIONS

The formulas for calculating the two ROEs (as specified by the regulations) are as follows:

500-ppm RADIUS OF EXPOSURE CACULATION

$$X=[(0.4546)(H_2S \text{ conc.})(Q)]^{(0.6258)}$$

Where:
X = Radius of exposure in feet
H_2S Conc. = Decimal equivalent of mole or volume fraction of H_2S in the gaseous mixture
Q = Escape rate expressed in cubic feet per day (corrected for standard conditions of 14.73 psi absolute and 60 degrees Fahrenheit)

LINAM RANCH PLANT

For existing facilities or operations, the escape rate (Q) is the maximum daily rate of the gaseous mixture produced or handled or the best estimate thereof for the Linam Gas Plant. For purposes of this Plan the volume rate used for contingency planning purposes is an "escape rate" equal to the maximum inlet gas volume of 225,000 MCFD. The inlet gas volume at the Plant is somewhat variable and is continuously metered. The Plant records daily inlet gas volumes and prepares a daily volume report. The volume of 225,000 MCFD of inlet gas has been selected as the escape rate since it is the highest volume that the Plant would handle under its current operations and is considered worst case interpretation of the volume of gas.

As to H_2S concentration of the inlet gas, daily monitoring data indicates variable concentrations; 4,387 is used in this Plan as a worst case scenario, based on data gathered in 2014.

The calculation of worst case scenario has been done as follows:
Q = 225,000,000
H_2S conc = 4,387 ppm or 0.44 mole%

500 ppm RADIUS OF EXPOSURE CALCULATION

[(0.4546)*(H_2S concentration)*(gas volume (Q))] 0.6258
[(0.4546)*(4,387*.000001)*(225,000,000)] 0.6258

500-ppm ROE = 3,443 feet

100 ppm RADIUS OF EXPOSURE CALCULATION

[(1.589)*(H_2S concentration)*(gas volume (Q))] 0.6258
[(1.589)*(4,387*.000001)*(225,000,000)] 0.6258

100-ppm ROE = 7,535 feet

DCP Midstream

LP Plant Inlet - Linam Plant **ROE CALCULATIONS PURSUANT TO RULE 11**

If data is provided in mole% use calculator below for getting ppm

Enter Mole % in cell C5	Mole %	ppm
Convert mole% to ppm	0.43866	4386.6

If data is provided in mole fraction use calculator below for getting ppm

Enter Mole Fraction in cell C10	Mole Fraction	ppm
Convert mole fraction to ppm	0	0

Use ppm derived from either of above calculations to input data below

Input Data Here	H_2S Concentration (ppm)		4386.6			
	24 Hour Throughput (MMCFD)		225			

The radius of exposure is calculated using the following equations:

100 ppm ROE calculation (as per 19 NMAC 15.11.7.K.1)

$$X_{100ppm} = [(1.589)(Conc_{H2S})(Q)]^{(0.6258)}$$

500 ppm ROE calculation (as per 19 NMAC 15.11.7.K.2)

$$X_{500ppm} = [(0.4546)(Conc_{H2S})(Q)]^{(0.6258)}$$

Where:

X = radius of exposure (ft)

$Conc_{H2S}$ = the decimal equivalent of the mole or volume fraction of H_2S in the gas

Q = daily plant throughput corrected to standard conditions (SCFD)

Plant parameters

Q =	225	MMSCFD =	225000000	SCFD	
$Conc_{H2S}$ =	4386.6	ppm =	0.43866	Mole %=	0.004387 Mole Fraction

ROE calculation:

X_{100ppm} = [(1.589)*(0.0043866)*(225000000)]^(0.6258)

X_{100ppm} = 7535 ft = 1.43 miles

X_{500ppm} = [(0.4546)*(0.0043866)*(225000000)]^(0.6258)

X_{500ppm} = 3443 ft = 0.65 miles

LINAM AGI FACILITY AND AGI PIPELINE

For existing facilities or operations, the escape rate (Q) is the maximum daily rate of the gaseous mixture transmitted or handled, or the best estimate thereof for the Linam AGI Pipeline and AGI Facility. For purposes of this Plan the volume rate used for contingency planning purposes is an "escape rate" equal to the maximum treated acid gas volume of 5.322555 MMSCFD. The gas volume transmitted through the Pipeline and handled at the AGI Facility is variable and is continuously metered. The Plant records daily TAG volumes and prepares a daily TAG volume report. The volume of 5.322555 MMSCFD of TAG has been selected as the escape rate as it is the highest volume that the plant would produce under its current operations and is considered worst case interpretation of the volume of TAG. Daily monitoring data indicate H_2S concentrations in TAG of 18.54% which is somewhat variable.

As to H_2S concentration of TAG, daily monitoring data indicates variable concentrations; 18.54% is used in this Plan as a worst case scenario, based on data gathered in 2014.

The calculation of worst case scenario has been done as follows:
Q = 5,322,555
H_2S conc = 185,434.4 ppm or 18.5434439 mole%

500 ppm RADIUS OF EXPOSURE CALCULATION

[(0.4546)*(H_2S concentration)*(gas volume (Q))] 0.6258
[(0.4546)*(0.185434438911387)*(5,322,555)] 0.6258

500-ppm ROE = 3,443 feet

100 ppm RADIUS OF EXPOSURE CALCULATION

[(1.589)*(H_2S concentration)*(gas volume (Q))] 0.6258
[(1.589)*(0.185434438911387)*(5,322,555)] 0.6258

100-ppm ROE = 7,535 feet

DCP Midstream LP Treated Acid Gas - Linam Plant ROE CALCULATIONS PURSUANT TO RULE 11

If data is provided in mole% use calculator below for getting ppm

Enter Mole % in cell C5	Mole %	ppm
Convert mole% to ppm	18.54344389	185434.439

If data is provided in mole fraction use calculator below for getting ppm

Enter Mole Fraction in cell C10	Mole Fraction	ppm
Convert mole fraction to ppm	0	0

Use ppm derived from either of above calculations to input data below

Input Data Here		H_2S Concentration (ppm)		185434.4			
		24 Hour Throughput (MMCFD)		5.322555			

The radius of exposure is calculated using the following equations:

100 ppm ROE calculation (as per 19 NMAC 15.11.7.K.1)

$$X_{100ppm} = [(1.589)(Conc_{H2S})(Q)]^{(0.6258)}$$

500 ppm ROE calculation (as per 19 NMAC 15.11.7.K.2)

$$X_{500ppm} = [(0.4546)(Conc_{H2S})(Q)]^{(0.6258)}$$

Where:

X = radius of exposure (ft)

$Conc_{H2S}$ = the decimal equivalent of the mole or volume fraction of H_2S in the gas

Q = daily plant throughput corrected to standard conditions (SCFD)

Plant parameters

Q =	5.322555 MMSCFD =	5322555 SCFD		
$Conc_{H2S}$ =	185434.4 ppm =	18.5434439 Mole %=	0.185434	Mole Fraction

ROE calculation:

X_{100ppm} = [(1.589)*(0.185434438911387)*(5322555)]^(0.6258)

X_{100ppm} = 7535 ft = 1.43 miles

X_{500ppm} = [(0.4546)*(0.185434438911387)*(5322555)]^(0.6258)

X_{500ppm} = 3443 ft = 0.65 miles

APPENDIX G
H_2S PLAN DISTRIBUTION LIST

New Mexico Oil Conservation Division, Santa Fe Office

New Mexico Department of Public Safety (State Office)

Lea County LEPC/Emergency Manager*

Lea Power Partners, Hobbs Plant

Linam Ranch Plant Office

Linam Emergency Trailers

New Mexico State Police, Hobbs Office

State Emergency Response Commission (SERC)

Xcel Maddox Power Plant

*Note: Lea County LEPC/Emergency Manager will make and send copies of this plan to appropriate entities within his jurisdiction, including the Hobbs Fire Department

APPENDIX H

CHRONOLOGIC RECORD OF EVENTS LOG

CHRONOLOGIC RECORD OF EVENTS LOG

1. Incident Name	2. Operational Period (Date/Time) From: To:	UNIT /ACTIVITY LOG ICS 214

3. Individual Name	4. ICS Section	5. Assignment/Location

6. Activity Log	Page	of

TIME	MAJOR EVENTS

7. Prepared by:	Date/Time

UNIT/ACTIVITY LOG		ICS 214