GW - __15__

H2S CONTINGENCY PLAN

REVIEW

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, January 03, 2012 7:24 AM
To: 'Bowhay, Glenn A'
Cc: Ledonne, David A; Cook, John W; Sanchez, Daniel J., EMNRD; Gonzales, Elidio L, EMNRD
Subject: RE: OCD H2S Contingency Plan Review Letter dated 12/22/2011

Mr. Bowhay:

Please submit your revised plan by COB Monday, February 6, 2012.

Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: http://www.emnrd.state.nm.us/ocd/
"Why not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward with the Rest of the Nation?" To see how, go to "Pollution Prevention & Waste Minimization" at:
http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental)

From: Bowhay, Glenn A [mailto:GABowhay@dcpmidstream.com]
Sent: Friday, December 23, 2011 1:06 PM
To: Chavez, Carl J, EMNRD
Cc: Ledonne, David A; Cook, John W; Sanchez, Daniel J., EMNRD; Gonzales, Elidio L, EMNRD
Subject: FW: OCD H2S Contingency Plan Review Letter dated 12/22/2011

Carl,

Thank you for the review and look forward to working with you to bring this plan into compliance.

I do however, ask that your 30 days resolution date be extended by 2 weeks. Receiving this 3 days before the Christmas and New Year Holidays will greatly hinder our efforts to provide a thorough review of your recommendations and provide an effectively revised Plan.

Thanks in advance and Merry Christmas,

Glenn Bowhay
Health and Safety Manager
DCP Midstream - Permian Region
432-620-4009 - Office
432-425-7635 - Cell
432-620-4160 - Fax
gabowhay@dcpmidstream.com

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Thursday, December 22, 2011 2:26 PM
To: Bowhay, Glenn A
Cc: Sanchez, Daniel J., EMNRD; Gonzales, Elidio L, EMNRD
Subject: OCD H2S Contingency Plan Review Letter dated 12/22/2011

Mr. Bowhay:

Good afternoon. The OCD has completed its review of DCP Midstream, L.P.'s H2S Contingency Plan (See attached letter).

A hard copy is being sent via mail. Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
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New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John H. Bemis
Cabinet Secretary-Designate

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

Jami Bailey
Division Director
Oil Conservation Division

DECEMBER 22, 2011

Mr. Glenn Bowhay
Safety Manager- Western Region
DCP Midstream, L.P.
10 Desta Drive, Suite 400-West
Midland, Texas 79705

Re: DCP Midstream, L.P., Fullerton to Linam Sour Gas Pipeline (GW-015) H2S Contingency Plan (October 2011), Section 6 Township 19 South and Range 37 East NMPM, Lea County, New Mexico

Dear Mr. Bowhay:

The New Mexico Oil Conservation Division (OCD) has regulatory authority for the administration of 19.15.11 et seq. NMAC (Hydrogen Sulfide Gas). The OCD is in receipt of DCP Midstream, L.P.'s (DCP) above subject Contingency Plan (CP) and has completed a preliminary review.

In accordance with 19.15.11.9(F) NMAC, the OCD has determined that the submitted CP for the non-fixed facility (sour gas pipeline) is inadequate for the protection of public safety. DCP appears to neglect the apparent residences observed along pipeline intersections with highways and motorists on the highway and adjacent parallel pipeline ROW. Consequently, the OCD provides comments and/or requirements for the operator to amend the CP for re-submittal to the OCD for final review and approval.

In general, DCP does not appear to have trained responders to act in the event the CP must be implemented and the OCD notified. Instead, DCP appears to be relying on the "911" Emergency phone number and public agencies to respond or implement the CP. It is not clear whether the fire department agrees with the CP, since it does not appear to be incorporated in any training drills. The discussion on personal protection equipment (PPE or hand-held detector detail(s)) for DCP responders falls short in that DCP appears to merely train workers on what levels of PPE exist in training, but do not don them and respond in the event the CP is implemented. Training drills appear to be table top drills conducted annually with a "may" added for actual drills with public safety agencies and DCP emergency responders. The activation level appears to stop once an [H2S] reading of 10 ppm or less is detected and there is no mention of continued investigation for odors or if readings remain detectable, but less than 10 ppm, which raises concerns that there may be leaks that are never located and fully repaired to address the public safety issues. There is no public training for residences that are observed along highway intersections and along the highway ROW to the injection well. The ESD is not adequately explained nor do response levels i.e., Level 2, incorporate ESD into the CP implementation process. There are no engineering drawings displaying the location(s) of the ESD(s) along the 17 miles of pipeline where they exist in the event of an emergency to automatically or manually shut-down and locate a leak.

The OCD comments and/or requirements based on the CP review are as follows:

1) Please submit the large scale maps with road barricade, windsock and sign locations along with the plan to the OCD Santa Fe Office for the Administrative Record. Appendix "A" ROE Map does not exhibit a scale to evaluate public areas along the pipeline. A map with scale is required.
2) The exemption request to 19.15.11 12(C) NMAC does not consider the safety of the general public; therefore, at a minimum, any populated areas (roadways, homes, ranches, etc.) near the pipeline must be reasonably addressed by this provision. Signage with 24/7 phone number for odor complaints, etc. nearby pipeline intersections with highways and residences is required. In addition, wind-socks shall be positioned to assist the general public in moving upwind during an emergency situation. The CP "Activation Level" shall include odor complaints,
3) DCP's cover letter dated October 10, 2011 and CP make reference to "discrepancy identified in the gas metering tabulations", which shall be changed to reflect that this will be the "Activation Level" (AL), which initiates an immediate corrective action(s) process to investigate and correct a detected release or leak along the pipeline to protect public safety. In addition, any odor or fire complaints; and/or [H2S] at or greater than 10 ppm shall trigger the AL. Levels 1, 2 and 4 responses all default to "Release Resolved" when detection is less than 10 ppm, but this may not be the case. In addition, none of the levels indicate when full implementation of the CP occurs to address the ROE_{100ppm} impacts to public areas and associated notification to the OCD. Levels 2 and/or 4 should clearly indicate when the CP is to be fully implemented. In addition, the operator must notify the OCD in any event where the CP is implemented (but not for "Activation Level" activities).
4) There is no indication in the "Levels" flow chart on when the ESD is activated and where it or they are located schematically along the pipeline, etc. There was a brief sentence stating that an ESD should occur before a "Level 4" response, but it is not identified in Level 2. It is also unclear how a leak will be located and repaired along the ~17 miles of pipeline, once the ESD activates from low/high pressure shut-down of the system. Also, for example, how long would it take to completely shut-down the system in the event of H2S CP implementation?
5) Sulfur Dioxide needs to be included with H2S in the characterization, since there is a flare system that burns H2S in the event of an emergency.
6) Response actions shall not be terminated based on [H2S] less than 10 ppm, but shall rely on best professional judgment (i.e., "discrepancy identified in the gas metering tabulations", low-pressure/high pressure shut-off, olfactory senses, physical indicators, etc.). For example, if detectors and/or odors are still detected then there may still be a leak?
7) The OCD is required to be notified in the event the CP is implemented after an $ROE_{100\ ppm}$ impacts a public area.
8) On page 11 no. 5, the term "bum" should be corrected to "burn".
9) Appendix "C" indicates that the Owner/Operator employees are not trained for firefighting of incidents along the pipeline ROW. DCP should communicate with the LEPC to see if they will handle this type of fire to make sure professionals agree to respond once the CP is implemented? DCP may need to hire an environmental contractor with these skills and training to help protect public safety.
10) Public training for any identified residences, ranches, and population centers shall be included even if it is done via post card describing the implementation of the CP with a DCP phone number for questions.

Please submit the revised CP within 30 days from receipt of this letter. Please contact me if there are any questions regarding this matter. Please do not hesitate to contact me at (505) 476-3490 or CarlJ.Chavez@state.nm.us.if you have questions. Thank you and your staff in advance for your cooperation during this H2S CP review.

Sincerely,

Carl J. Chavez
Environmental Engineer

CJC/cjc

xc: OCD District Office 1, Hobbs
Daniel Sanchez, OCD

File: OCD Online "GW-015"- H2S Contingency Plan

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, December 22, 2011 1:26 PM
To: 'Bowhay, Glenn A'
Cc: Sanchez, Daniel J., EMNRD; Gonzales, Elidio L, EMNRD
Subject: OCD H2S Contingency Plan Review Letter dated 12/22/2011
Attachments: OCD Review Letter 12-22-2011.pdf

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DCP Midstream, L.P.
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Carl J. Chavez
Environmental Engineer

CJC/cjc

xc: OCD District Office 1, Hobbs
Daniel Sanchez, OCD

File: OCD Online "GW-015"- H2S Contingency Plan

New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

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

Daniel Sanchez
Acting Division Director
Oil Conservation Division

March 1, 2011

Ms. Diane Kocis
Senior Environmental Specialist
DCP Midstream, LP
370 17th Street, Suite 2500
Denver, CO 80202

Dear Ms. Kocis:

Re: Linam Ranch Gas Plant (GW-015) Oil and Gas Facilities/Operations that may Vent and/or Flare H_2S Gas

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

In New Mexico, the OCD Rules that pertain to Hydrogen Sulfide (H_2S) Gas are provided at § 19.15.11 et seq. NMAC (Hydrogen Sulfide Gas). The OCD Oil and Gas Rules that address "No-Flare" and the OCD Form C-129 process are provided at § 19.15.7.37 et seq. NMAC (Application for Exception to No-Flare). Gas plants have gas gathering pipelines with meters connected to operators who then either sell or vent casinghead gas into the gas gathering pipelines that feed into the plants. The OCD Rules that pertain to "Casinghead Gas" are provided at § 19.15.18.12 et seq. NMAC (Production Operating Practices).

This letter was precipitated by a recent event where a gas plant operator shut-in a "gas gathering pipeline." This "shutting-in" of the pipeline impacted approximately thirty individually-metered operators who may have continued operating instead of "shutting-in" their well(s). In spite of the fact that approximately thirty operators were impacted, the OCD observed that only one of those thirty operators contacted the OCD via Form C-129 as required under the OCD Rules to obtain approval of their application for an "exception to no-flare." (The operator initially had contacted the OCD to request approval to vent H_2S gas into the air rather than shut-in the well.) The OCD has serious public safety concerns when operators do not properly shut-in their wells when gas gathering pipelines and/or meters are shut-in, especially where the wells are near populated and/or agricultural areas due to the potential for loss of life from toxic gas.

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

correct because operators are also required to comply with the requirements set out in the OCD Rules regarding flaring and venting. For example, in the situation where a gas plant operator has notified connected well operators of a gas-gathering pipeline shut-down, each of those well operators is required to shut-in its well(s) or to obtain OCD District Supervisor approval to flare via an OCD C-129 Form. Operators who do not comply are illegally venting and/or flaring gas under OCD Rules.

In addition, gas plants and/or oil and gas operators may be required to satisfy OCD § 19.15.11 et seq. NMAC (Hydrogen Sulfide Gas) Contingency Plan requirements for facilities and wells in cases where 100 ppm or greater H_2S concentrations may impact public areas. OCD records indicate that DCP Midstream, LP **does** currently have an H_2S Contingency Plan (CP) on file with the OCD. If you do not have an approved CP under § 19.15.11 et seq. NMAC (Hydrogen Sulfide Gas) for your gas plant yet, please submit your CP to the OCD Environmental Bureau in Santa Fe on or before August 11, 2011. (*The OCD notes that it is aware of some operators who have recently submitted CPs to the OCD that are currently under review. Please advise if this is the case for DCP Midstream.*)

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

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

Sincerely,

Daniel Sanchez,
Compliance & Enforcement Manager

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

October 20, 2009

UPS Tracking Number NM875 0- 3

Mr. Glenn Von Gonten
Acting Environmental Bureau Chief
New Mexico Oil Conservation Division
New Mexico Energy, Minerals
& Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

Subject: Revised H2S Contingency Plan for DCP Midstream L.P.'s Linam Ranch Gas Plant and Acid Gas Injection Well - Lea County, New Mexico

Dear Mr. Von Gonten:

Per New Mexico Oil Conservation Division requirement in Order # R-12546, enclosed is DCP Midstream, LP's revised H2S Contingency Plan for the Linam Ranch Gas Plant and Acid Gas Well.

This submittal follows our previous submittal dated September 2, 2009 and review held in your offices on September 30, 2009.

We appreciate the feedback and direction provided during the previous review and have incorporated that information in our revised plan.

If you have any questions concerning this submittal, please contact me at 432-620-5410 or 432-631-6005 for assistance. Please send all correspondence regarding the Plan to bjboles@dcpmidstream.com or to my attention at DCP Midstream, LP, 10 Desta Drive Suite 400 West Midland, TX 79705 so I can route it to the appropriate DCP personnel.

We are striving diligently to begin start up of the acid gas injection process equipment as quickly as possible to avoid inclement weather and to ensure reliable operation prior to December 31.

We will make ourselves available at your earliest convenience to meet with you in Santa Fe if that would be preferable to expedite any further revisions deemed necessary.

Sincerely,
DCP Midstream, LP

Burnace Boles
Director
SENM NMED Settlement Compliance

(Plan not yet approved by NMOCD)

H_2S CONTINGENCY PLAN

Linam Ranch Gas Plant
and AGI Wellsite
Hobbs, New Mexico

DCP Midstream, LP.

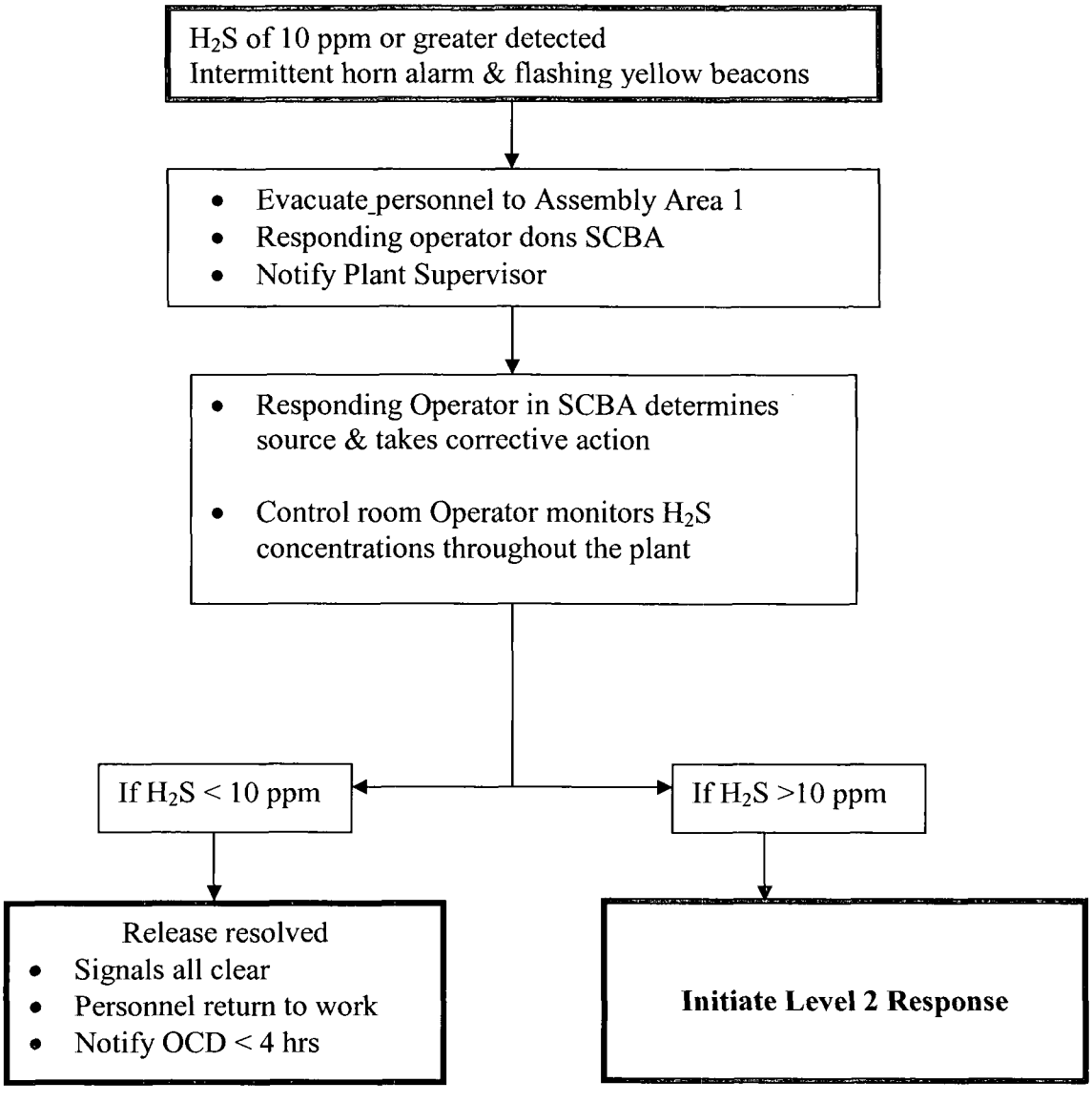
October 19, 2009

TABLE OF CONTENTS

APPENDICES

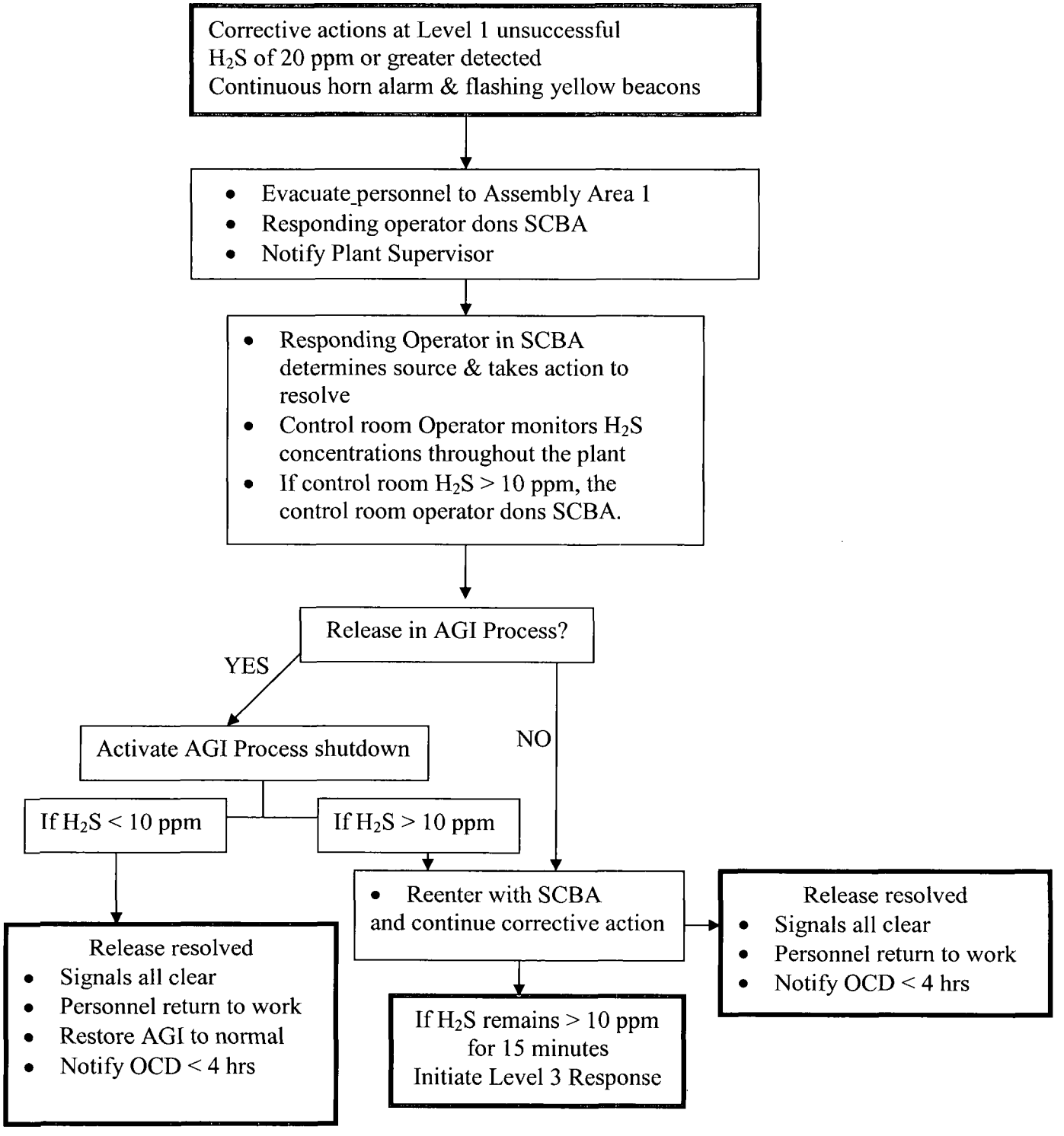
OPERATOR QUICK REFERENCE GUIDE

LINAM RANCH PLANT RELEASE
LEVEL 1 RESPONSE



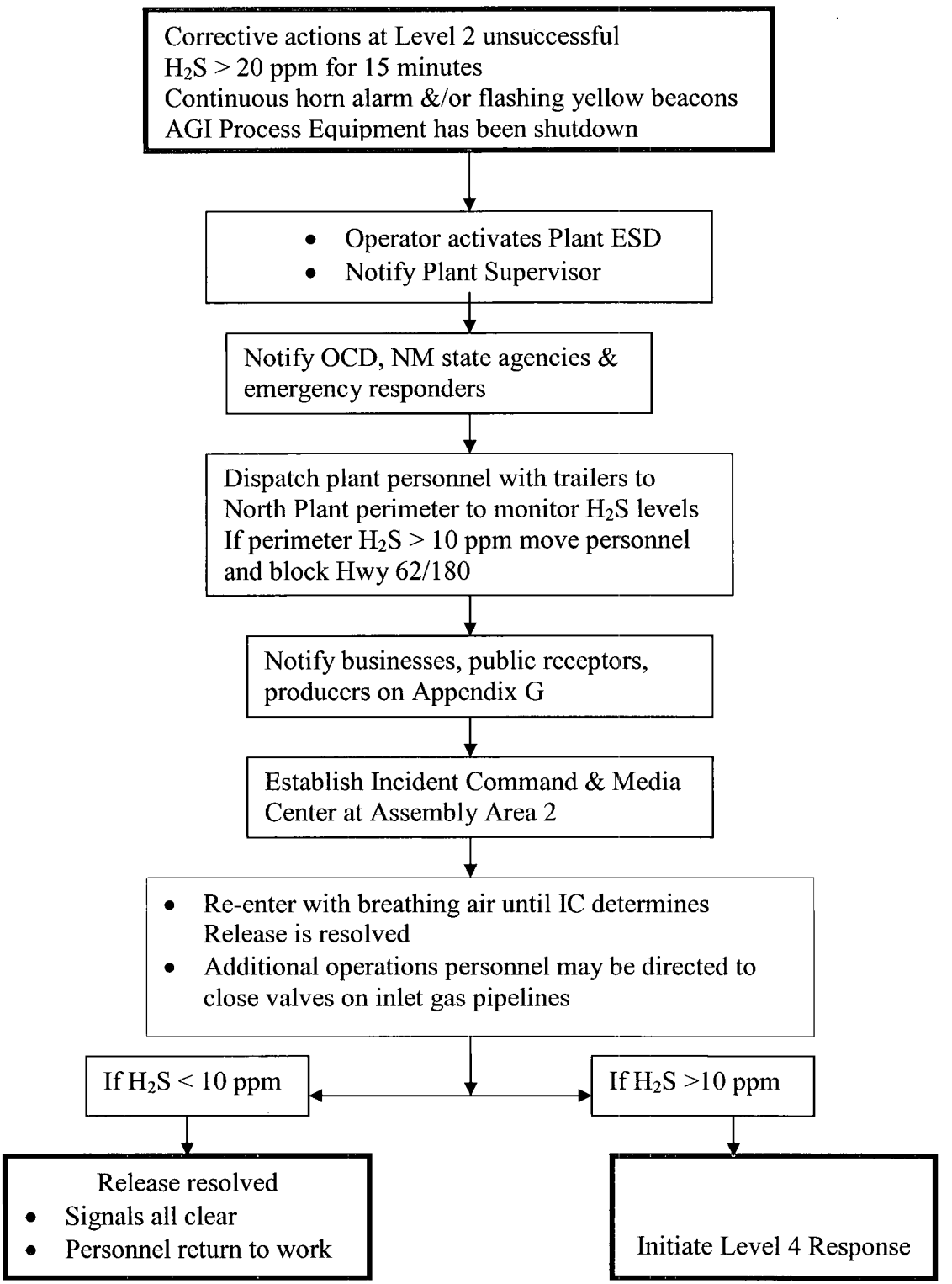
For Details refer to Page 14

LINAM RANCH PLANT RELEASE
LEVEL 2 RESPONSE



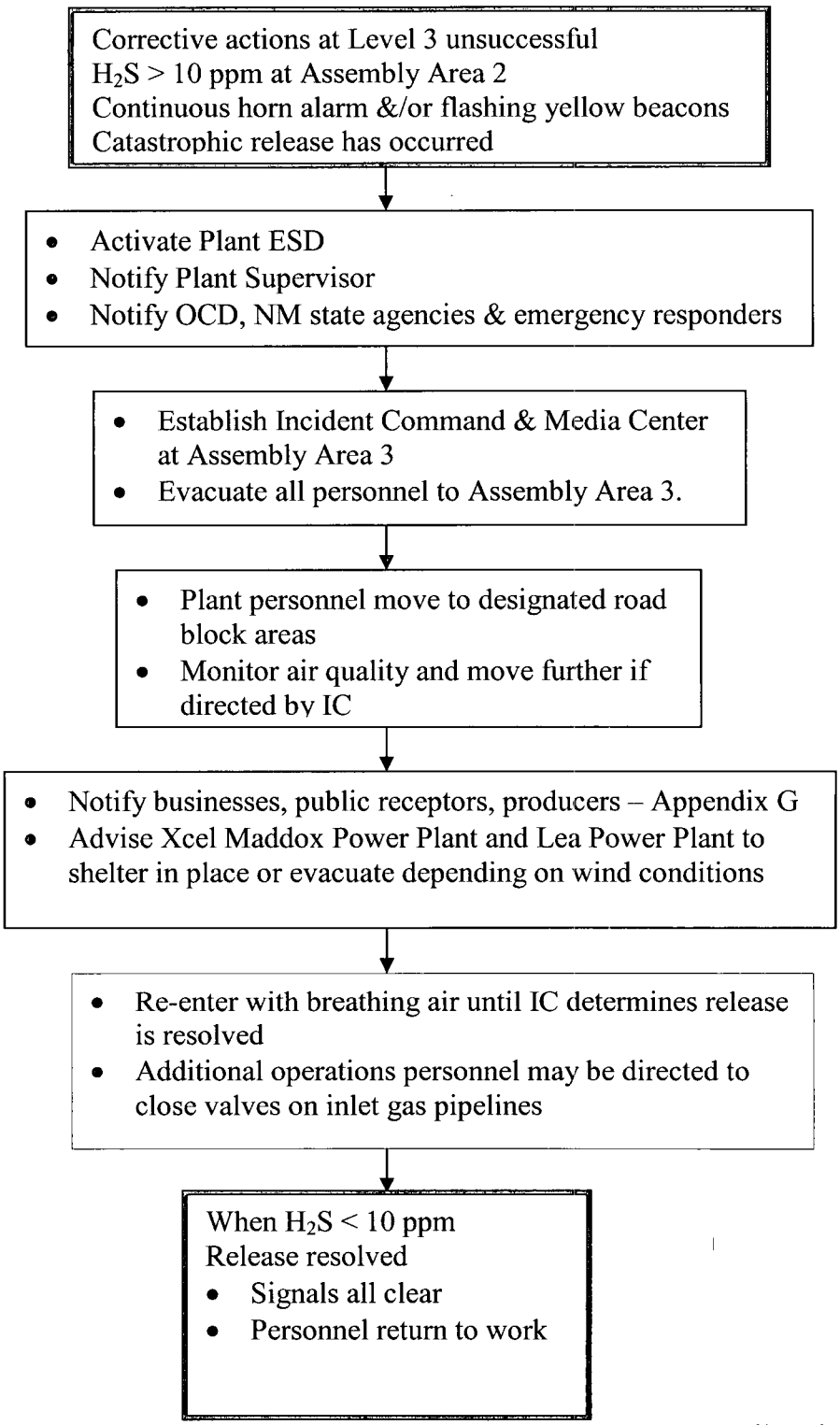
For Details refer to Page 15

LINAM RANCH PLANT RELEASE
LEVEL 3 RESPONSE



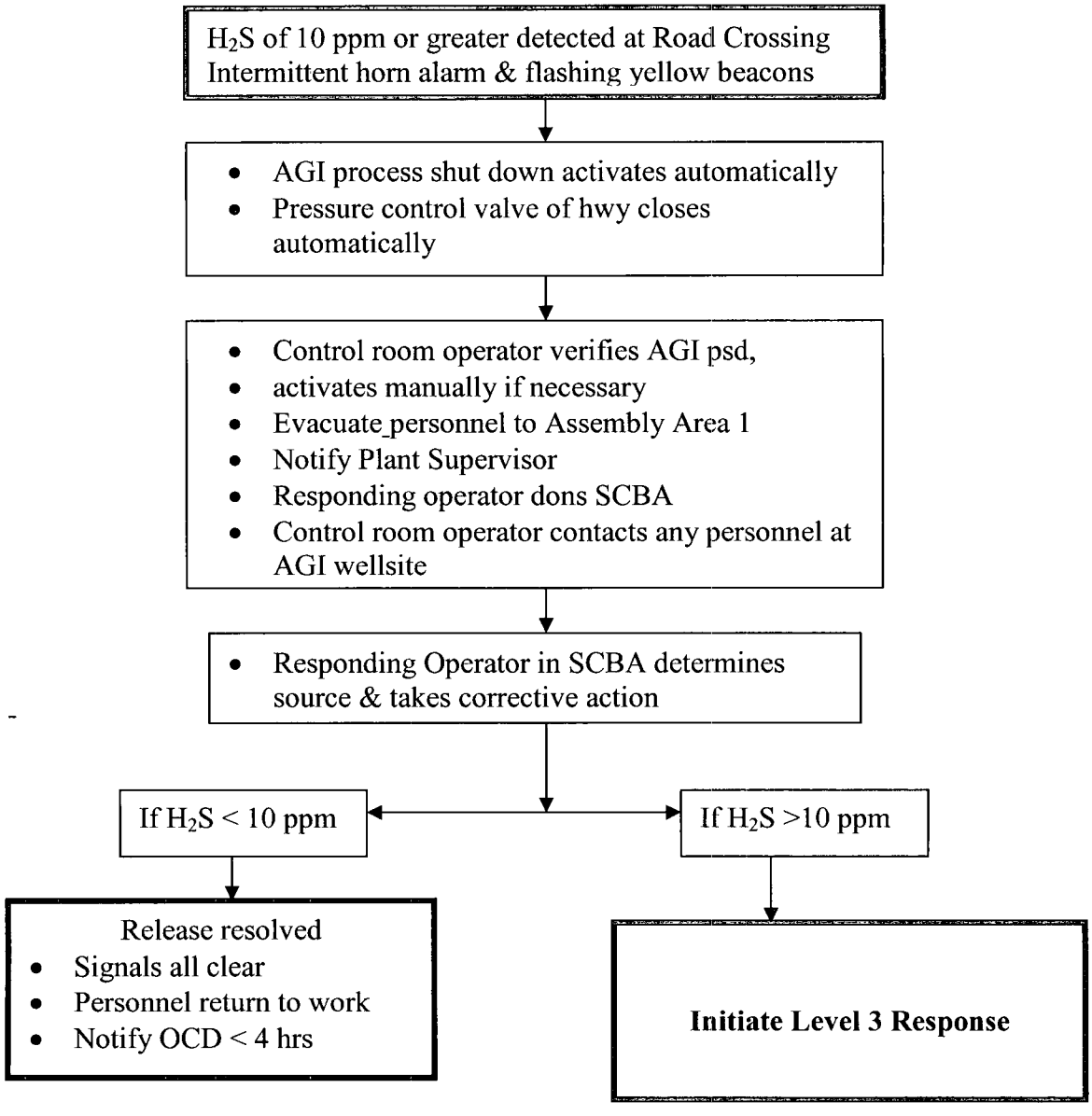
For Details refer to Page 16

LINAM RANCH PLANT RELEASE
LEVEL 4 RESPONSE



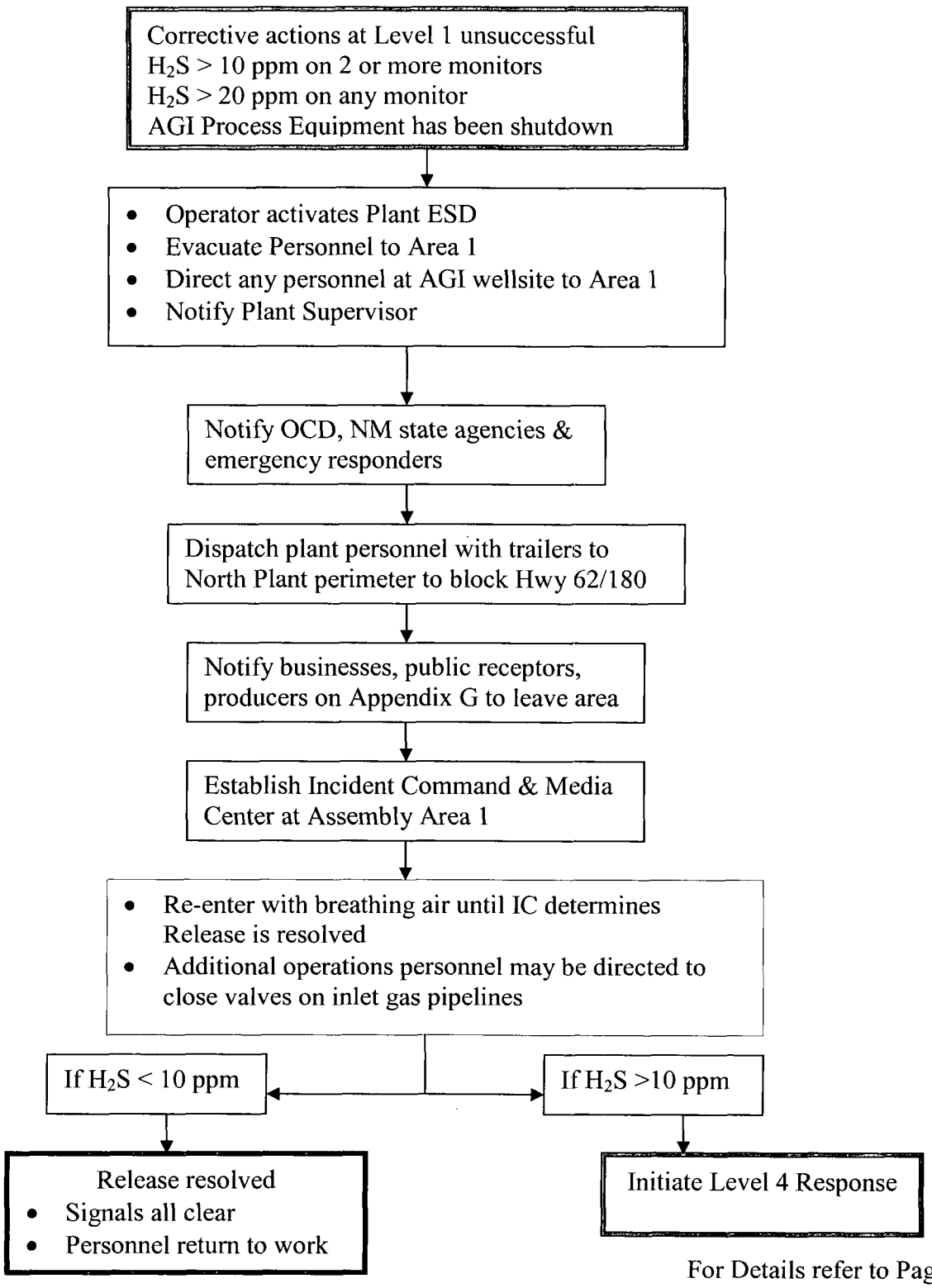
For Details refer to Page 17

ROAD CROSSING RELEASE
LEVEL 1 RESPONSE



For Details refer to Page 19

ROAD CROSSING RELEASE
LEVEL 3 RESPONSE
Note: There is no LEVEL 2 Response for Road Crossing Release



For Details refer to Page 20

ROAD CROSSING RELEASE
LEVEL 4 RESPONSE

Correction actions at Level 3 are unsuccessful
$H_2S > 10$ ppm at Assembly Area 2
Continuous horn alarm &/or flashing yellow beacons
Catastrophic release has occurred

- Activate Plant ESD
- Notify Plant Supervisor
- Notify OCD, NM state agencies & emergency responders

- Establish Incident Command & Media Center at Assembly Area 3
- Evacuate all personnel to Assembly Area 3.

- Plant personnel move to designated road block areas
- Monitor air quality and move further if directed by IC

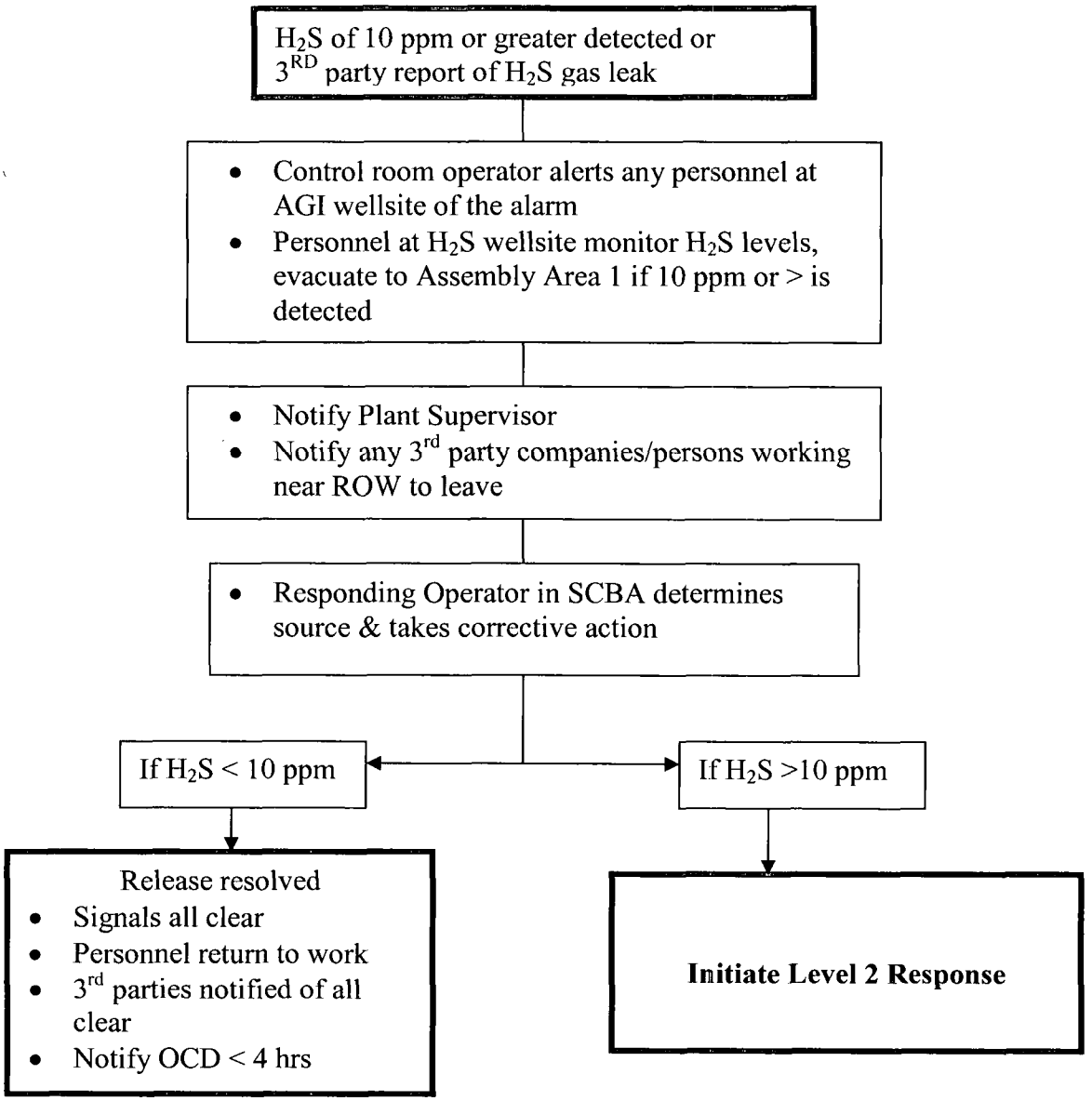
- Notify businesses, public receptors, producers – Appendix G
- Advise Xcel Maddox Power Plant and Lea Power Plant to shelter in place or evacuate depending on wind conditions

- Re-enter with breathing air until IC determines release is resolved
- Additional operations personnel may be directed to close valves on inlet gas pipelines

When $H_2S < 10$ ppm
Release resolved
- Signals all clear
- Personnel return to work

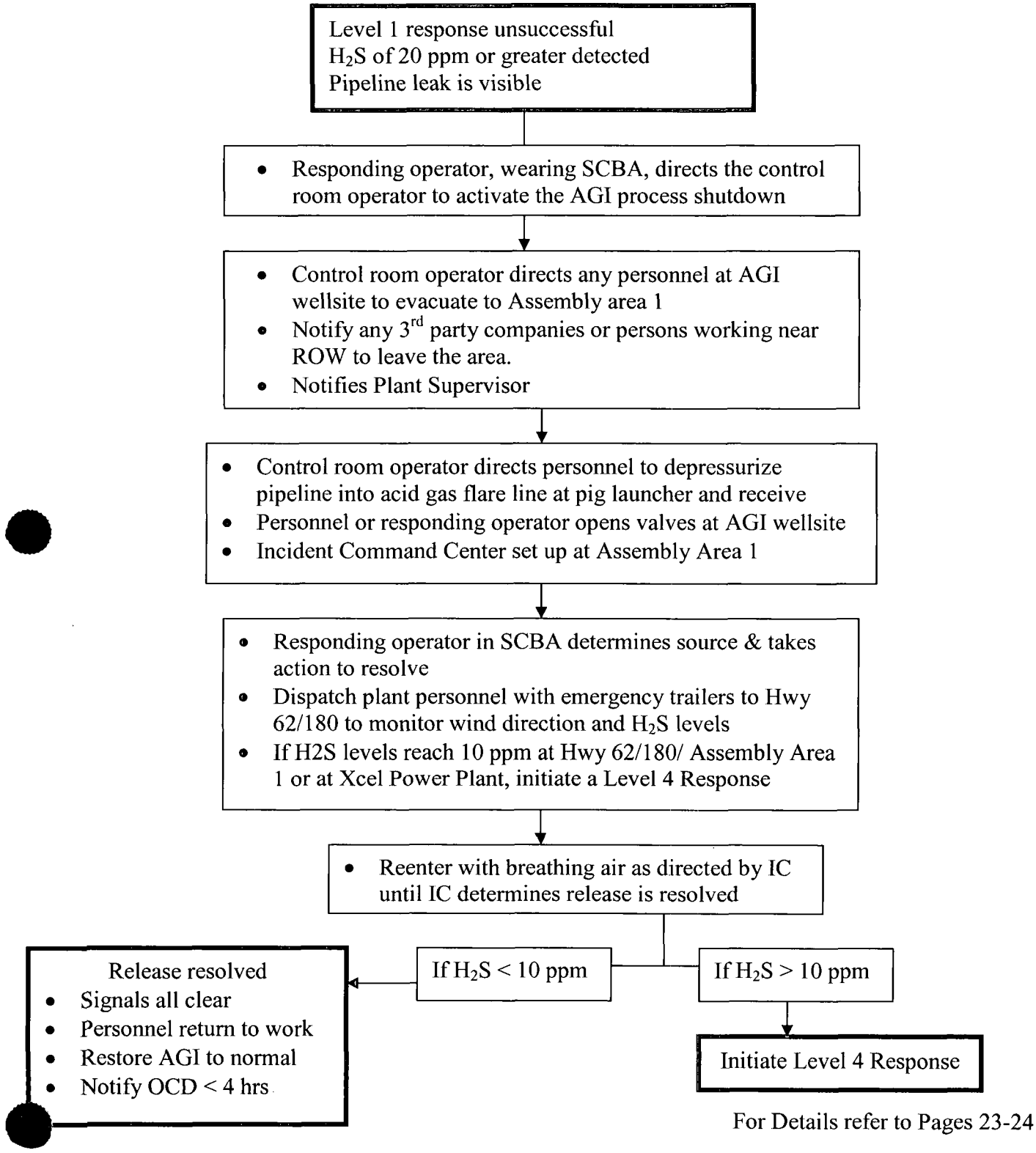
For Details refer to Page 21

AGI PIPELINE RELEASE
LEVEL 1 RESPONSE



For Details refer to Page 23

AGI PIPELINE RELEASE
LEVEL 2 RESPONSE



For Details refer to Pages 23-24

AGI PIPELINE RELEASE
LEVEL 4 RESPONSE

Note: There is no Level 3 Release for the AGI Pipeline

- Corrective action at Level 2 is unsuccessful
- H_2S > 10 ppm at Xcel Power Plant, Hwy 62/180, at Assembly Area 1 or 2, or any public area or road
- Catastrophic release occurs

↓

- Activate Plant ESD
- Notify Plant Supervisor
- Notify OCD, NM state agencies & emergency responders

↓

- Establish Incident Command & Media Center at Assembly Area 3
- Evacuate all personnel to Assembly Area 3.

↓

- Dispatch emergency trailers designated road block areas on Hwy 62/180
- Monitor air quality and move further if directed by IC

↓

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- Advise Xcel Maddox Power Plant and Lea Power Plant to shelter in place or evacuate depending on wind conditions

↓

- Re-enter with breathing air until IC determines release is resolved
- Additional operations personnel may be directed to close valves on inlet gas pipelines

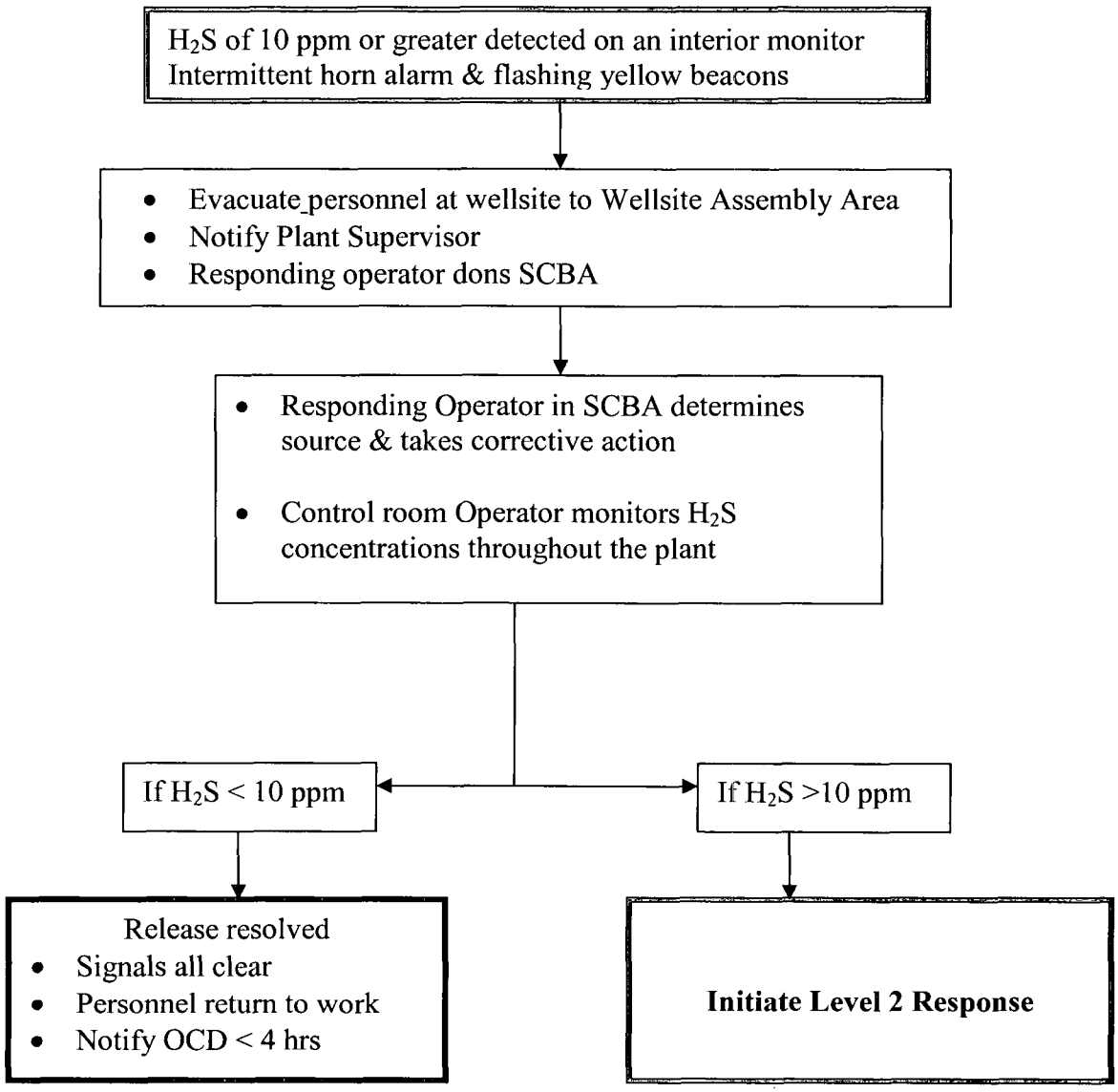
↓

When H_2S < 10 ppm
Release resolved

- Signals all clear
- Personnel return to work

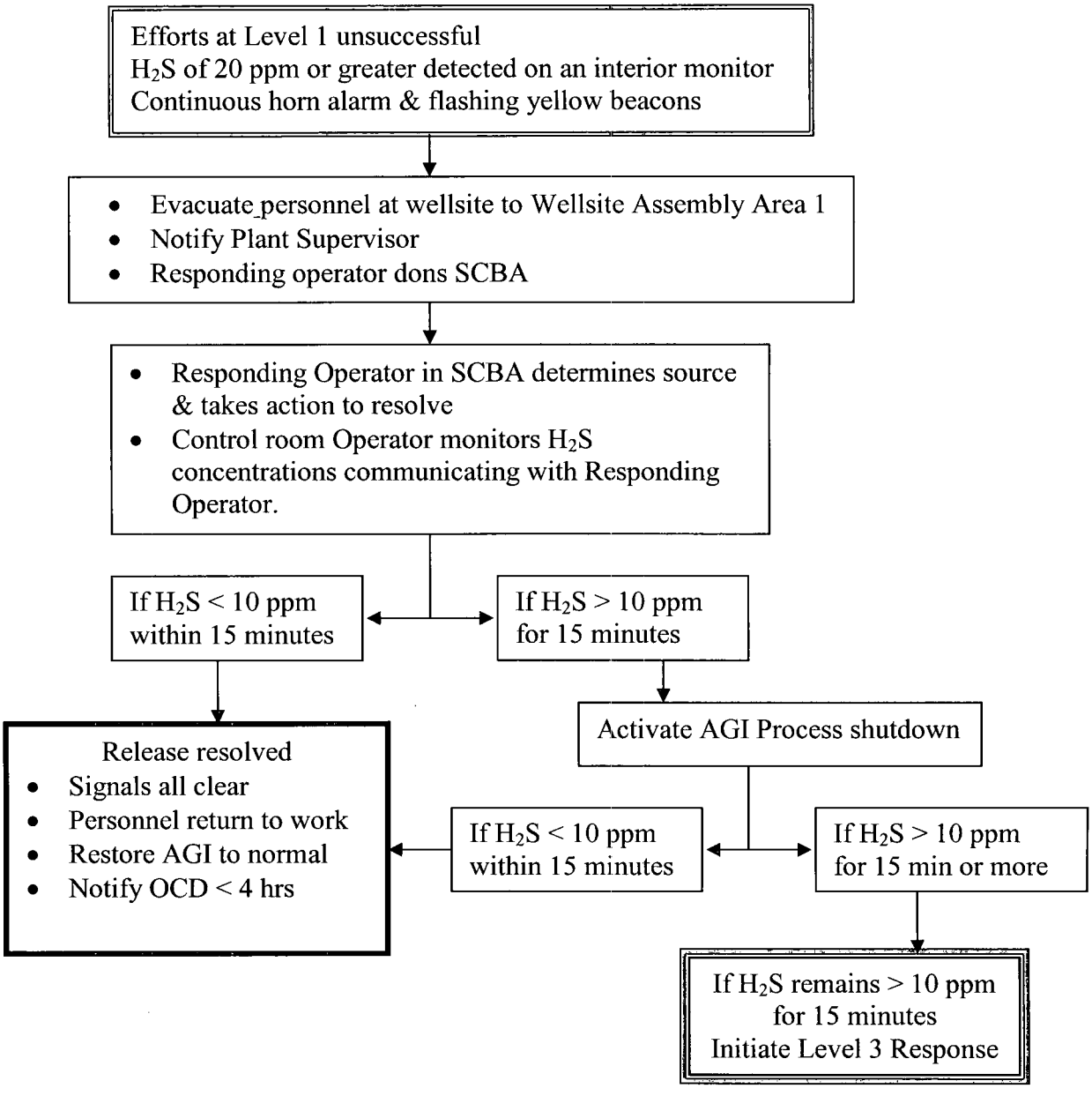
For Details refer to Pages 25-26

AGI WELLSITE RELEASE
LEVEL 1 RESPONSE



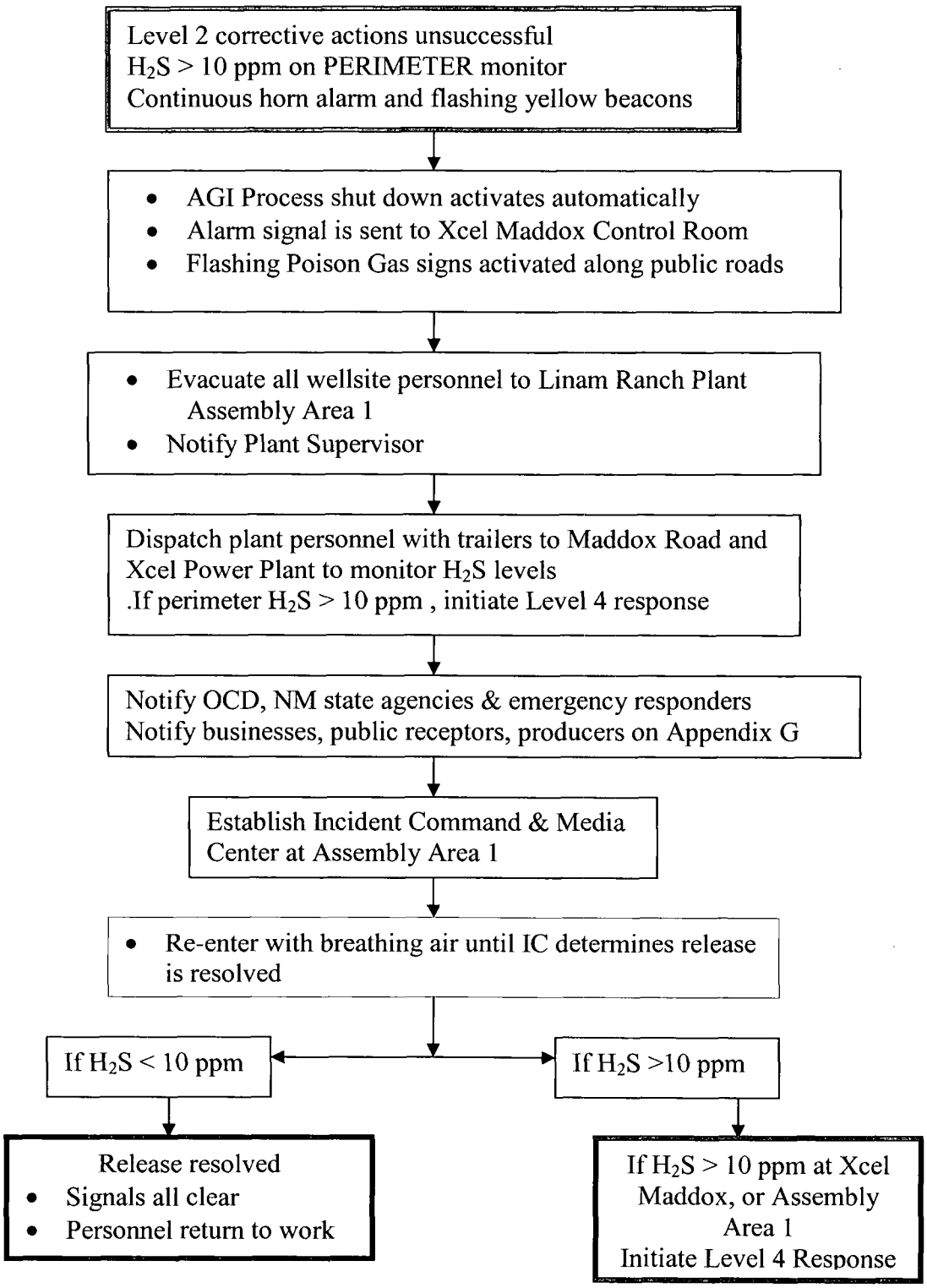
For Details refer to Page 27

AGI WELLSITE RELEASE
LEVEL 2 RESPONSE



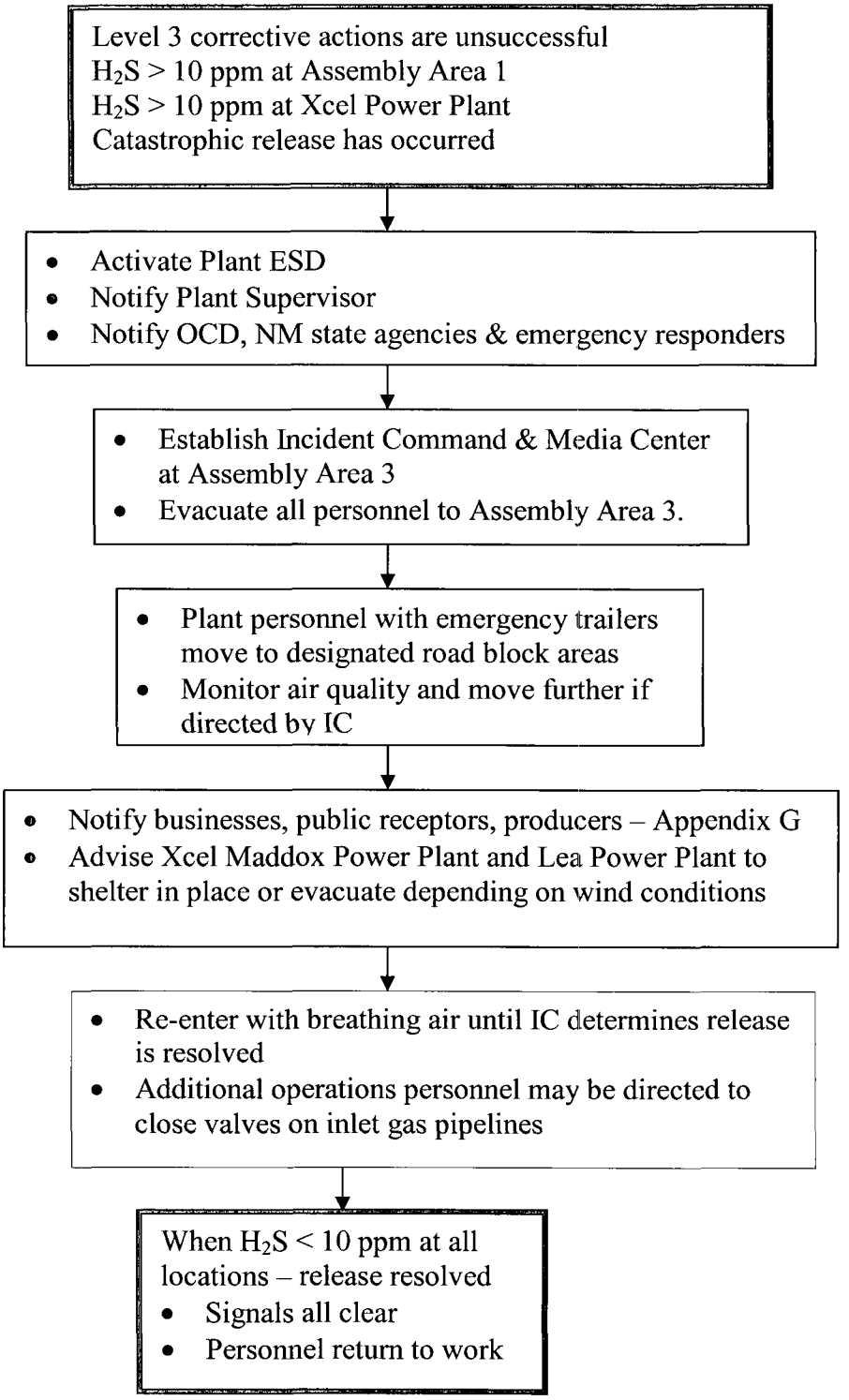
For Details refer to Pages 27-28

AGI WELLSITE RELEASE
LEVEL 3 RESPONSE



For Details refer to Pages 28-29

AGI WELLSITE RELEASE
LEVEL 4 RESPONSE



For Details refer to Pages 29-30

I. INTRODUCTION

The Linam Ranch Gas Plant (hereinafter the "Plant") is a natural gas processing plant which handles and/or generates hydrogen sulfide and/or sulfur dioxide; therefore this Hydrogen Sulfide Contingency Plan (the "H_2S Plan" or "the Plan") has been developed:

1) to satisfy the New Mexico Oil Conservation Division (OCD) Rule 11
2) to conform with API "Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide," RP 55, and
3) to create a site-specific hydrogen sulfide contingency plan that outlines the emergency response procedures that will be implemented 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.

The terms used in this Plan are to be used in the same manner as defined in Title 19 Chapter 15 Part 11 of the New Mexico Administrative code (1 9.15.1 1.7- Definitions) unless otherwise defined herein.

The Linam Ranch Plant and AGI wellsite have extensive Emergency Shut Down (ESD) and Process Shut Down (PSD) systems designed to isolate incoming and out-going gas and product streams, 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 buttons located at exit locations at the Plant and the AGI wellsite as shown in Appendix D. The ESD systems are designed to prevent a Level 4 response.

A. PLANT DESCRIPTION & MAP (Figure 1)

The Linam Ranch Gas Plant is located in Lea County, New Mexico and encompasses 164.6 acres. The Plant is owned and operated by DCP Midstream LP.

More specifically, the Plant is located in Section 6, Township 19S, Range 37E in Lea County, New Mexico.

1. Its coordinates are:
   Latitude: 32.6953 N **Longitude: -103.2853 W**

2. Its physical address is:
   139 West Highway 62/180 Hobbs, New Mexico 88240

3. Its mailing address is:
   139 West Highway 62/180 Hobbs, New Mexico 88240

4. 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.

B. ACID GAS INJECTION (AGI) & MAP (Figure 1)

The Linam Acid Gas Injection well is located in Lea County, New Mexico. The mineral and surface lease encompasses 160 acres, with the wellsite being 8.6 acres within a secure fenced area. The AGI wellsite is leased from the State and operated by DCP Midstream LP.

More specifically, the AGI is located in Section 30, Township 18S, Range 37E in Lea County, New Mexico.

1. Its coordinates are:
   Latitude: 32.7167 N **Longitude: -103.2928 W**

2. 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 wellsite gate.

   The location of the Plant and AGI are illustrated herein on Figure 1.

FIGURE 1
Linam Ranch Gas Plant &
Acid Gas Injection Property

C. DESCRIPTION OF PLANT OPERATIONS

1. 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, New Mexico. Once gathered at the Plant, the produced natural gas is compressed; treated in an amine process for the removal of carbon dioxide and hydrogen sulfide; 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.

2. Because the natural gas that is gathered and processed at the Plant contains hydrogen sulfide ("sour gas"), it must be treated or processed to remove these and other impurities. The carbon dioxide and hydrogen sulfide (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 wellsite located approximately 2 miles from the Plant.

D. DESCRIPTION OF AGI WELLSITE OPERATIONS

1. The acid gas stream is received at the wellsite 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.

2. The acid gas is injected into the Lower Bone Spring formation at a depth of 8710 feet to 9085 feet below the surface. The wellbore is constructed with 3 casing strings, all with cement circulated to the surface. A permanent packer is set at approximate 8650 feet. The injection tubing is attached to the packer and is equipped with a check valve located below the packer and a hydraulically operated subsurface safety valve located approximately 250 feet below the surface.

3. The wellsite, normally unmanned, is fully automated and is connected to the Linam Ranch Plant control room DCS via a fiber optic line. The wellsite facility operations are monitored and are controlled from the Linam Ranch Plant. Video cameras located at the wellsite provide visibility throughout the AGI wellsite to the Linam Ranch Plant control room.

II. THE PLAN

A. RESPONSIBILITY FOR CONFORMANCE WITH THE H_2S PLAN

It is the responsibility of all personnel on-site to follow the safety and emergency procedures outlined in the Hydrogen Sulfide Contingency Plan (the H_2S Plan) as well as 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.

B. 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 wellsite, specifically those areas within the radii-of-exposure.

C. AVAILABILITY OF THE H_2S PLAN

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 Manager's office at the Hobbs office, and at the Western Region Safety Manager's office in Midland, Texas. **See Appendix H for the H_2S Plan Distribution List**, which lists all the additional entities that have been provided a copy of the H_2S Plan.

D. CONTENT OF THE PLAN

At a minimum, the H_2S Plan will contain information regarding:

1) the emergency procedures to be followed in the event of an hydrogen sulfide (H_2S) or sulfur dioxide (SO_2) release that may pose a threat to the Plant, public or public areas,
2) the characteristics of H_2S and SO_2,
3) a facility description, map and/or drawings, and
4) information regarding training and drills to be conducted related to this Plan.

III. PLAN DESIGN CONSIDERATIONS

A. CHARACTERISTICS OF H_2S, SO_2 AND CARBON DIOXIDE

1. Hydrogen Sulfide (H_2S)

The current inlet gas streams into the Plant contain approximately 4,700 ppm (or 0.47 mole percent) of hydrogen sulfide based on data generated from the sampling of the combined inlet gas stream (average of samples taken Jan.- Oct. 2009 and analyzed by an independent laboratory).

The current inlet to the AGI compression, pipeline, and injection well contains 23.39 mole percent hydrogen sulfide (average of samples taken monthly Jan. – Sept. 2009).

Hydrogen sulfide is a colorless, toxic and flammable gas, and at low concentrations, has the odor of rotten eggs. Hydrogen sulfide gas is heavier than air.

Hydrogen sulfide 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
TWA	10 ppm
STEL	15 ppm
IDLH	100 ppm
Specific Gravity (air = 1.0)	1.189
Boiling Point	-76.5°F
Freezing Point	-121.8°f
Vapor Pressure	396 psia
Auto ignition Temperature	518°F
Lower Flammability Limit	4.3%
Upper Flammability Limit	46.0%
Stability	Stable
pH in water	3
Corrosivity	Reacts with metal, plastics, tissues & nerves

Physical Effects of Hydrogen Sulfide		
Concentration		
ppm	%	Physical Effect
1	0.00010	Can be smelled (rotten egg odor)
10	0.0010	Obvious & unpleasant odor; Permissible Exposure Limit; Safe for 8-hour exposure
15	0.0015	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 & Health (IDLH); Loss of sense of smell in 3-15 minutes; Stinging in eyes and 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
1,000	0.1000	Instant unconsciousness; followed by death within minutes

2. Sulfur Dioxide (SO_2)

Sulfur dioxide is produced as a by-product of H_2S combustion. The waste gas stream consisting of hydrogen sulfide and carbon dioxide 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 wellsite 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.

Sulfur dioxide is heavier than air, but can be picked up by a breeze and carried downwind at elevated temperatures. Sulfur dioxide can be extremely irritating to the eyes and mucous membranes of the upper respiratory tract.

Sulfur Dioxide Properties and Characteristics	
CAS No.	7446-09-05
Molecular Formula	SO_2
Molecular Weight	64.07
TWA	2 ppm
STEL	5 ppm
IDLH	100 ppm
Specific Gravity (air = 1.0)	2.26
Boiling Point	14°F
Freezing Point	-103.9°F
Vapor Pressure	49.4 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 sulfur dioxide 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.
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 my result unless rescued promptly

3. Carbon Dioxide

The current inlet gas streams to the Plant contain approximately 1.6% carbon dioxide based on samples taken Jan. – Oct. 2009.

The current inlet to the AGI compression, pipeline, and injection well contains 76.30 mole percent of carbon dioxide (average of samples taken monthly Jan. – Sept. 2009).

Carbon dioxide gas is colorless, odorless, and non-flammable. Carbon dioxide is heavier than air.

Carbon Dioxide Properties and Characteristics	
CAS No.	124-38-9
Molecular Formula	CO_2
Molecular Weight	44.010
TWA	5,000 ppm
STEL	30,000 ppm
IDLH	40,000 ppm
Specific Gravity (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

B. RADII OF EXPOSURE (ROE)

For the Linam Ranch Plant and AGI wellsite 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 wellsite. The rates and other variables used to calculate the ROE is discussed in greater detail in Appendix B – ROE calculations. Also refer to Appendix C - map showing 500-ppm ROE and the 100- ppm ROE.

	500-ppm ROE	100-ppm ROE
Linam Ranch Plant	**4,057 ft.**	**8,877 ft.**
AGI wellsite	**4,073 ft.**	**8,914 ft.**

IV. EMERGENCY ACTION PROCEDURES

A. EMERGENCY RESPONSE ORGANIZATION

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).

In the event of an accidental release that results in the activation of the H_2S Plan and all personnel have been evacuated out of the affected area, 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, will act as IC until the New Mexico State Police arrive. Once the New Mexico State Police arrive, the ranking State Police officer will assume the duties of the IC.

The Plant Supervisor or his designee shall determine:

1) Plant Shut Downs
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 Manager 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.

B. EMERGENCY RESPONSE

This section explains the procedures and decision process to be used in the event of an H_2S release; much of which has been pre-determined 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.

1. OBJECTIVE

All Plant employees shall be prepared to respond to an H_2S emergency at the Plant, the AGI pipeline, and the AGI wellsite.

Emergency response actions may be taken for a variety of situations that may occur. The Plan is activated in progressive levels, based on the concentration of H_2S that has been released, and the physical location where the release has occurred.

Response Levels

To facilitate the Plan implementation, the release responses were made site-specific. There are four (4) response "sites" – the Linam Ranch Plant, Highway 62/180 Road Crossing, AGI Pipeline, and AGI wellsite.

The Plan has four (4) activation levels that are described in detail below and in outline form in the Response Flow diagrams in Appendix F.

Level 1 - Intermittent alarm sounded and flashing yellow beacons activated for H_2S greater than 10 ppm.

Level 2 - Continuous alarm sounded and flashing yellow beacons activated for H_2S greater than 20 ppm.

Level 3 - Continuous alarm sounded and flashing yellow beacons activated, H_2S levels continue to increase above 20 ppm for 15 minutes, Operators activate AGI process shut down (PSD) and/or Linam Ranch Plant Emergency Shut down (ESD), depending on location of the release. Notification of public receptors and State agencies is initiated.

Level 4 - 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 public receptors and State agencies is initiated.

As soon as the Plan has been activated based on the criteria above, the Plant Supervisor, or his designee, should be notified.

2. EVACUATION AND EMERGENCY ASSEMBLY AREAS

Evacuation for all visitors and all personnel that are not operators begins at the 10 ppm H_2S intermittent alarm and flashing yellow beacon. The responding Plant operator(s) are to put on the 30-min Self Contained Breathing Apparatus (SCBA) and first determine if any personnel are in distress and assist any distressed personnel to evacuate to Emergency Assembly Area 1. Emergency services (911) will be contacted if there are injuries or as otherwise deemed necessary. The operators will then, wearing the SCBA, 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 described in **Appendix F**.

Prevailing winds for the area are from the southwest. Personnel should evacuate along the designated route unless the designated evacuation route is downwind of the release (based on the windsock), then all evacuees should proceed perpendicular and then upwind to the Emergency Assembly Areas.

The Plant and AGI wellsite plot plans show evacuation routes and Emergency Assembly Areas. **(Appendix D)**

The Emergency Assembly Area 1 is:

Parking Area on the north side of the Plant Office Building (see Appendix C)

The Emergency Assembly Area 2 is:

Parking Area at Hobbs Plant Office (see Appendix C)

The Emergency Assembly Area 3 is:

North Parking lot at intersection of Hwy 62/180 and Hwy 483 (see Appendix C)

Wellsite Emergency Assembly Area:

Parking Area outside main gate on west side of wellsite (see Appendix C)

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 wellsite, thus the sign-in sheet will be used at the Emergency Assembly Areas to make a full accounting of all personnel and visitors.

Also at each Emergency Assembly Area, the ambient air quality 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.

3. IMMEDIATE ACTION PLANS/ INITIAL RESPONSES

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.

The following outlines the immediate action plans that are illustrated by flow diagrams in Appendix F. These are to be used when responding to an H_2S release occurring at the Linam Ranch Plant, Highway 62/180 road crossing, the AGI pipeline, or the AGI wellsite. 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.

LINAM RANCH PLANT RELEASES:

LEVEL 1 RESPONSE - PLANT

A Level 1 response occurs when

- 10 ppm of H_2S or greater is detected at a fixed monitor
- 10 ppm of H_2S or greater is detected on a personal monitor
- an intermittent horn and a flashing yellow light occurs

1. At the initial sound of the intermittent alarm or the flashing yellow beacon, the responding operator will prepare to put on a 30 minute SCBA, the control room operator will remain in the control room and will monitor H_2S concentrations throughout the plant.

   All other personnel in the Plant complex shall immediately evacuate the Plant using the evacuation routes to the Emergency Assembly Area 1 (**see Appendix D**). At the assembly area, all personnel will be accounted for using the plant sign in sheet and the air quality will be monitored to insure it remains less than 10 ppm H_2S. If H_2S rises above 10 ppm, all personnel will move to Assembly Area 2.

   The Plant Supervisor shall be notified of the release.

2. The responding operator, upon donning the SCBA, will first help any persons in distress evacuate to the Emergency Assembly Area. If deemed necessary, local emergency response service providers will be contacted by Plant personnel designated by the Operator.

3. Wearing the SCBA, the responding operator(s) will determine the source of the release and if possible take corrective actions. If corrective actions are successful and the release is resolved, and the monitored H_2S levels in the Plant return to 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 plant to resume work.

4. The Plant Supervisor or his designee will contact the OCD district office within 4 hours of the release.

   If the release is not resolved and H_2S levels continue to increase, Level 2 Response is initiated.

LEVEL 2 RESPONSE - PLANT

A Level 2 response occurs when

- corrective actions at Level 1 are unsuccessful
- 20 ppm of H_2S or greater is detected at a fixed monitor
- a continuous horn and a flashing yellow light occurs

1. The responding operator will prepare to put on a 30 minute SCBA, the control room operator will remain in the control room and will monitor H_2S concentrations throughout the plant. If the concentration of H_2S in the control room exceeds 10 ppm, the control room operator will also put on a 30 minute SCBA.

   All other personnel in the Plant complex shall immediately evacuate the Plant using the evacuation routes to the Emergency Assembly Area 1 At the assembly area, all personnel will be accounted for using the plant sign in sheet and the air quality will be monitored to insure it remains less that 10 ppm H_2S. If it rises above 10 ppm, H_2S all personnel will move to Assembly Area 2.

   The Plant Supervisor shall be notified of the release.

2. The responding operator(s), upon donning the SCBA, will first help any persons in distress evacuate to the Emergency Assembly Area. If deemed necessary, local emergency response service providers will be contacted by Plant personnel as designated by the Operator.

3. Wearing the SCBA, the responding operator(s) will determine the source of the release and if possible take corrective actions. If corrective actions are successful and the release is resolved, and the monitored H_2S levels in the Plant return to 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 plant to resume work.

4. If the release has occurred within the AGI system, the Operator will activate the AGI process shut down, which shuts down and isolates the AGI compressors and equipment and routes the acid gas to the plant acid gas flare. If the release is contained and the monitored H_2S levels in the Plant 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 plant to resume work. Priority will be given to restoring the AGI compressors and equipment to normal operations.

5. The Plant Supervisor or his designee will contact the OCD district office within 4 hours of the release.

If the H_2S levels continue to rise, or remain above 20 ppm for 15 minutes, the Operator will initiate Level 3 Response.

LEVEL 3 RESPONSE - PLANT

A Level 3 response occurs when

- corrective actions at Level 2 are unsuccessful
- 20 ppm of H_2S or greater is detected for greater than 15 minutes

1. Operator will activate the Plant ESD shutting off all incoming and outgoing gas and 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 wellsite.

   The Plant Supervisor will be notified

2. All personnel will be evacuated from Assembly Area 1 to Assembly Area 2, where air quality will continue to be monitored for H_2S. All personnel will be accounted for using the plant sign-in list.

   State agencies including the OCD District Office and Emergency responders will be notified.

3. Plant personnel with H_2S monitors and emergency trailers will be dispatched to the north plant perimeter between the plant and Highway 62/180 and will monitor for H_2S concentrations. If H_2S concentrations reach 10 ppm, plant personnel will move to the designated road block areas shown on ROE map and Highway 62/180 will be blocked.

4. Businesses, public receptors, and producers as listed in Appendix G will be notified. The nature of the release and status of containment will be conveyed. Parties will be advised to report the incident to employees working near the Plant to alert any third party contractors or service companies working in the Plant vicinity or imminently scheduled to work in the Plant vicinity, of the release. <u>All should be instructed to leave the area and not to re-enter until further notice.</u>

5. Incident Command Center will be established at the Assembly Area 2 – Hobbs Plant. Linam Ranch Plant Distributed Control System (DCS) may be available at this site to assist in monitoring Linam Ranch Plant H_2S levels)

   Establish media staging area adjacent to Assembly Area 2 and direct all media to it.

   The IC will initiate and maintain a Chronological Record of Events log. (Appendix I)

   If monitored H_2S levels at Emergency Assembly Area 2 exceed 10 ppm, evacuate to Emergency Assembly Area 3, and initiate a Level 4 Response. All personnel should be accounted for at Assembly Area 3 using the plant sign in sheet and air quality will be monitored for H_2S concentrations.

6. 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.

7. If release is resolved and monitored levels of H_2S in the Plant are less than 10 ppm, the Plant Supervisor or his designee may authorize personnel to return to the Plant. 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.

If the release is not resolved or H_2S levels continue to increase, the IC will initiate Level 4 Response.

LEVEL 4 RESPONSE - PLANT

A Level 4 response occurs when

- if corrective actions at Level 3 are unsuccessful
- H_2S concentrations reach 10 ppm or greater at Assembly Area 2,
- a catastrophic release occurs

1. Operators shall have activated the plant ESD system on evacuation from Plant facilities. Plant Supervisor will be notified of the release. State agencies including the OCD District Office and Emergency responders will be notified.

2. The Incident Command Center, media staging area and all personnel shall have evacuated to Emergency Assembly Area 3. All personnel will be accounted for using the plant sign-in sheet. Initiate and maintain a Chronological Record of Events log.

3. Plant personnel will move to the designated road block areas shown on ROE map and Highway 62/180 will be blocked.

4. Notifications to area businesses, both manned and unmanned will include the nature of the release and status of containment. Notifications will include but are not limited to the following:

   - Businesses, public receptors, and producers as listed in Appendix G. All will be instructed to immediately alert all company personnel, third party contractors and/or services companies working in the area and those imminently scheduled to work in the area, of the release and evacuation status of the Plant. They should be instructed to immediately leave and not re-enter the Plant vicinity until further instruction. All shall be informed of the road blocks on Highway 62/180.

   - Xcel Maddox and Lea Power Partners facilities will be notified of the release and advised to shelter in place or evacuate depending on wind direction.

5. 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.

6. 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.

7. Once release is resolved and monitored levels of H_2S in the Plant are less than 10 ppm, the Plant Supervisor or his designee may authorize personnel to return to the Plant. 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 at the Plant.

ROAD CROSSING RELEASES – HWY 62/180 ROAD CROSSING

LEVEL 1 RESPONSE – ROAD CROSSING

The AGI pipeline has fixed monitors at the Highway 62/180 road crossing – north and south locations and another monitor approximately 100 ft. north of the highway near the Low Pressure isolation valve.

A Level 1 response occurs when

- 10 ppm of H_2S or greater is detected at road crossing fixed monitor
- an intermittent horn and a flashing yellow light occurs

1. If a fixed monitor at the highway crossings reaches 10 ppm H_2S, the AGI process shut down is automatically initiated which shuts down and isolates the AGI compressors and equipment and routes the acid gas to the plant acid gas flare. This will also automatically close an ESD valve located immediately south of Highway 62/180 as well as a control valve located approximately 100' north of Highway 62/180.

   The responding operator will prepare to put on a 30 minute SCBA, the control room operator will remain in the control room and will monitor H_2S concentrations throughout the plant.

   All other personnel in the Plant complex shall immediately evacuate the Plant using the evacuation routes to the Emergency Assembly Area 1 (see **Appendix D**). At the assembly area, all personnel will be accounted for and the air quality will be monitored to insure it remains less than 10 ppm H_2S. If it rises above 10 ppm H_2S, all personnel will move to Assembly Area 2.

   The Plant Supervisor shall be notified of the release.

2. The responding operator, upon donning the SCBA, will first help any persons in distress evacuate to the Emergency Assembly Area. If deemed necessary, local emergency response service providers will be contacted by Plant personnel designated by the Operator.

   The control room operator will contact any personnel working at the AGI wellsite, alerts them to the road crossing alarm condition, and directs them to monitor air quality using the fixed monitors at the wellsite.

3. Wearing the SCBA, the responding operator will determine the source of the release and if possible take corrective actions. If corrective actions are successful and the release is resolved, and the monitored H_2S levels in the Plant and the AGI pipeline (including the fixed monitors at the Highway 62/180 road crossing) return to 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 plant to resume work.

4. The Plant Supervisor or his designee will contact the OCD district office within 4 hours of the release.

If the Level 1 road crossing release is not resolved and H_2S levels continue to increase, Level 3 Response is initiated.

LEVEL 2 RESPONSE – ROAD CROSSING

There is no Level 2 Response for a road crossing release.

LEVEL 3 RESPONSE – ROAD CROSSING

A Level 3 response is initiated when:

- level 1 corrective actions are unsuccessful
- more than one AGI pipeline fixed monitor reaches 10 ppm H_2S
- any one of the AGI pipeline fixed monitor reaches 20 ppm H_2S

1. Operator will activate the Plant ESD shutting off all incoming and outgoing gas and 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 wellsite. Operator will activate the continuous H_2S alarm.

   All plant personnel will be evacuated to Assembly Area 1, where air quality will continue to be monitored for H_2S.

   The control room operator will contact personnel working at the AGI wellsite and direct them to evacuate to Assembly Area 1. All personnel will be accounted for using the plant sign-in list.

   The Plant Supervisor will be notified

2. State agencies including the OCD District Office and Emergency responders will be notified.

3. Emergency trailers will be dispatched to block Highway 62/180 at designated locations shown on the ROE Map.

4. Businesses, public receptors, and producers as listed in Appendix G will be notified. The nature of the release and status of containment will be conveyed. Parties will be advised to report the incident to employees working near the Plant to alert any third party contractors or service companies working in the Plant vicinity or imminently scheduled to work in the Plant vicinity, of the release. <u>All should be instructed to leave the area and not to re-enter until further notice.</u>

5. Incident Command Center will be established at the Assembly Area 1 as long as H_2S levels remain less than 10 ppm at the Assembly area. Establish media staging area adjacent to Assembly Area 1 and direct all media to it.

   The IC will initiate and maintain a Chronological Record of Events log. Appendix I

   If monitored H_2S levels at Emergency Assembly Area 1 exceed 10 ppm, evacuate to Emergency Assembly Area 2. Establish media staging area adjacent to Assembly Area 2 and direct all media to it.

6. 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.

7. If release is resolved and monitored levels of H_2S in the Plant, the monitors at the Highway 62/180 road crossing, and the AGI wellsite are less than 10 ppm, the Plant Supervisor or his designee may authorize personnel to sign in and return to the Plant and wellsite. Traffic will be restored on Highway 62/180. 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.

If the release is not resolved and/or H_2S levels continue to increase, Level 4 Response is initiated.

LEVEL 4 RESPONSE – ROAD CROSSING

A Level 4 response occurs when

- if corrective actions at Level 3 are unsuccessful
- H_2S concentrations reach 10 ppm or greater at Assembly Area 2,
- a catastrophic release occurs

1. Operators shall have activated the plant ESD system on evacuation from Plant facilities. Plant Supervisor will be notified of the release. State agencies including the OCD District Office and Emergency responders will be notified.

2. The Incident Command Center, media staging area and all personnel shall have evacuated to Emergency Assembly Area 2. All personnel will be accounted for using the plant sign-in sheet. Initiate and maintain a Chronological Record of Events log. H_2S concentrations at Emergency Area 2 will be monitored. If concentrations exceed 10 PPM, all personnel will evacuate to Emergency Area 3.

3. Plant personnel will move to the designated road block areas shown on ROE map and Highway 62/180 will be blocked.

4. Notifications to area businesses, both manned and unmanned will include the nature of the release and status of containment. Notifications will include but are not limited to the following:

   - Businesses, public receptors, and producers as listed in Appendix G. All will be instructed to immediately alert all company personnel, third party contractors and/or services companies working in the area and those imminently scheduled to work in the area, of the release and evacuation status of the Plant. They should be instructed to immediately leave and not re-enter the Plant vicinity until further instruction. All shall be informed of the road blocks on Highway 62/180.

- Xcel Maddox and Lea Power Partners facilities will be notified of the release and advised to shelter in place or evacuate depending on wind direction.

5. If escaping vapors have been ignited, the vapors should be allowed to continue to bum unless the fire endangers personnel, the public, other property, or other equipment.

6. 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.

7. Once release is resolved and monitored levels of H_2S in the Plant, the monitors at the Highway 62/180 road crossing, and the AGI wellsite 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. Traffic will be restored on Highway 62/180. 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.

AGI PIPELINE RELEASES – PIPELINE

LEVEL 1 RESPONSE – PIPELINE

Level 1 response for the AGI pipeline occurs when:

- Operator conducting biweekly line patrol detects H_2S concentration greater than 10 ppm.
- Third party report of H_2S gas leak.

1. The responding operator, upon donning the SCBA, will check the pipeline right of way (ROW), helps any persons in distress, and evacuate any employees or contractors who may be working on or near the pipeline ROW to Linam Emergency Assembly Area 1. If deemed necessary, local emergency response service providers will be contacted by Plant personnel designated by the Operator.

   The control room operator will contact any personnel working at the AGI wellsite, inform them of the H_2S alarm on the pipeline, and direct them to monitor air quality – H_2S concentrations, using the wellsite fixed monitors, and to evacuate to Assembly Area 1 if levels increase to 10 ppm.

   Any third party companies working near the ROW will be advised of the situation and instructed to leave the area and not return until further notice.

   The Plant Supervisor shall be notified of the release.

2 Wearing the SCBA, the operator(s) will determine the source of the release and if possible take corrective actions. If corrective actions are successful and the release is resolved, and the monitored H_2S levels on the pipeline and at the wellsite return to less than 10 ppm, the Plant Supervisor or his designee will signal all clear and personnel will be allowed to sign in and resume work on the pipeline ROW. Personnel working at the wellsite will be notified of the all clear.

3. The Plant Supervisor or his designee will contact the OCD district office within 4 hours of the release.

   If the release is not resolved and H_2S levels continue to increase, Level 2 Response is initiated.

LEVEL 2 RESPONSE – PIPELINE

Level 2 Response occurs when:

- Level 1 response is unsuccessful
- H_2S concentration is increasing above 10 ppm, or is detected at 20 ppm
- Pipeline leak is visible.

1. The responding operator will immediately contact the control room operator to activate the AGI process shut down, which shuts down and isolates the AGI compressors and equipment and routes the acid gas to the plant acid gas flare.

   The control room operator will contact personnel working at the AGI wellsite and direct them to evacuate to Emergency Assembly Area 1.

   Any third party companies working near the ROW will be advised of the situation and instructed to leave the area and not return until further notice.

   The Plant Supervisor will be notified.

2. The control room operator will direct that the manual valves at both the Linam Ranch Plant pig launcher and the AGI wellsite pig receiver be opened, and the pipeline will be depressurized into the acid gas flares located at both sites. The responding operator may, if no personnel are present at the wellsite, proceed to the wellsite, using H_2S monitors to insure his safety, to open the manual valve at the pig receiver.

3. The responding operator, upon donning the SCBA, will check the pipeline ROW, help any persons in distress, and evacuate any employees or contractors persons who may be working on or near the pipeline ROW to Linam Emergency Assembly Area 1. If deemed necessary, local emergency response service providers will be contacted by Plant personnel designated by the Operator.

4. Plant personnel with H_2S monitors and emergency trailers will be dispatched to the Highway 62/180 pipeline crossing and to the Xcel power plant on Maddox Road. Wind direction and H_2S concentrations will be monitored. **If H_2S concentrations at Highway 62/180, the Assembly Area 1, or at Xcel power plant on Maddox Road reach 10 ppm, a Level 4 response is initiated.**

5. Incident Command Center will be established at the Plant Assembly Area 1 . Establish media staging area adjacent to Assembly Area 1 and direct all media to it. The IC will initiate and maintain a Chronological Record of Events log. Appendix I If monitored H_2S levels at Emergency Assembly Area 1 exceed 10 ppm, evacuate to Emergency Assembly Area 3.

6 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.

If release is resolved and monitored levels of H_2S in the Plant, the monitors at the Highway 62/180 road crossing, and the AGI wellsite 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.

The Plant Supervisor or his designee will contact the OCD district office within 4 hours of the release

If the release is not resolved and/or H_2S levels continue to increase, Level 4 Response is initiated.

LEVEL 3 RESPONSE – PIPELINE

There is no level 3 for a pipeline response.

LEVEL 4 RESPONSE – PIPELINE

A Level 4 response occurs when

- if corrective actions at Level 2 are unsuccessful
- H_2S concentrations reach 10 ppm or greater at - the Xcel Power Plant, Highway 62/180, or any other public area or road.
- a catastrophic release occurs

1. Emergency trailers will be dispatched to block Highway 62/180 at designated locations shown on the ROE Map.

   Plant operators will activate the plant ESD system.

   The operator will contact any personnel working at the AGI wellsite and direct them to evacuate to Emergency Assembly Area 3.

2. The Incident Command Center will be relocated to Emergency Assembly Area 3. All personnel shall evacuate to Assembly Area 3. All personnel will be accounted for using the plant sign-in sheet. Initiate and maintain a Chronological Record of Event log.

3. State agencies including the OCD District Office and Emergency responders will be notified.

4. Notifications to area businesses, both manned and unmanned will include the nature of the release and status of containment. Notifications will include but are not limited to the following:

   - Businesses, public receptors, and producers as listed in Appendix G. All will be instructed to immediately alert all company personnel, third party contractors and/or services companies working in the area and those imminently scheduled to work in the area, of the release and evacuation status of the Plant. They should be instructed to immediately leave and not enter/or re-enter the Plant vicinity until further instruction. All shall be informed of the road blocks on Highway 62/180.

   - Xcel Maddox plant and Lea Power Partners plant will be notified of the release and advised to shelter in place or evacuate depending on wind direction.

5. If escaping vapors have been ignited, the vapors should be allowed to continue to bum unless the fire endangers personnel, the public, other property, or other equipment.

6. 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.

7. Once release is resolved and monitored levels of H_2S in the Plant, the monitors at the Highway 62/180 road crossing, and the AGI wellsite are less than 10 ppm, the Plant Supervisor or his designee may authorize personnel to sign in and return to the Plant, AGI wellsite, and pipeline ROW. Traffic will be restored on Highway 62/180. 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.

AGI WELLSITE RELEASES:

LEVEL 1 RESPONSE – AGI WELLSITE

A Level 1 response occurs when

- 10 ppm of H_2S or greater is detected at an **interior** fixed monitor
- 10 ppm of H_2S or greater is detected on a personal monitor
- an intermittent horn and a flashing yellow light occurs

1. The operator and all other personnel in the wellsite shall immediately evacuate the wellsite using the evacuation routes to the Wellsite Assembly Area (see **Appendix D**). At the assembly area, all personnel will be accounted for using the sign in sheet, and the air quality will be monitored to insure it remains less than 10 ppm H_2S. If it rises above 10 ppm H_2S, all personnel will move to Linam Ranch Plant Assembly Area 1.

   The Plant Supervisor shall be notified of the release.

2. The responding operator, upon donning the SCBA, will first help any persons in distress evacuate to the Emergency Assembly Area. If deemed necessary, local emergency response service providers will be contacted by Plant personnel designated by the Operator.

3. Wearing the SCBA, the operator will attempt to fix the cause of the release. If the release is contained and the monitored H_2S levels in the wellsite 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 wellsite to resume work.

4. The Plant Supervisor or his designee will contact the OCD district office within 4 hours of the release.

If the release is not resolved and H_2S levels continue to increase, Level 2 Response is initiated.

LEVEL 2 RESPONSE – AGI WELLSITE

A Level 2 response occurs when

- Corrective actions at Level 1 were unsuccessful
- 20 ppm of H_2S or greater is detected at an interior fixed monitor
- a continuous horn and a flashing yellow light occurs

1. At the initial sound of the continuous alarm or observance of the flashing yellow beacons, the operators and all other personnel in the wellsite will evacuate using the evacuation routes to the Wellsite Assembly Area (see **Appendix** D). At the assembly area, all personnel will be accounted for using the sign in sheet, and the air quality will be monitored to insure it remains less than 10 ppm H_2S. If it rises above 10 ppm H_2S, all personnel will move to Assembly Area 1.

   The Plant Supervisor shall be notified of the release.

2. The operator, upon donning the SCBA, will first help any persons in distress evacuate to the Emergency Assembly Area. If deemed necessary, local emergency response service providers will be contacted by Plant personnel as designated by the Operator

3 . Wearing the SCBA, the operator(s) will attempt to fix the cause of the release. If the operators are unsuccessful in containing the release and H_2S levels continue to rise, or remain above 20 ppm for 15 minutes, the Operator will activate the AGI process shut down, which shuts down the AGI compressors and equipment, closes the pipeline and injection well isolation valves, and depressurizes the wellsite equipment and piping to the wellsite flare. At Linam Ranch Plant, the acid gas stream from the amine system is routed to the plant acid gas flare.

   If the release is contained and the monitored H_2S levels in the wellsite 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 wellsite to resume work. Priority will be given to restoring the AGI compressors and equipment to normal operations.

4. If the wellsite perimeter monitors reach 10 ppm, initiate a Level 3 Response.

If the release is not resolved and H_2S levels continue to increase, Level 3 Response is initiated.

LEVEL 3 RESPONSE – AGI WELLSITE

A Level 3 response is initiated when:

- level 2 corrective actions are unsuccessful
- when a wellsite perimeter monitor has reached 10 ppm H_2S

1. The AGI process shut down 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 wellsite equipment and piping to the wellsite acid gas flare. At Linam Ranch Plant, the acid gas stream from the amine treater is routed to the Linam Ranch Plant acid gas flare.

   An alarm signal is automatically sent to the Xcel Maddox Power Plant, alerting their control room of the 10 ppm H_2S concentration at the DCP AGI wellsite perimeter.

   Flashing Poison Gas signals are activated along public and private roads adjacent to the AGI wellsite to alert personnel of potential danger – locations are shown on Appendix D - ROE Map.

2. All personnel will be evacuated from the Wellsite Assembly Area to the Linam Ranch Plant Assembly Area 1. At the assembly area, all personnel will be accounted for using the sign in sheet, and the air quality will be monitored to insure it remains less than 10 ppm H_2S. If it rises above 10 ppm H_2S, all personnel will move to Assembly Area 3.

   The Plant Supervisor shall be notified of the release.

3. Personnel with emergency trailers will be dispatched to monitor H_2S concentration on Maddox road at the Xcel Power Plant. **If H_2S concentration at the Maddox Road and Xcel Power Plant reach 10 ppm, Xcel will be advised to evacuate and a Level 4 will be initiated.**

4. State agencies including the OCD District Office and Emergency responders will be notified.

5. Businesses, public receptors, and producers as listed in Appendix G will be notified. The nature of the release and status of containment will be conveyed. Parties will be advised to report the incident to employees working near the AGI facility to alert any third party contractors or service companies working in the AGI vicinity or imminently scheduled to work in the AGI vicinity, of the release. <u>All should be instructed to leave the area and not to re-enter until further notice.</u>

6. Incident Command Center will be established at the Linam Ranch Plant Assembly Area 1. – Establish media staging area adjacent to Linam Ranch Plant Assembly Area 1 and direct all media to it. The IC will initiate and maintain a Chronological Record of Events log. Appendix I

   If monitored H_2S levels at Linam Ranch Plant Emergency Assembly Area 1 exceed 10 ppm, initiate a Level 4 response and evacuate to Assembly Area 3. Establish Incident Command Center and media staging area adjacent to Assembly Area 3 and direct media to it.

7. 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 on AGI pipeline.

If release is resolved and monitored levels of H_2S in the AGI wellsite are less than 10 ppm, Plant Supervisor or his designee will signal all clear and personnel will be allowed to sign in and re-enter the wellsite to resume work.

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.

If release is not resolved, a Level 4 response is initiated

LEVEL 4 RESPONSE – AGI WELLSITE

A Level 4 response occurs when

- if corrective actions at Level 3 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 Power Plant
- Or a catastrophic release occurs

1. Operators shall have activated the plant ESD system on evacuation from Plant facilities. Plant Supervisor will be notified of the release. State agencies including the OCD District Office and Emergency responders will be notified.

2. The Incident Command Center, media staging area and all personnel shall have evacuated to Emergency Assembly Area 3. All personnel will be accounted for using the plant sign-in sheet. Initiate and maintain a Chronological Record of Events log.

3. Plant personnel will move to the designated road block areas shown on ROE map and Highway 62/180 will be blocked.

4. Notifications to area businesses, both manned and unmanned will include the nature of the release and status of containment. Notifications will include but are not limited to the following:

   - Businesses, public receptors, and producers as listed in Appendix G. All will be instructed to immediately alert all company personnel, third party contractors and/or services companies working in the area and those imminently scheduled to work in the area, of the release and evacuation status of the Plant. They should be instructed to immediately leave and not enter/or re-enter the Plant vicinity until further instruction. All shall be informed of the road blocks on Highway 62/180.

   - Xcel Maddox and Lea Power Partners facilities will be notified of the release and advised to shelter in place or evacuate depending on wind direction.

5. 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.

6. 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.

7. Once resolved and all monitored levels of H_2S in the AGI wellsite and Plant are less than 10 ppm H_2S, the Plant Supervisor will signal all clear and allow personnel to sign in and re-enter the Plant site and AGI wellsite. All businesses previously notified will be informed that the release had been resolved and advised of the current monitored H_2S levels at the AGI wellsite and Plant.

4. EMERGENCY SHUT DOWN SYSTEM

The Linam Ranch Plant and AGI wellsite have extensive Emergency Shut Down (ESD) and Process Shut Down (PSD) systems designed to isolate incoming and out-going gas and product streams, contain hydrocarbon and H_2S releases, and safely depressurize equipment to flares. These systems are automatically and manually initiated, depending on process conditions. There are manually activated ESD buttons located at exit locations at the Plant and the AGI wellsite as shown on Appendix D. The ESD systems are designed to prevent a Level 4 response. See **Appendix E** for a more detailed description of the ESD systems.

5. 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.

The NMOCD will be notified as soon as possible but no later than 4 hours following a release of H_2S requiring activation of this Plan. This shall be followed up with a full report of the incident using the NMOCD's C-141 form no later than 15 days following the release.

A. DISCOVERY AND INTERNAL REPORTING

1. All personnel, including contractors who perform operations, maintenance, and/or repair work in sour gas areas within the Plant, AGI pipeline, and AGI wellsite wear H_2S monitoring devices to assist them in detecting the presence of unsafe levels of H_2S. When any personnel 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 value 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; and
    - Type and severity of the emergency; and
    - Location of the emergency (area/block, mile markers, latitude & longitude, or building), and the distance to surrounding equipment and/or structures; and
    - 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; and
    - Description of injuries and report of damage to property and structures; and
    - Initiate and maintain a Chronological Record of Events log. This record should record the time, date, and a summary of the event.

2. If any personnel detects H_2S levels greater than 10 ppm either as a result of his/her personal monitoring device or the intermittent alarms and/or yellow flashing beacons from fixed monitors, Plant operators are to contact the Plant Supervisor for assistance and one operator

will put on the 30-min SCBA to attempt to resolve the issue. All non essential persons shall be notified of the release and evacuated from the area. The responding Operator wearing the SCBAs 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 H2S Contingency Plan can be activated, if necessary.

3. Once the Plant Supervisor is contacted, he or his designee is to notify the appropriate DCP management, EHS personnel, Plant emergency response personnel, and advise them of the existing situation. If necessary, the Control Room Operator will then conduct the notifications to state regulatory agencies including the OCD District Office and emergency response agencies as detailed in the **IMMEDIATE ACTION PLAN/INITIAL RESPONSE** section of this Plan.

4. 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.

B. PUBLIC AWARENESS AND COMMUNICATION

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. Refer to the Response Flow diagram in Appendix F that indicates when certain entities are to be contacted in event of activation of this Plan. **Appendix G** is a listing of the entities to be contacted and **Appendix H** is a list of organizations that have received a copy of the Plan. DCP will inform all state and local response organizations on its Plan as well as those businesses that fall within its 500-ppm and 100-ppm ROE as illustrated in **Appendix C.**

C. PUBLIC AREAS, NEARBY BUSINESSES AND RESIDENTS

The contact information for all residents, businesses and public areas is contained in **Appendix G.** All businesses and public places within the 500 ppm and 100 ppm radius of exposure will be contacted by Plant personnel as designated by Plant Supervisor if the Plan is activated and based on response level as described in the **IMMEDIATE ACTION PLAN/INITIAL RESPONSE** section of this Plan and advised of the following:

- The nature and extent of the release/emergency at the Plant, Pipeline or AGI wellsite 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 evacuate and/or when it is safe to return to the area.

1. Residences or Public roads:

   There are no residences located within 500 ppm radius of exposures. There are 2 residences within the 100 ppm radius of exposure located east of the plant site on US Highway 62-180.

There are 2 public roads located within the 500 ppm radius of exposure. 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 radius of the AGI wellsite and the pipeline. Both of these roads also have sections within the 100 ppm radius of exposure of the AGI wellsite, pipeline and Plant site. Additionally, a portion of NM Highway 8, south of US Highway 62-180, lies within the 100 ppm radius of exposure of the AGI Pipeline and Plant site.

2. Businesses or Other Public Areas:

There is one 24 - hour manned business within the 500 ppm radius of exposure. The Xcel Maddox Power Plant is located southwest of the AGI wellsite and within the 500 ppm radius of exposure of the AGI wellsite 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 radius of exposure of the Plant Site and the AGI pipeline.

There are 2 additional manned businesses within the 100 ppm radius of exposures. The Lea Power Partners Power Plant lies northwest of the AGI wellsite and within the 100 ppm radius of exposure of the AGI wellsite and the AGI Pipeline. The DCP Hobbs Gas Plant lies within the 100 ppm radius of exposures of the AGI wellsite, 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 radius of exposures for the plant, pipeline, AGI wellsite, all residences, manned and unmanned businesses, and producers listed on Appendix G will be notified if the Plan is enacted.

6. SITE SECURITY

A. In order to have an accurate listing of all personnel on-site in the event of an emergency, a daily sign-in log sheet shall be utilized. The sign-in log sheet shall include at a minimum the person's name, the company name, the time of arrival, and the time of departure.

B. The Incident Commander shall be responsible to assure that all personnel sign-in upon arrival and sign-out upon departure from the job site.

C. The Incident Commander may at his discretion assign the responsibilities for the daily sign-in log sheet to the individual designated as the Record Keeper or another designee.

D. At the discretion of the Incident Commander, a security coordinator andlor a security team may be established, and the access to the job site restricted.

E. Road blocks will occur as outlined in the Response Level detail for Plant, road crossing, pipeline, or AGI wellsite releases.

7. SIGNS & MARKERS

The Plant, AGI wellsite, 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, AGI wellsite, and along the pipeline right of way. Emergency response phone numbers are posted at the entrance to the Plant and AGI wellsite. AGI pipeline markers also include emergency response numbers.

Signs are located at the Plant and AGI wellsite gate entrances indicating that all visitors are to sign in at the Plant office.

8. FIRST-AID STATION

The first aid station will be located at the Emergency Assembly Area.

FIRST AID KITS are located:

- Plant Superintendent Office Building,
- Maintenance/Safety Office Building, and
- Each company vehicle
- Plant Supervisors office
- Linam Ranch Plant Control Room
- Emergency trailers

9. MEDIA SITE

A. If a Level 3 Response occurs, the Media Site will be located adjacent to Emergency Assembly Area 2. The Incident Commander will designate the Media Site adjacent to the Emergency Assembly Area.

B. If a Level 4 Response occurs, the Media Site will be located adjacent to Emergency Assembly Area 3. The Incident Commander will designate a media Site adjacent to the Emergency Assembly Area.

C. The Incident Commander will designate a Media Liaison Officer or assume these duties personally.

D. 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 Incident Commander has approved their entry.

E. Media personnel shall not be allowed to enter DCP Midstream property without the approval of the DCP Midstream Asset Manager or his designee, and shall be escorted by DCP Midstream personnel at all times.

10. EMERGENCY AND SAFETY EQUIPMENT

Refer to **Appendix E** for information pertaining to the Plant's emergency and Safety equipment.

V. TRAINING AND DRILLS

A. TRAINING

1. Training on the H_2S Plan
   - Inclusion of local officials and LEPC
   - Public areas and businesses (within the ROE)
   - Those on the Plan distribution list

2. Other Emergency Response Related Training

DCP Midstream has an extensive safety training program and addresses various aspects of job related hazards. All training records for the Plant are maintained at the Plant. The following is a limited list and summary of the training programs that relate to the H_2S Plan and Emergency Response:

- 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. This training also complies with the requirements of the DCP and Linam Ranch Plant's Process Safety Management Program and Procedures Manuals.
- Hydrogen Sulfide and Sulfur Dioxide Training - All Plant personnel receive annual refresher training on hydrogen sulfide and sulfur dioxide, 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 hydrogen sulfide 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 personal protective equipment (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.

B. EMERGENCY RESPONSE DRILLS

1. The Plant will conduct, at least, a tabletop drill annually. Multiple drills during the year may be scheduled at the discretion of the Plant Supervisor.

2. The annual drill will execute this Plan and include, at a minimum, contacting the entities that are identified as being within the 500-ppm ROE and the Local Emergency Response contacts identified on **Appendix G.** The drills will also include briefing of public officials on issues such as evacuation or shelter-in-place plans.

3. Drill training will be documented and those records will be maintained at the Plant. The documentation shall include at a minimum the following:

   a. Description or scope of the drill, including date and time
   b. Attendees and Participant to the drill
   c. Summary of activities and responses
   d. Post-drill debriefing and reviews

APPENDIX A
WORST CASE SCENARIO

The basis for Linam Ranch Plant worst case calculations is 5700 parts per million (ppm) or 0.57 mole percent of hydrogen sulfide in the inlet gas to the Linam Gas Plant and a maximum daily (24 hour) processing volume of 225,000 Mscf. The ROE assumes an uncontrolled instantaneous release from the area near the amine contact towers of the referenced volume and concentration. Calculations using the ROE formula pursuant to NMAC 19.15.1 1 are provided in **Appendix** B.

It should be noted that this rate, though used as worst case, would unlikely be released due to the Plant emergency shut down (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 shut down valves as follows:

- Eddy Co. Line – pipeline shut down valve, capable of remote or manual closing, 300 ft. north of Hwy 62/180. Second pipeline shut down valve, manual closing, 5 miles west of Linam Ranch Plant.
- Buckeye Line – pipeline shut down valve, manual closing, 300 ft. north of Hwy 62/180. Second pipeline shut down valve 8 miles northwest of Linam Ranch Plant.
- Shell 12' Line – pipeline shut down valve, manual closing at south fence line of Linam Ranch Plant. Second pipeline shut down valve 12 miles southwest of Linam Ranch Plant.

These valves would be closed as directed by the IC in the event that Plant ESD valves failed to function properly.

The basis for AGI pipeline and wellsite for worst case calculations is 28.06 mole percent of hydrogen sulfide in the acid gas from the Linam Gas Plant and a maximum daily (24 hour) volume of 4,600 Mscf. The ROE assumes an uncontrolled instantaneous release from the wellsite or pipeline of the referenced volume and concentration. Calculations using the ROE formula pursuant to NMAC 19.15.11 are provided in **Appendix** B.

It should be noted that this rate, though used as worst case, would unlikely be released due to:

1. The AGI process shut down (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.

2. The Plant emergency shut down (ESD) systems, that when activated shuts down the Plant and closes ESD valves on the inlet pipelines preventing all gas from entering the Plant.

APPENDIX B
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

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

Where:
X = Radius of exposure in feet
Hydrogen Sulfide Conc = Decimal equivalent of mole or volume fraction of hydrogen sulfide 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

a) 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 the Company is using for contingency planning purposes an "escape rate" equal to the 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 hydrogen sulfide concentration of the inlet gas, daily monitoring data indicates variable concentrations with an average for 2009 of 4700 ppm, however 5700 ppm (0.57 mole percent) is a worst case scenario. Thus, the Plant has used a hydrogen sulfide concentration of 5700 ppm for its contingency planning purposes.
Using:
Q = 225,000,000
H_2S conc = 5700 ppm or 0.57 mole%

$$[(0.4546)*(H_2S \text{ concentration})*(\text{gas volume } (Q))]\ 0.6258$$
$$[(0.4546)*(5700*.000001)*(225{,}000{,}000)]\ 0.6258$$

500-ppm ROE = 4,057 feet

100-ppm RADIUS OF EXPOSURE CALCULATION

[(1.589)*(H_2S concentration)*(gas volume (Q))] 0.6258
[(1.589)*(5700*.000001)*(225,000,000)] 0.6258

100-ppm ROE = 8,877 feet

AGI PIPELINE AND WELLSITE

a) 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 AGI pipeline and wellsite, the Company is using for contingency planning purposes an "escape rate" equal to the acid gas volume of 4,600 MCFD. The volume of 4,600 MCFD of acid 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 hydrogen sulfide concentration of the inlet gas, daily monitoring data indicates variable concentrations with an average for 2009 of 23.39 mole percent; however 28.06 mole percent is a worst case scenario. Thus, the Plant has used a hydrogen sulfide concentration of 28.06 mole percent for its contingency planning purposes.
Using:
Q = 4,600,000
H_2S conc = 28.06 mole%

[(0.4546)*(H_2S concentration)*(gas volume (Q))] 0.6258
[(0.4546)*(0.2806)*(4,600,000)] 0.6258

500-ppm ROE = 4,073 feet

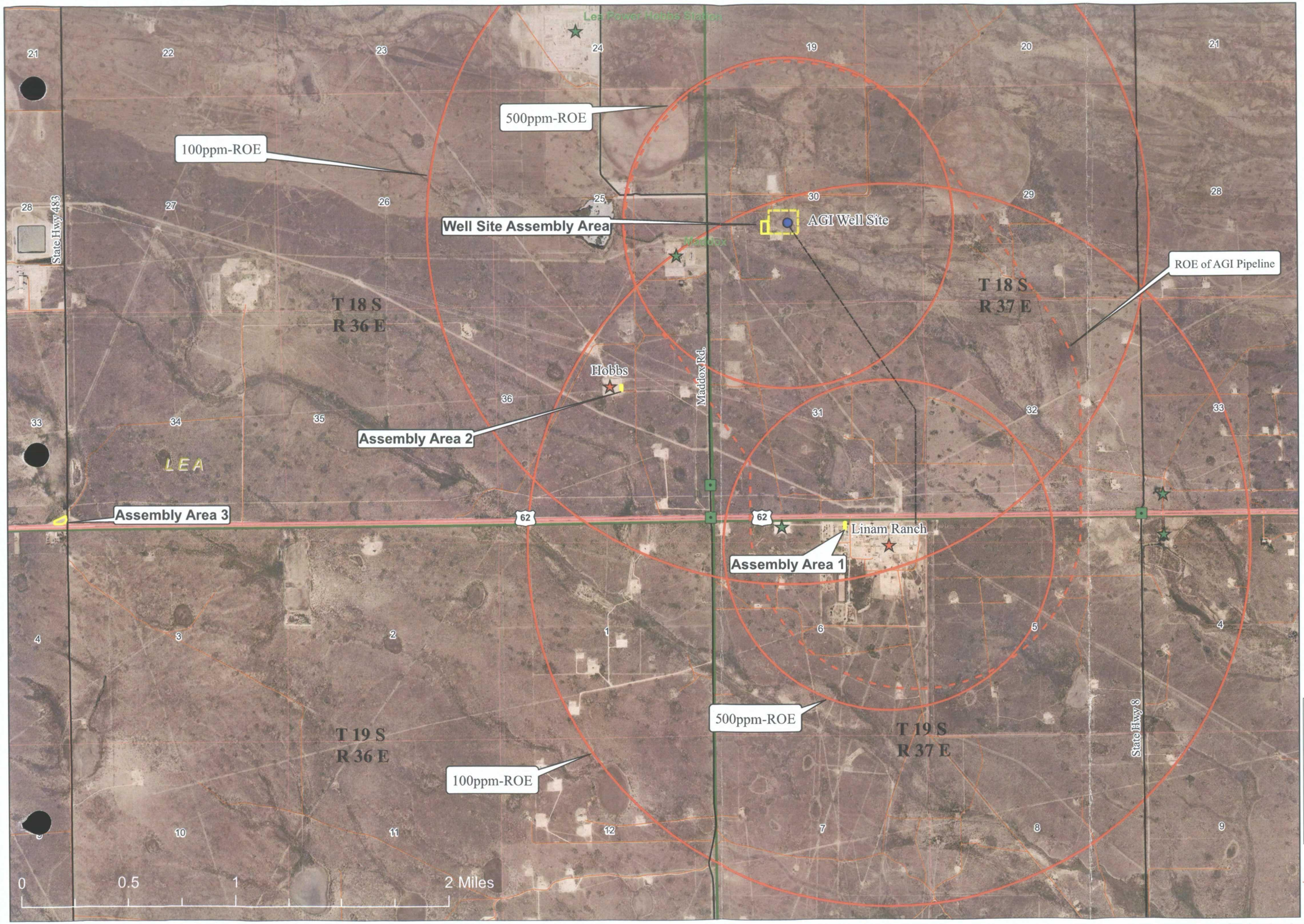
100-ppm RADIUS OF EXPOSURE CALCULATION

[(1.589)*(H_2S concentration)*(gas volume (Q))] 0.6258
[(1.589)*(0.2806)*(4,600,000)] 0.6258

100-ppm ROE = 8,914 feet

APPENDIX C
100-PPM AND 500-PPM
RADIUS OF EXPOSURE MAP

Linam Ranch Gas Plant
H2S Contingency Plan
Radius of Exposure



ROE
Public Receptors
AGI Pipeline
AGI Well Site
Assembly Areas
Road Blocks
DCP Plants

dcp Midstream

AGI Well Site
H2S Contingency Plan
Radius of Exposure

100ppm-ROE

500ppm-ROE

T 18 S
R 36 E

T 18 S
R 37 E

T 19 S
R 36 E

T 19 S
R 37 E

Smith Ranch House

Lea Power Hobbs Station

Well Site Assembly Area

AGI Well Site

ROE of AGI Pipeline

Maddox

Hobbs

Maddox Rd.

Assembly Area 2

Assembly Area 3

Assembly Area 1

Linam Ranch

State Hwy 483

State Hwy 8

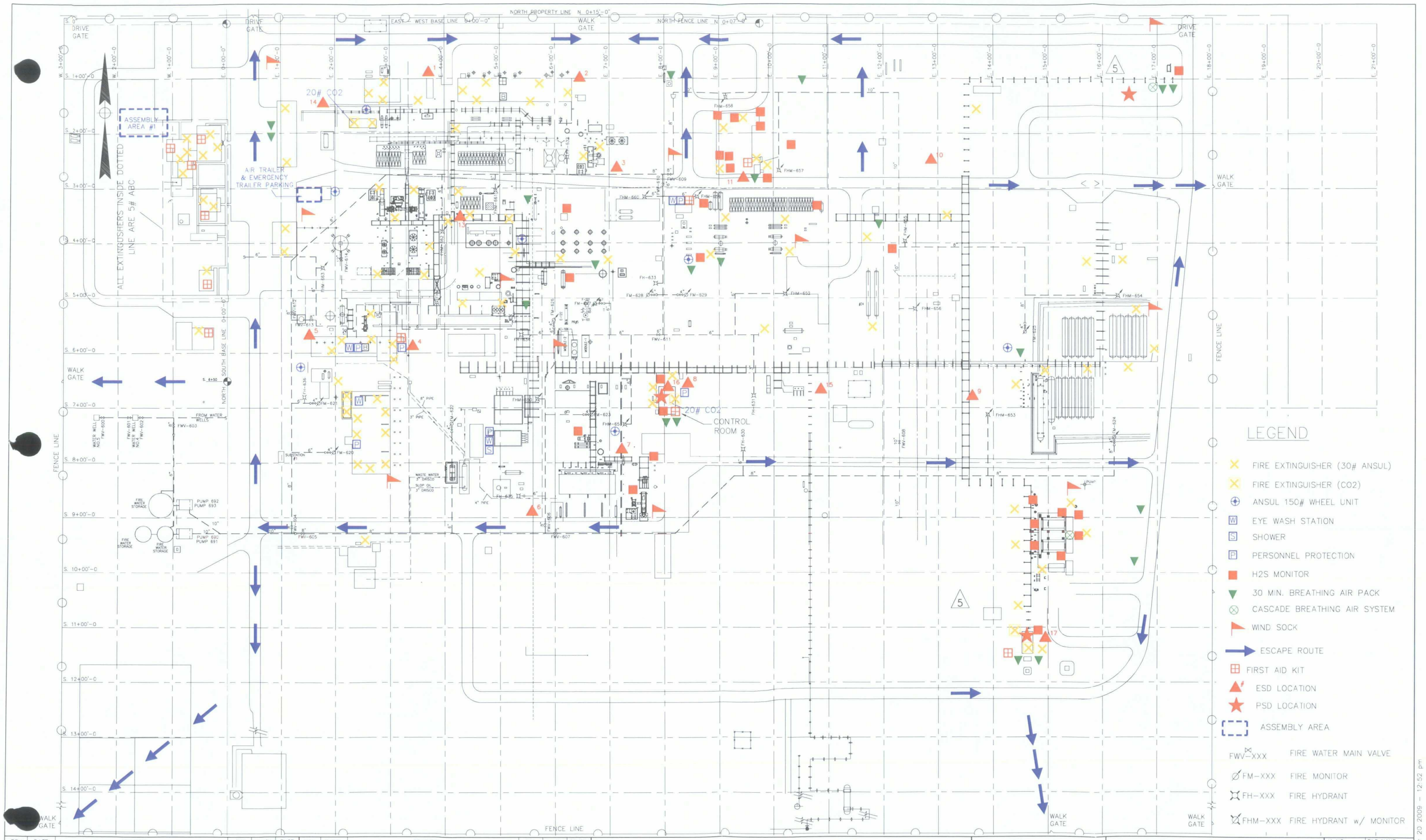
62

0 0.5 1 2 Miles

ROE
AGI Well Site
Assembly Areas
Road Blocks
H2S CautionSignals
Public Receptors
AGI Pipeline
DCP Plants

dcp Midstream

APPENDIX D
PLANT DIAGRAM WITH EVACUATION ROUTES & EMERGENCY EQUIPMENT LOCATIONS



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:

dcp Midstream

SAFETY EQUIPMENT LOCATION PLAN LINAM RANCH PLANT

DRAWN: COLEMAN | DATE: 5/14/96

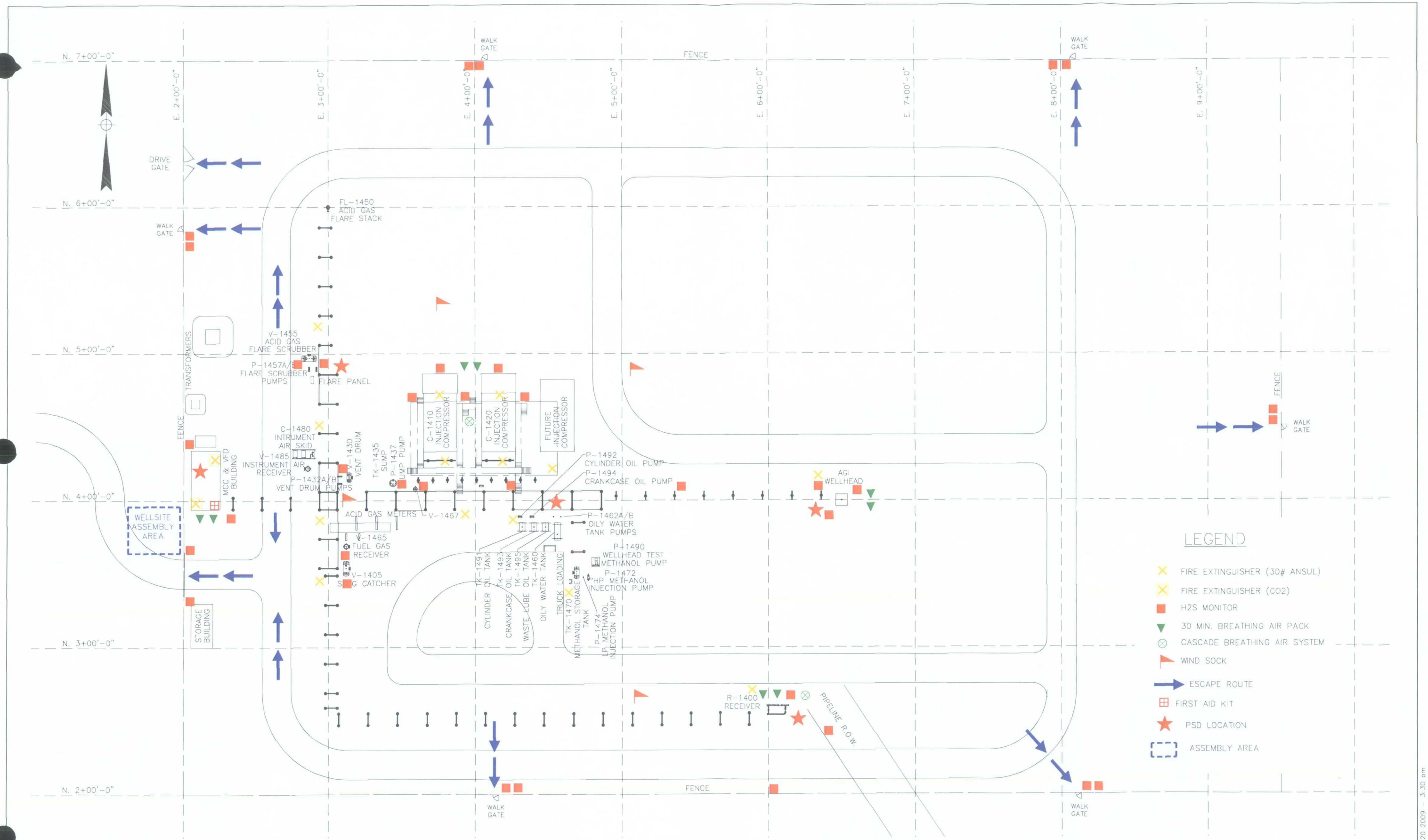
JA NO. | FILE NAME: 07307MP002

AFE NO. | SCALE: 1"=80'

BASE NO. 07-3-07

DWG. NO. M-5 | 6

PLOT TIME: October 20 2009 - 12:52 pm



REV.	DATE	REVISION	BY	CHK'D	ENGR.
0	03/24/09	ISSUED FOR CONSTRUCTION	MAC		RAK
1	5/18/09	ADDED ADDITIONAL PERIMITER H2S MONITORS	MAC		RAK
2	10/7/09	REVISED ESD EQUIPMENT	wrl		

REV.	DATE	REVISION	BY	CHK'D	ENGR.

NOTES:

PREPARED BY
ZAP
ENGINEERING & CONSTRUCTION SERVICES, INC.
12567 W. Cedar Drive Ph. (720) 529-4430
Lakewood, CO. 80228 ZAPECS.com

dcp Midstream

SAFETY EQUIPMENT LOCATION ACID GAS INJECTION WELL SITE

LINAM RANCH PLANT

DRAWN: MAC DATE: 01/18/08

JA NO. | FILE NAME: M14-006

AFE NO. | SCALE: 1"=30'

BASE NO.

DWG NO. M14-006/2

PLOT TIME: October 20 2009 - 3:30 pm

APPENDIX E
DESCRIPTION OF H_2S MONITORING & ALARM SYSTEMS

AGI PIPELINE

The following AGI pipeline parameters will be monitored from the plant control room DCS:

1. 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 wellsite (end of pipeline) by more than the setpoint (10%), the pipeline inlet ESD valve will be closed and the acid gas stream will be diverted to the plant acid gas flare.
2. Pipeline Low Pressure alarm. The pipeline normal operating pressure is projected to be 80 psig. Should the flowing pressure decrease below the setpoint (50 psig), a low pressure shut down switch will automatically close the inlet ESD valve and the acid gas stream will be diverted to the plant acid gas flare.

A. EMERGENCY SHUT DOWN SYSTEMS

LINAM RANCH PLANT

There are 17 Emergency Shut Down (ESD) manual stations located at various points in the facility (Appendix D).

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 a catastrophic release has occurred.

When any of the 17 manual stations are activated, the Plant equipment will be shut down, the natural gas inlets, outlets, and NGL product pipelines will be blocked.

Activating the ESD system should allow the Plant to avoid a Level 3 or Level 4 response.

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 at 5 miles, 8 miles, and 12 miles respectively. These block valves furthest upstream isolate the entire system from the field gathering lines coming into the Plant.

AGI WELLSITE

There are 5 AGI Process Shut Down stations located at various points in the AGI wellsite **(Appendix E).**

The AGI Process Shut Down 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 at the interior fixed monitors at the AGI wellsite and efforts to resolve the issue for 15 minutes have failed, OR if the perimeter monitors reach 10 ppm H2S.

The AGI Process Shut Down system shuts down the AGI compressors and equipment, closes the pipeline and injection well isolation valves, the subsurface safety valve, and depressurizes the wellsite equipment and piping to the wellsite flare. (There are also 2 AGI Process Shut Down stations located within the Linam Ranch Plant)

B. PLANT ALARMS, VISIBLE BEACONS & WIND INDICATORS

LINAM RANCH PLANT

1. Colored beacons, horns, and wind direction indicators are located in various locations throughout the Plant and are indicated on **Appendix D.**

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. At the initial sound of this intermittent alarm, the Plant operator will put on a SCBA and all other personnel in the Plant complex shall immediately proceed in a safe manner to the Emergency Assembly Areas as prescribed by the Emergency Action Plan on page 14 of this Plan.

3. A flashing yellow beacon signifies an H_2S release of 10 ppm and all personnel in the Plant complex shall immediately proceed in a safe manner to the Emergency Assembly Area 1 located north of the main office. If this area is not determined to be safe all will move to Assembly Area 2 which is at the Hobbs Plant, located approximately 1.5 miles northwest of Linam Ranch Plant off Maddox Road. Evacuation routes and Assembly Area 1 are indicated on **Appendix D.**

4. 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 WELLSITE

1. Colored beacons, horns, and wind direction indicators are located in various locations throughout the AGI wellsite and are indicated on **Appendix D.**

2. The audible signal for an emergency response and wellsite 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. At the initial sound of this intermittent alarm, the operator will put on a SCBA and all other personnel in the wellsite shall immediately proceed in a safe manner to the Emergency Assembly Areas as prescribed by the Emergency Action Plan on page 23 of this Plan.

3. A flashing yellow beacon signifies an H_2S release of 10 ppm and all personnel in the Plant complex shall immediately proceed in a safe manner to the Wellsite Emergency Assembly Area located west of the main gate. If this area is not determined to be safe, all will move to Assembly Area 1 which is at the Linam Ranch Plant.

4. Wind direction indicators are installed throughout the wellsite. At least one wind direction indicator can be seen at any location within the wellsite, as well as, from any point on the perimeter of the wellsite.

GAS DETECTION EQUIPMENT

1. The Plant and AGI wellsite areas utilize Det-tronics Remote H_2S Sensors. These sensors are a fixed point monitor to detect the presence of hydrogen sulfide in ambient air. The sensors are connected to Det-tronics alarm panel PLC's, and then to the Linam Distributed Control System. The monitors are equipped with a yellow flashing beacon. The yellow flashing beacon is activated at 10 ppm. The plant and AGI wellsite horns are activated with an intermittent alarm at 10 ppm and a continuous alarm at 20 ppm.

2. The fixed hydrogen sulfide monitors are strategically located throughout the Plant and AGI wellsite to detect an uncontrolled released of hydrogen sulfide. The Plant operators are able to monitor the ppm level of **H_2S** of all the Plant and AGI wellsite 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 wellsite motor control center buildings. These sensors are all located on the plot plans on **Appendix D.** 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.

3. Hand held 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 4 handheld monitors in the control room that are used by individuals for special projects and maintenance work. All personnel working in Linam Ranch Plant and the AGI wellsite wear personal H_2S monitors. The hand held gas detectors have sensors for oxygen, LEL (explosive hydrocarbon atmospheres), hydrogen sulfide, and carbon dioxide. The personal monitors are set to alarm and vibrate at 10 ppm.

D. RESPIRATORS

1. The Plant has 30 minute Self-Contained Breathing Apparatus (SCBA) respirators and cascade hose reel systems strategically located throughout the Plant.

2. The respirator containers are identified in the process area and the locations are identified on **Appendix** D.

3. All Plant personnel are trained to use the SCBA respirators.

E. FIRE FIGHTING EQUIPMENT

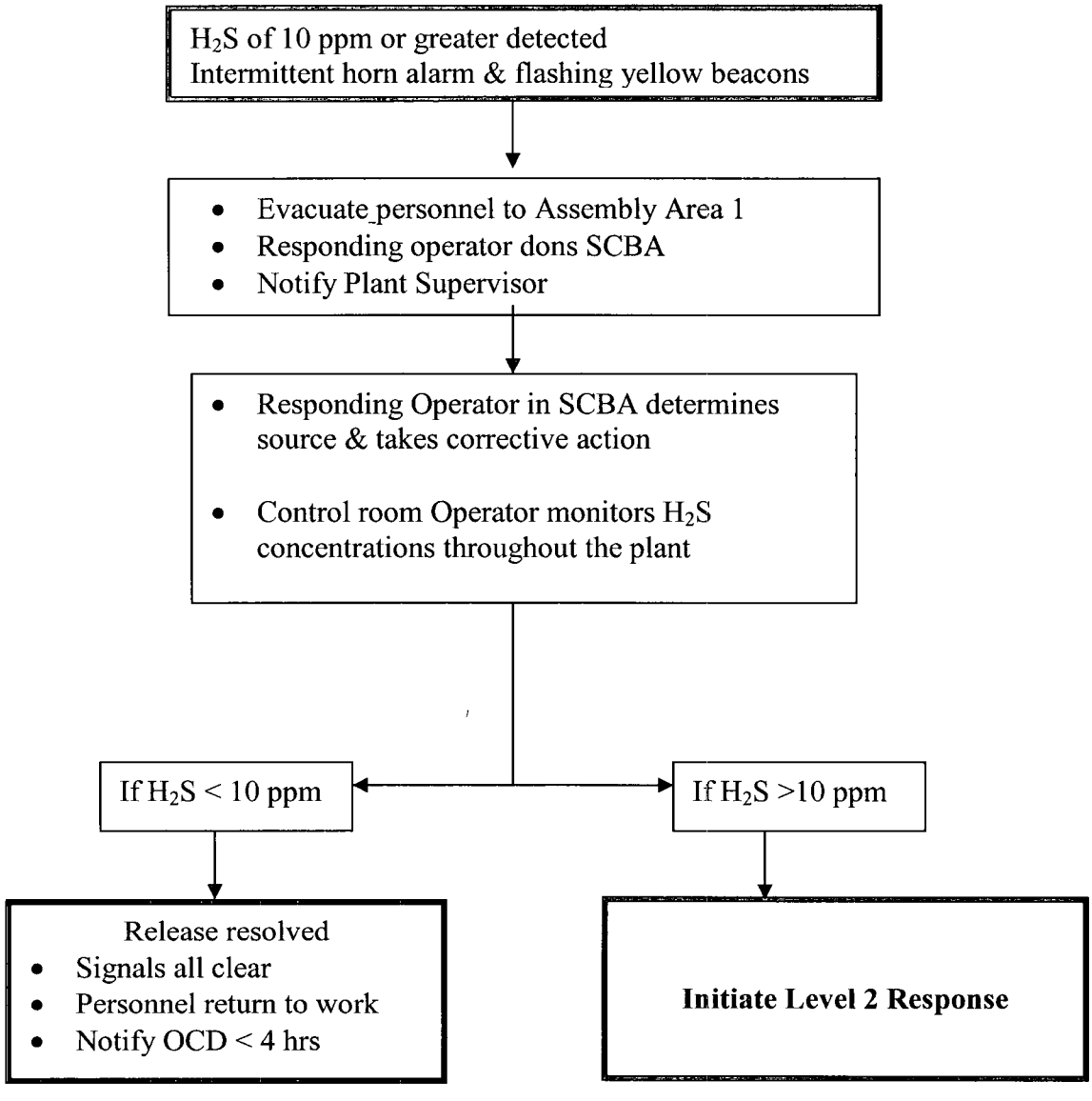
1. The Plant personnel are trained only for insipient stage fire fighting.

2. 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. **See Appendix** D.

3. The Plant does have a fire water system, utilized primarily at fixed monitors for equipment protection.

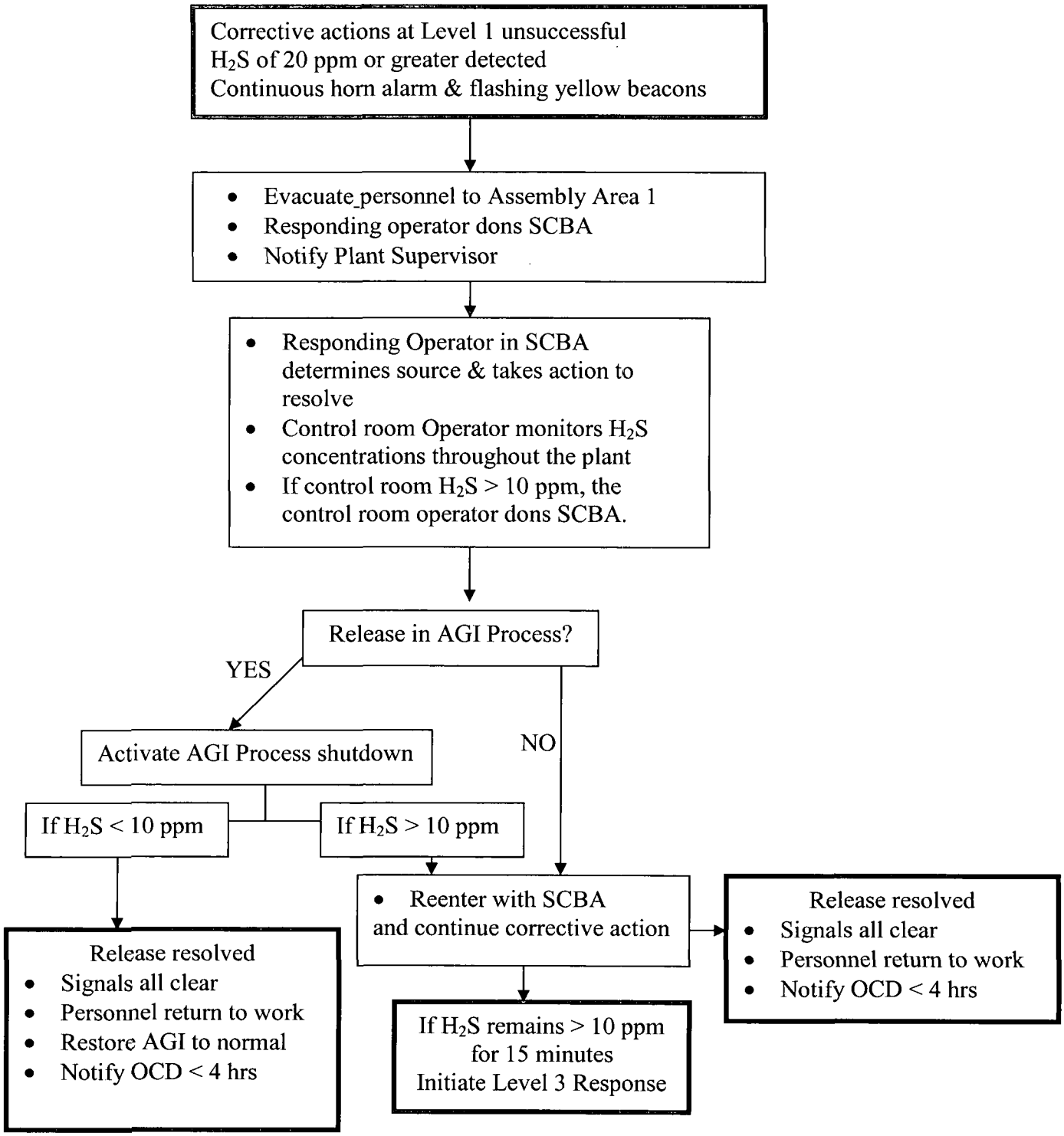
APPENDIX F
H_2S CONTINGENCY PLAN FLOW DIAGRAMS

LINAM RANCH PLANT RELEASE
LEVEL 1 RESPONSE



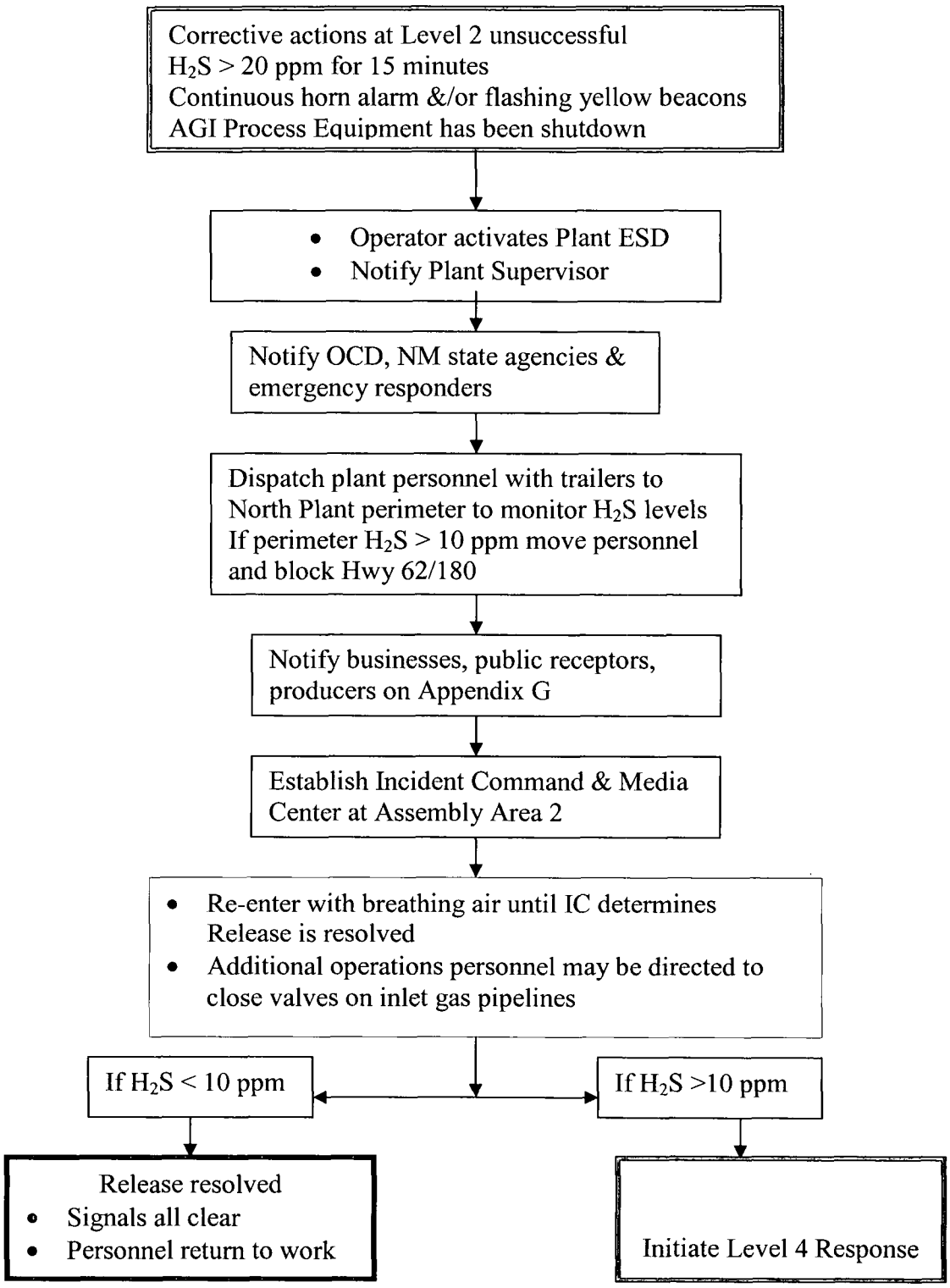
For Details refer to Page 14

LINAM RANCH PLANT RELEASE
LEVEL 2 RESPONSE



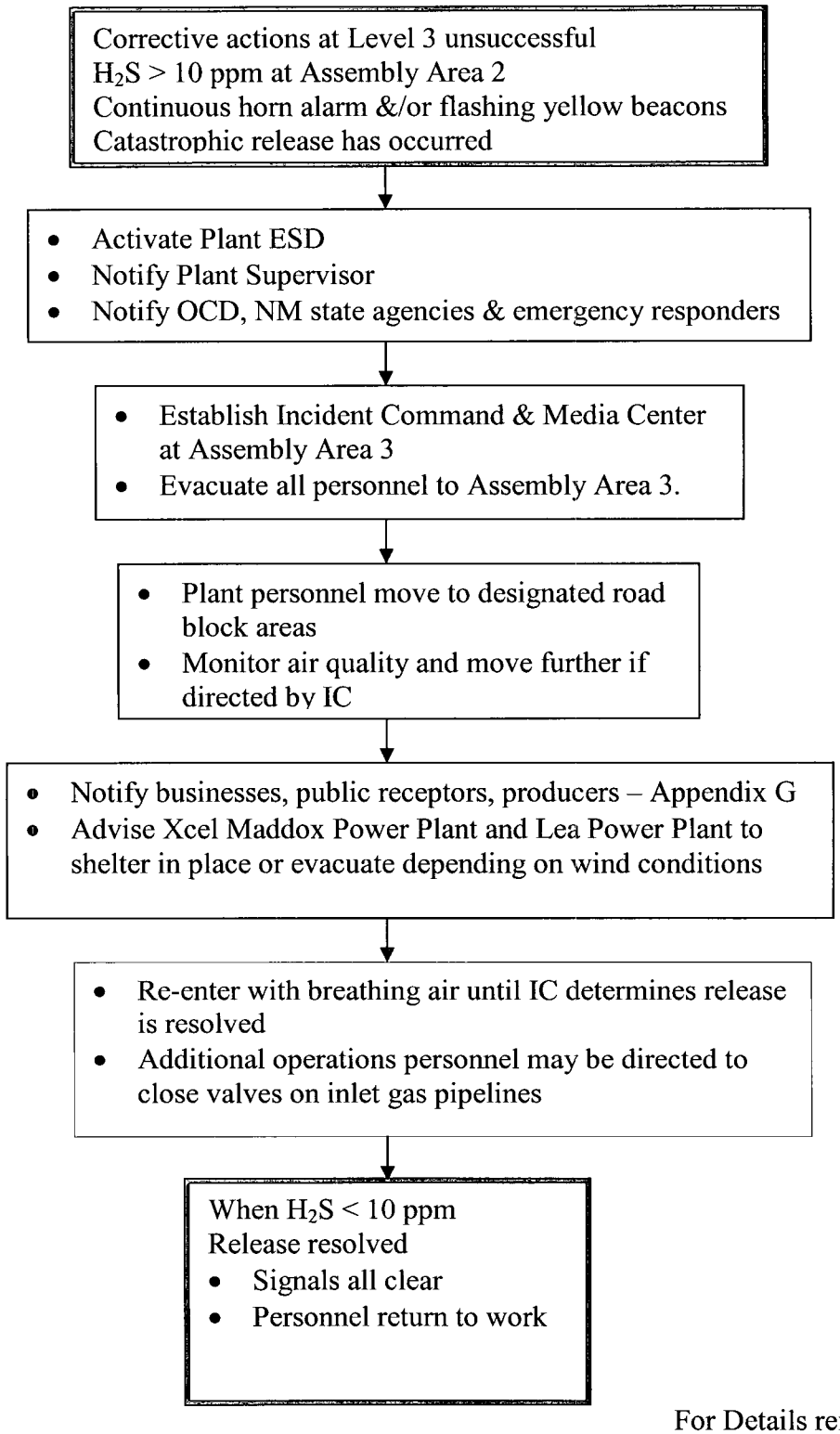
For Details refer to Page 15

LINAM RANCH PLANT RELEASE
LEVEL 3 RESPONSE



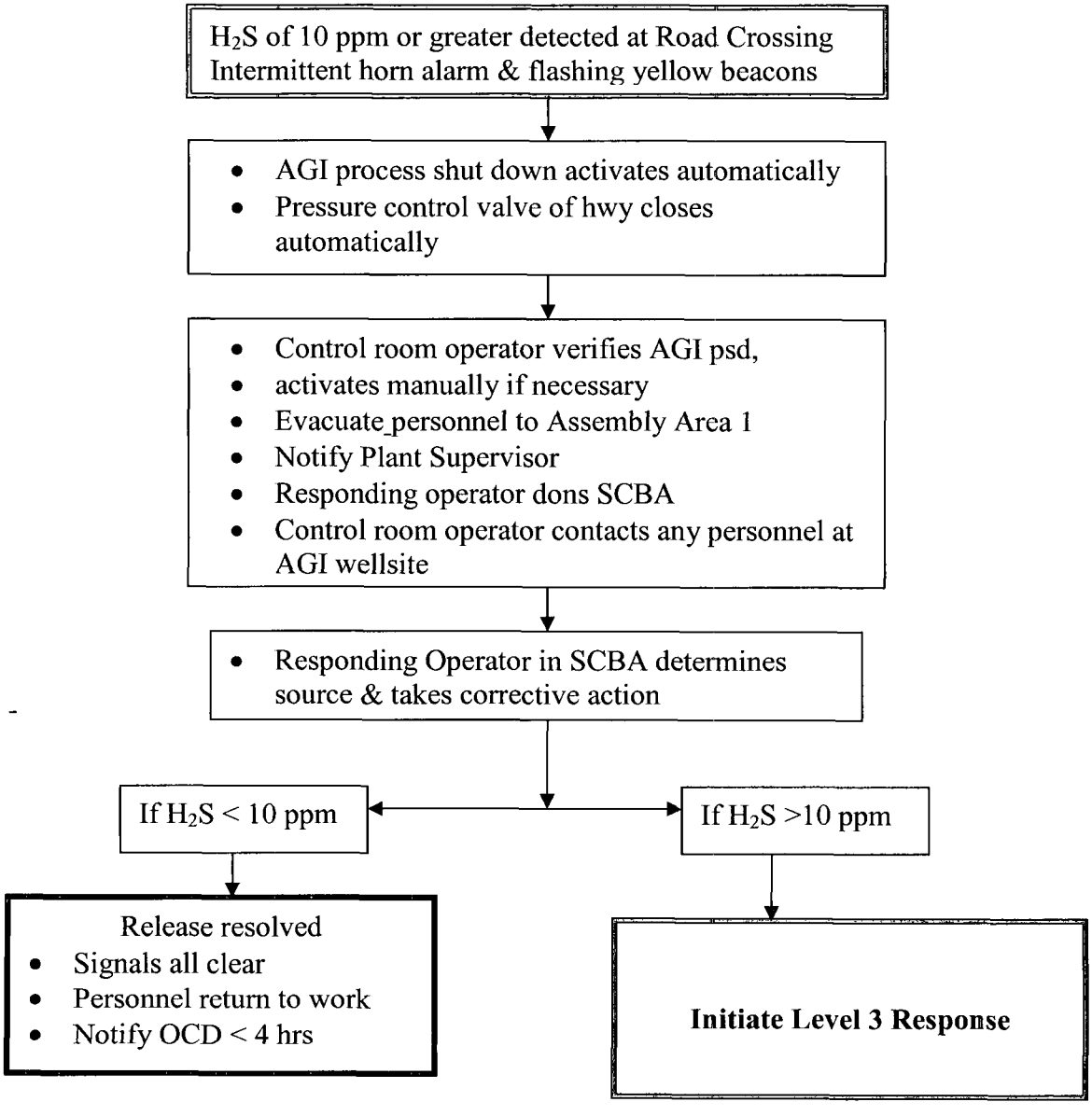
For Details refer to Page 16

LINAM RANCH PLANT RELEASE
LEVEL 4 RESPONSE



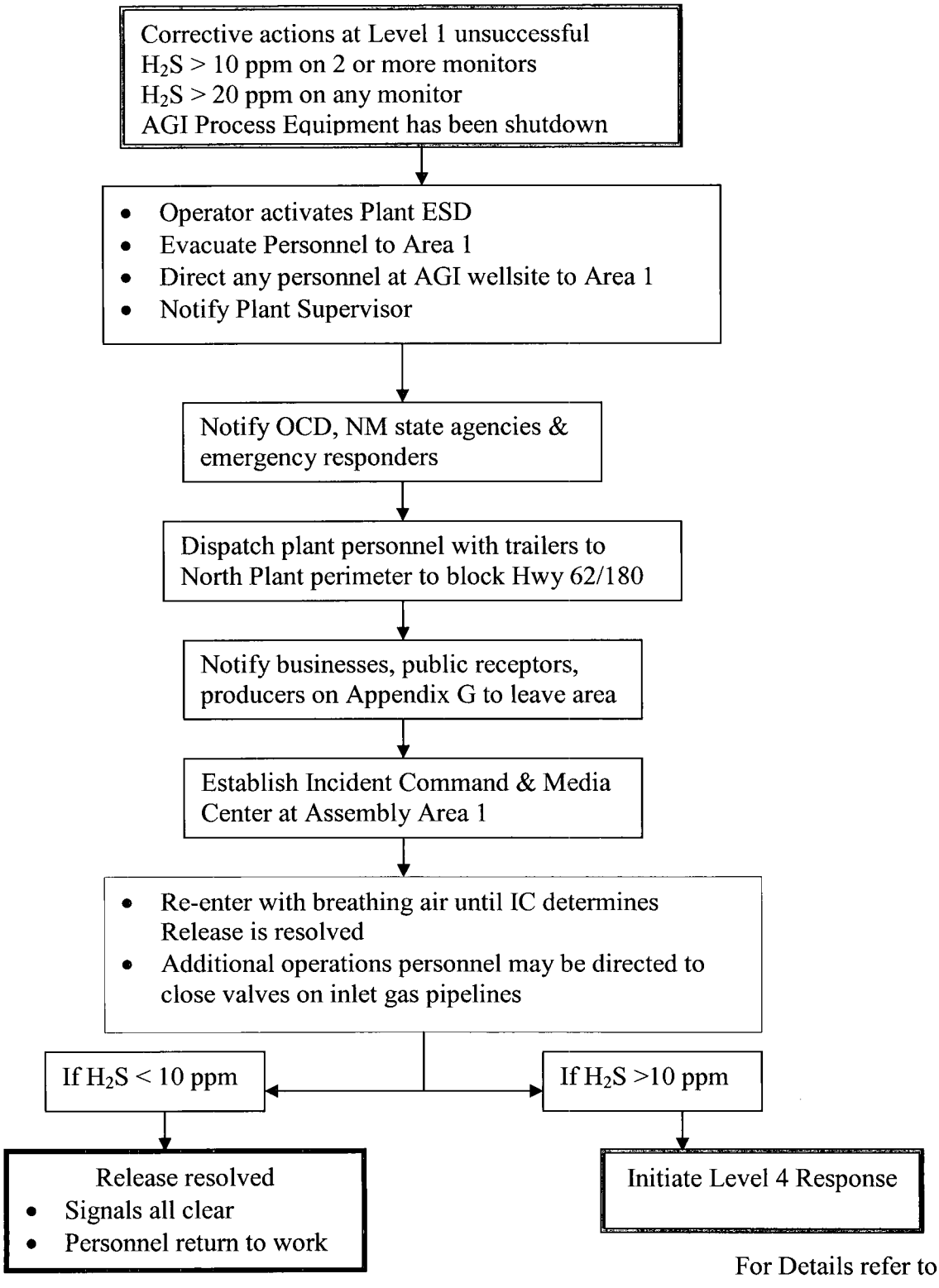
For Details refer to Page 17

ROAD CROSSING RELEASE
LEVEL 1 RESPONSE



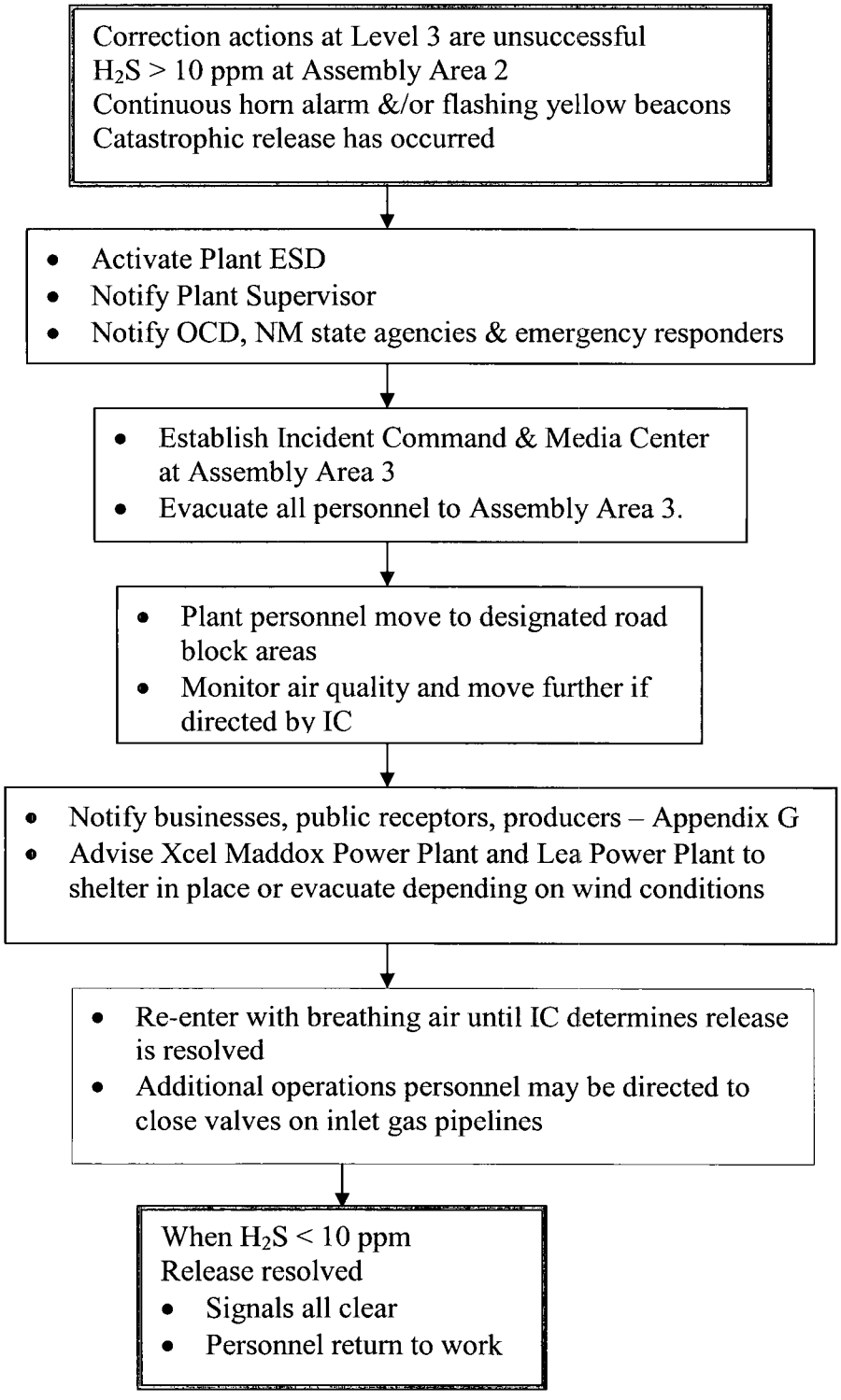
For Details refer to Page 19

ROAD CROSSING RELEASE
LEVEL 3 RESPONSE
Note: There is no LEVEL 2 Response for Road Crossing Release



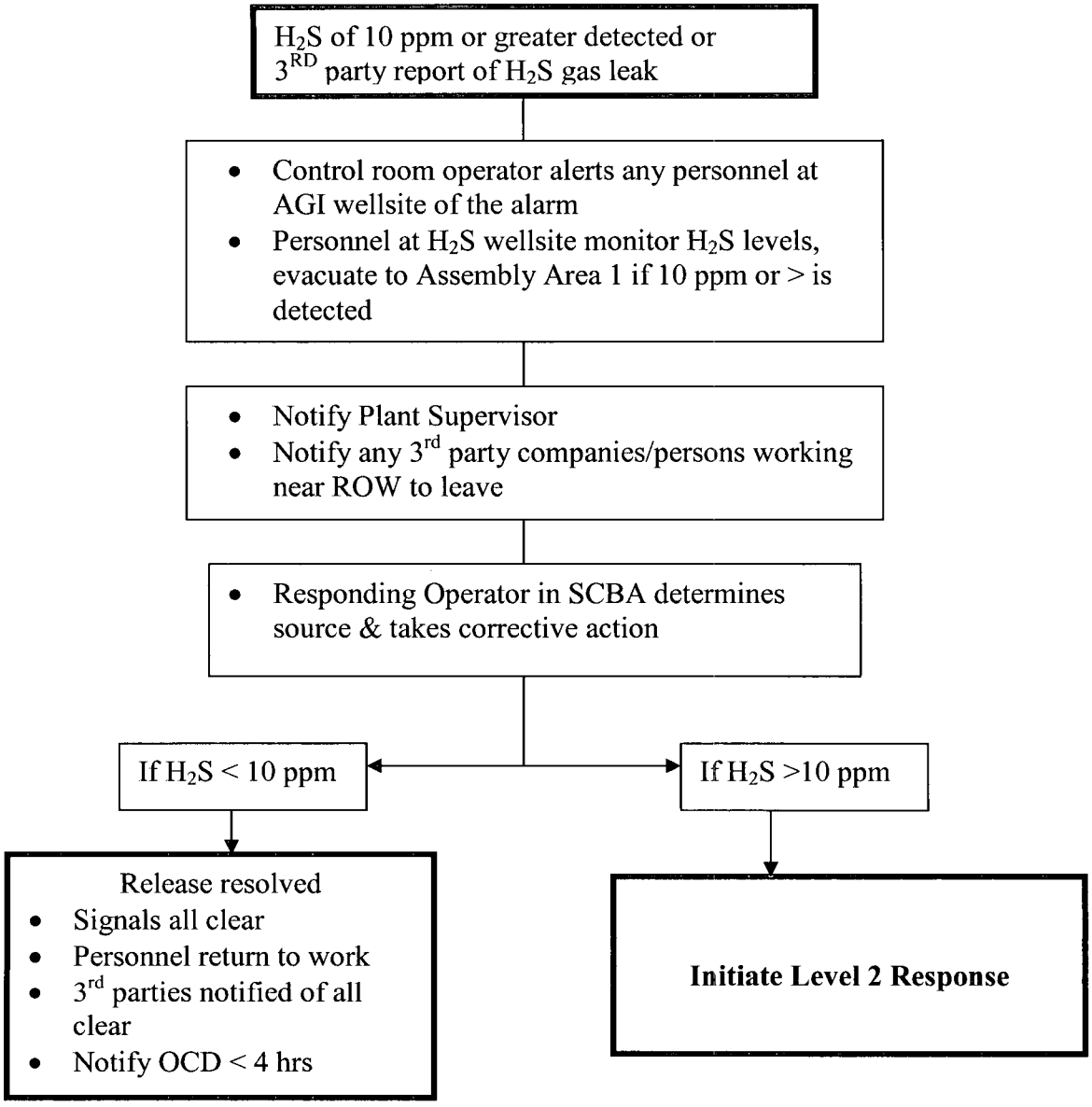
For Details refer to Page 20

ROAD CROSSING RELEASE
LEVEL 4 RESPONSE



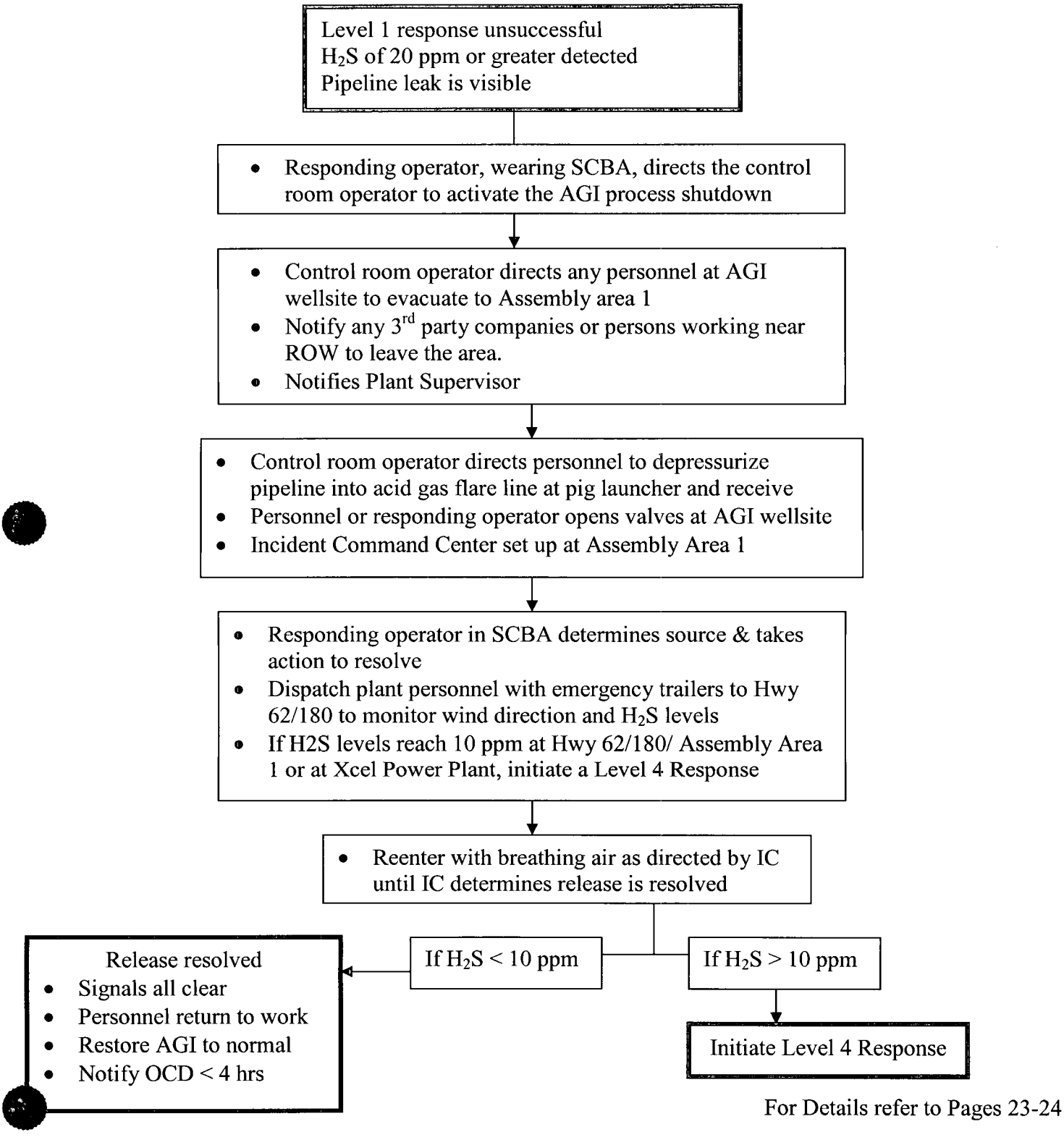
For Details refer to Page 21

AGI PIPELINE RELEASE
LEVEL 1 RESPONSE



For Details refer to Page 23

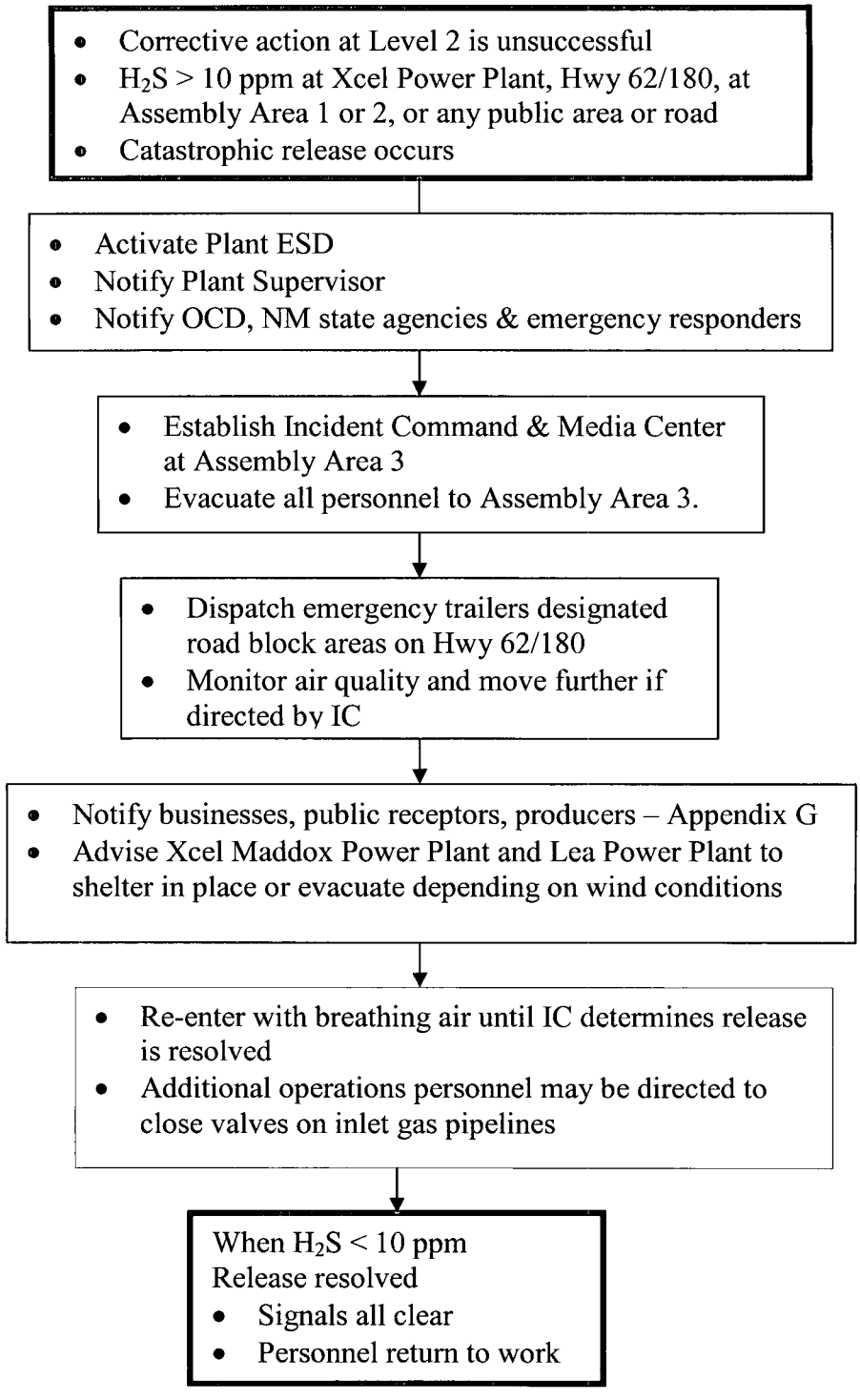
AGI PIPELINE RELEASE
LEVEL 2 RESPONSE



For Details refer to Pages 23-24

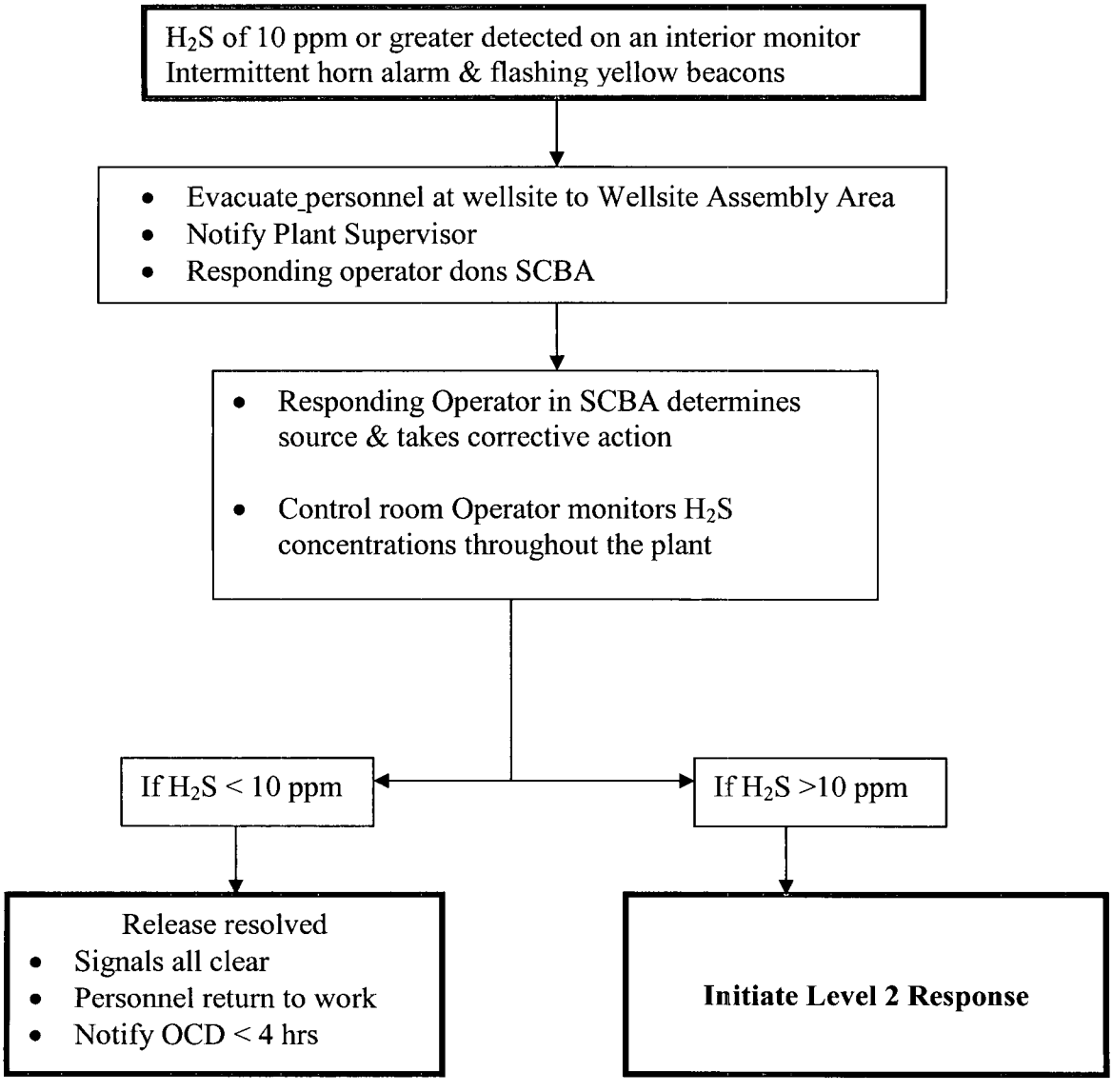
AGI PIPELINE RELEASE
LEVEL 4 RESPONSE

Note: There is no Level 3 Release for the AGI Pipeline



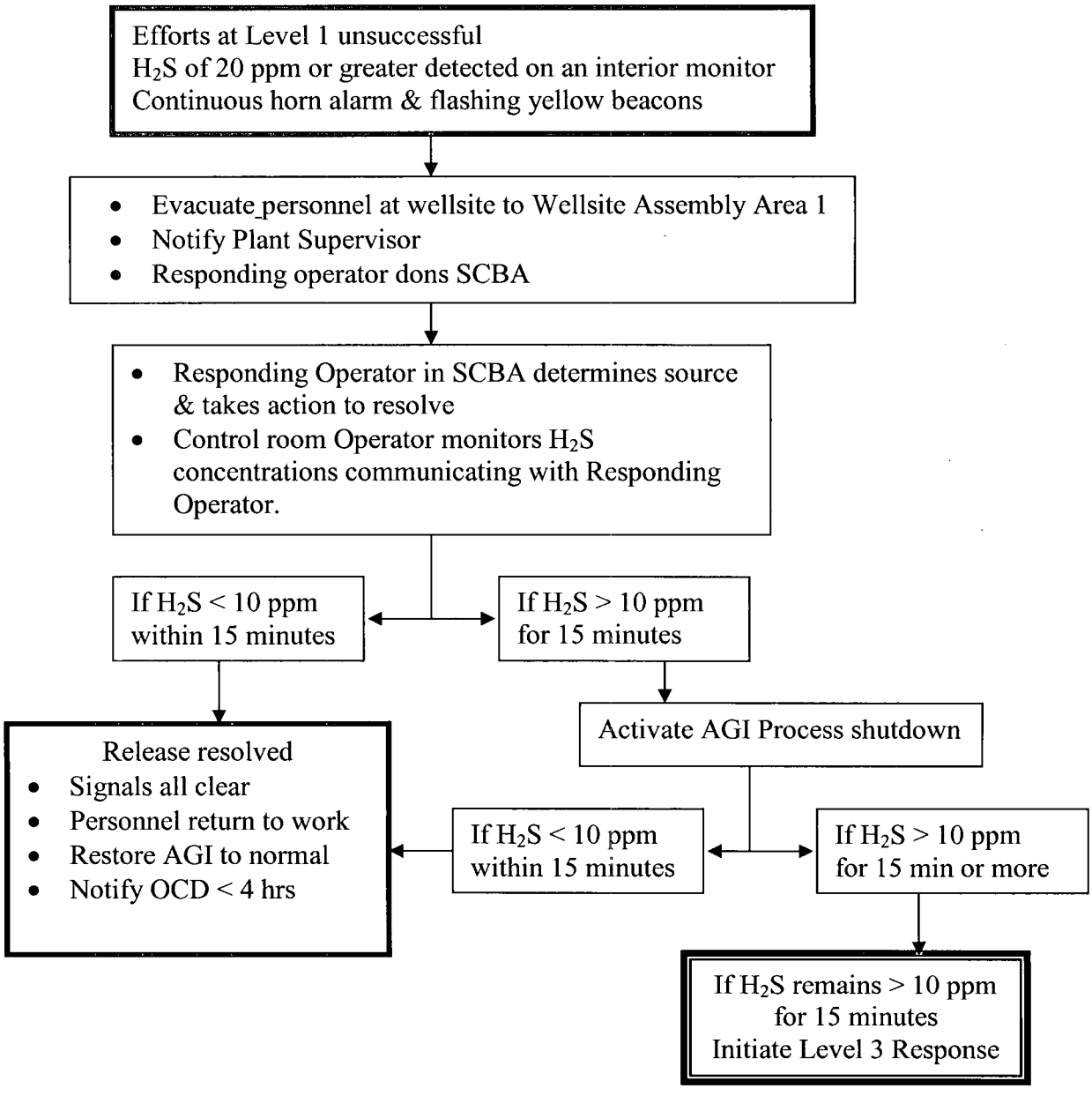
For Details refer to Pages 25-26

AGI WELLSITE RELEASE
LEVEL 1 RESPONSE



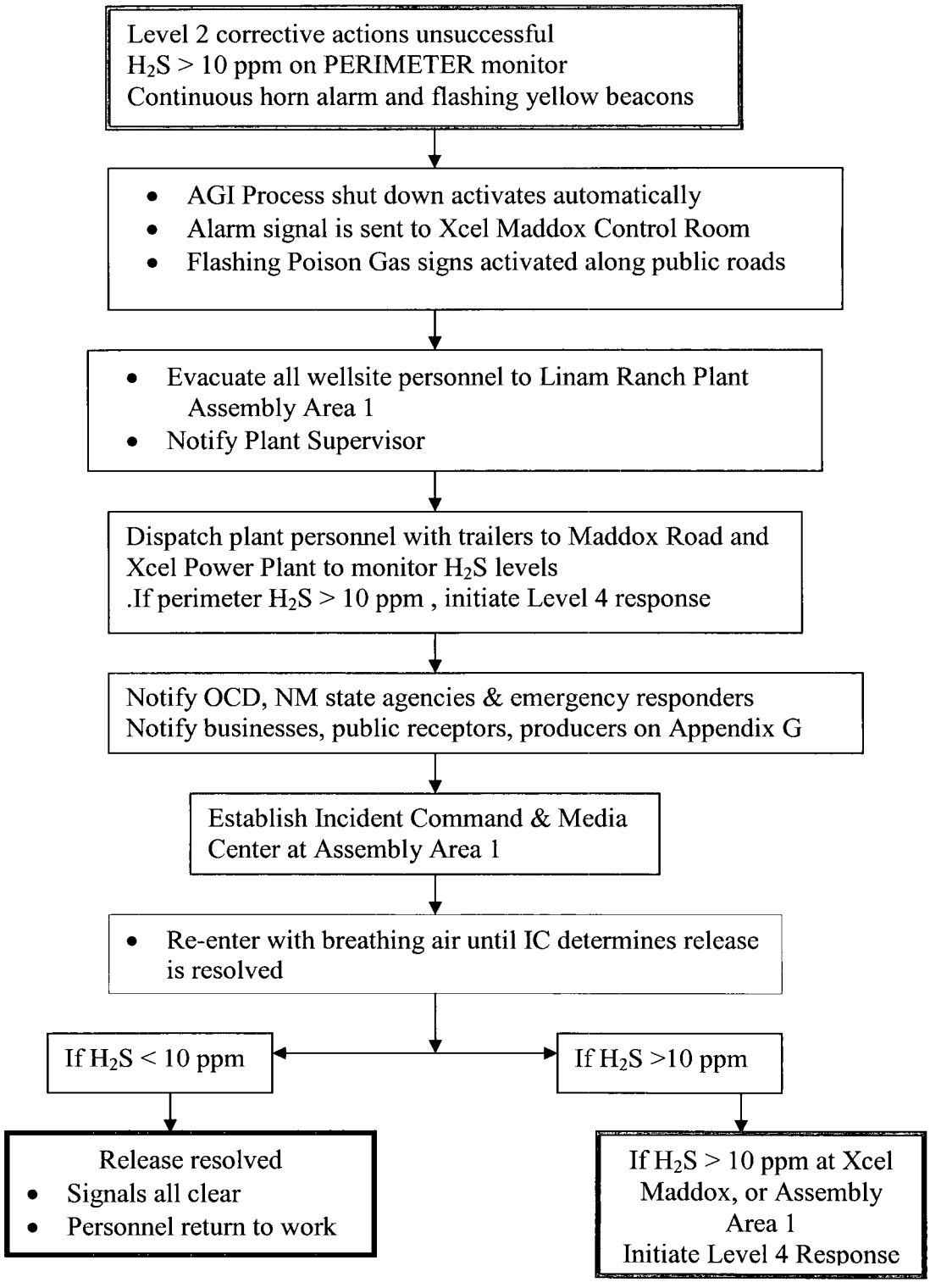
For Details refer to Page 27

AGI WELLSITE RELEASE
LEVEL 2 RESPONSE



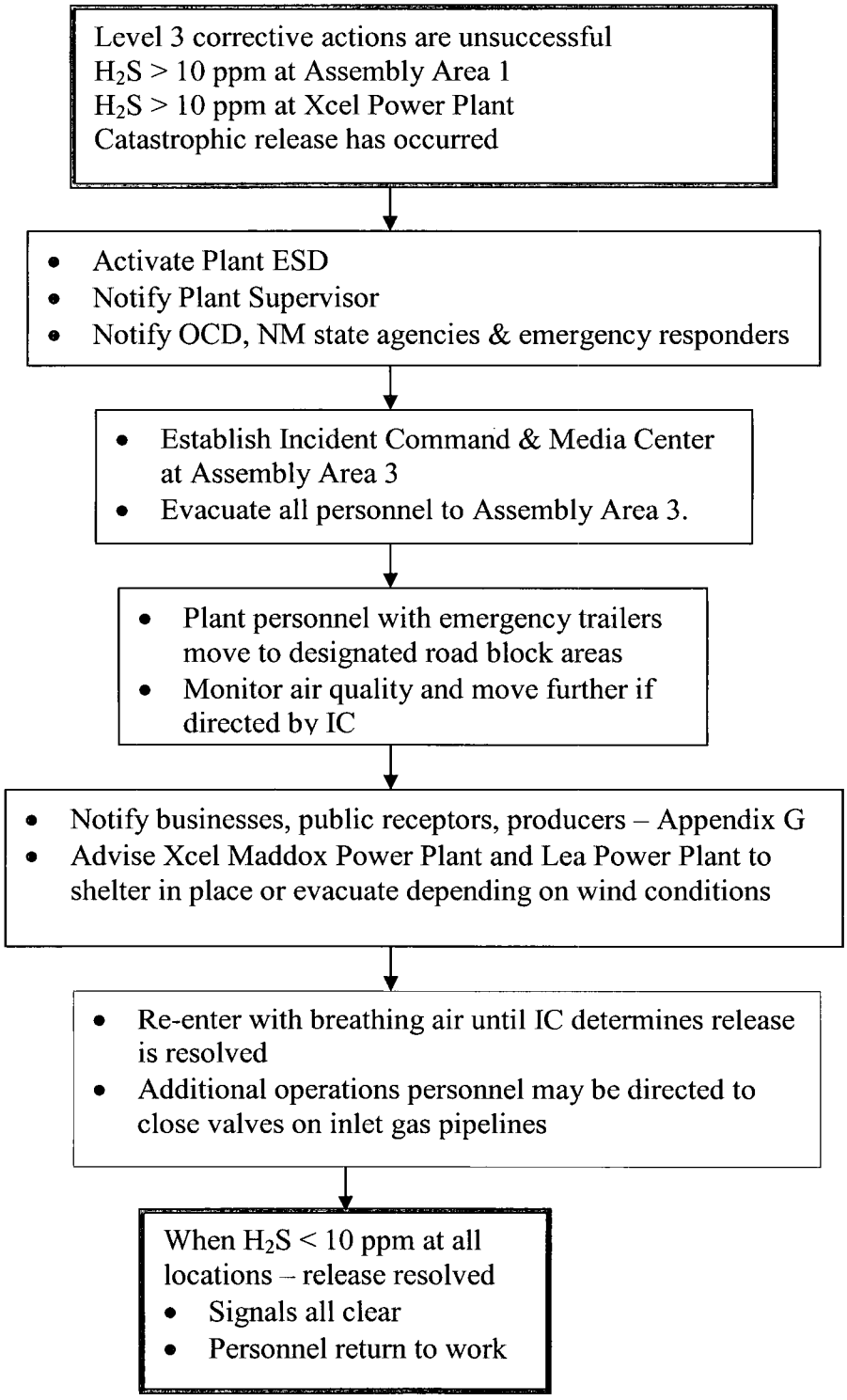
For Details refer to Pages 27-28

AGI WELLSITE RELEASE
LEVEL 3 RESPONSE



For Details refer to Pages 28-29

AGI WELLSITE RELEASE
LEVEL 4 RESPONSE



For Details refer to Pages 29-30

APPENDIX G
EMERGENCY CALL LIST
LINAM RANCH AND AGI COMPLEX

BUSINESSES AND PUBLIC RECEPTORS WITHIN THE ROE

NAME	ADDRESS	CONTACT	PHONE NUMBER
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 MIDSTREAM 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 Blv 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 McInroroe	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

A. DCP COMPANY INTERNAL NOTIFICATIONS

Name	Title	Office No.	Cell No.
	Linam Ranch Plant Operators	575-391-5792 575-391-5793 575-391-5794	575-390-6299
Harvey Hargrove	Linam Ranch Plant Operator III	575-391-5703	575-602-1656
Matt Hendricks	Linam Ranch Plant Supervisor	575-391-5701	575-390-0292
Kelly Jamerson	SENM Asset Manager	575-397-5539	325-226-3357
Lewis Hill	SENM Manager Area Operations	575-234-6405	575-706-1442
Sandy Ballard	SENM Asset Safety Coordinator	575-785-2020	575-390-6064
Charlie Powell	SENM Asset Safety Coordinator	575-234-6403	575-706-2003
Ronnie Trammel	V.P. Operations Western Region	432-620-4066	432-557-6898
Rick Cargile	President Southern Business Unit	713-735-3700	713-416-4003
Ken Duncan	Safety Manager Western Region	432-620-4148	432-664-9324
	DCP Gas Control – Houston,TX	800-435-1679	

B. COUNTY AND LOCAL LAW ENFORCEMENT

AGENCY	PHONE NUMBER
EMERGENCY DISPATCH	911
OIL CONSERVATION DIVISON – DISTRICT 1 LEA CO.	575-393-6161
LEPC	575-605-6561
NEW MEXICO STATE POLICE	575-392-5588
LEA COUNTY SHERIFF'S OFFICE	575-396-3611
STATE EMERGENCY RESPONSE COMMISSION	505-476-9681
NEW MEXICO OFFICE OF EMERGENCY MANAGEMENT	505-476-9600

APPENDIX H
H_2S PLAN DISTRIBUTION LIST

New Mexico Oil & Gas Conservation Division

New Mexico Environment Department

New Mexico Department of Public Safety (Hobbs Office)

New Mexico Department of Public Safety (State Office)

Hobbs Fire Department

Lea County Fire Department

Lea County Sheriff Department

Lea County Emergency Manager

Lea County LEPC

Hobbs Police

Lea County Regional Medical Center

Linam Ranch Plant Office

DCP Hobbs Plant Office

Linam Emergency Trailers

Linam Ranch Plant Supervisor's Office

AGI Wellsite MCC Building

Xcel Maddox Power Plant

Lea Power Partners Hobbs Plant

INCIDENT COMMAND 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

(Plan not yet approved by NMOCD)

RECEIVED OCD
2009 OCT 29 A 9:02

H_2S CONTINGENCY PLAN

Linam Ranch Gas Plant
and AGI Wellsite
Hobbs, New Mexico

DCP Midstream, LP.

October 29, 2009

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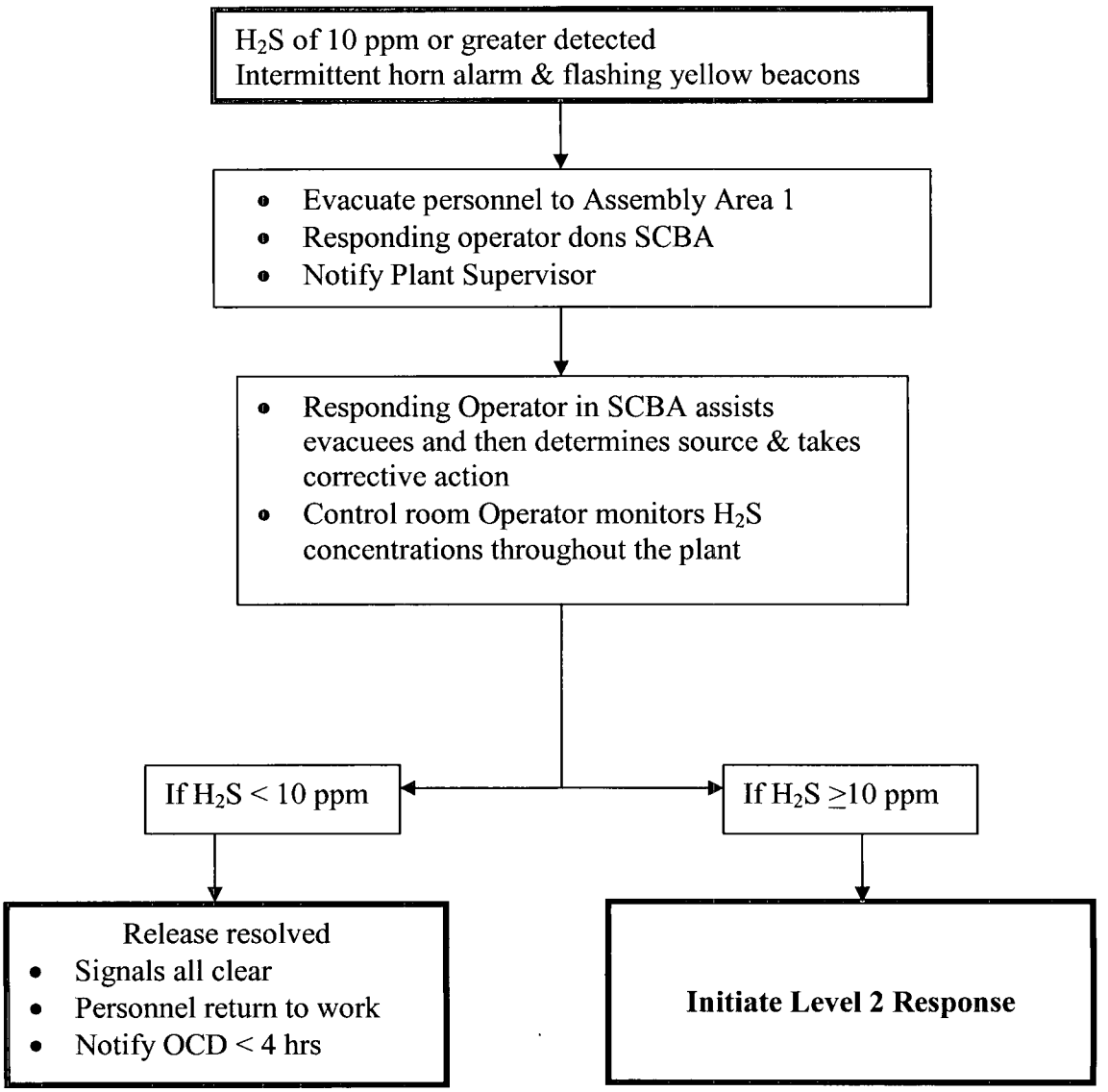
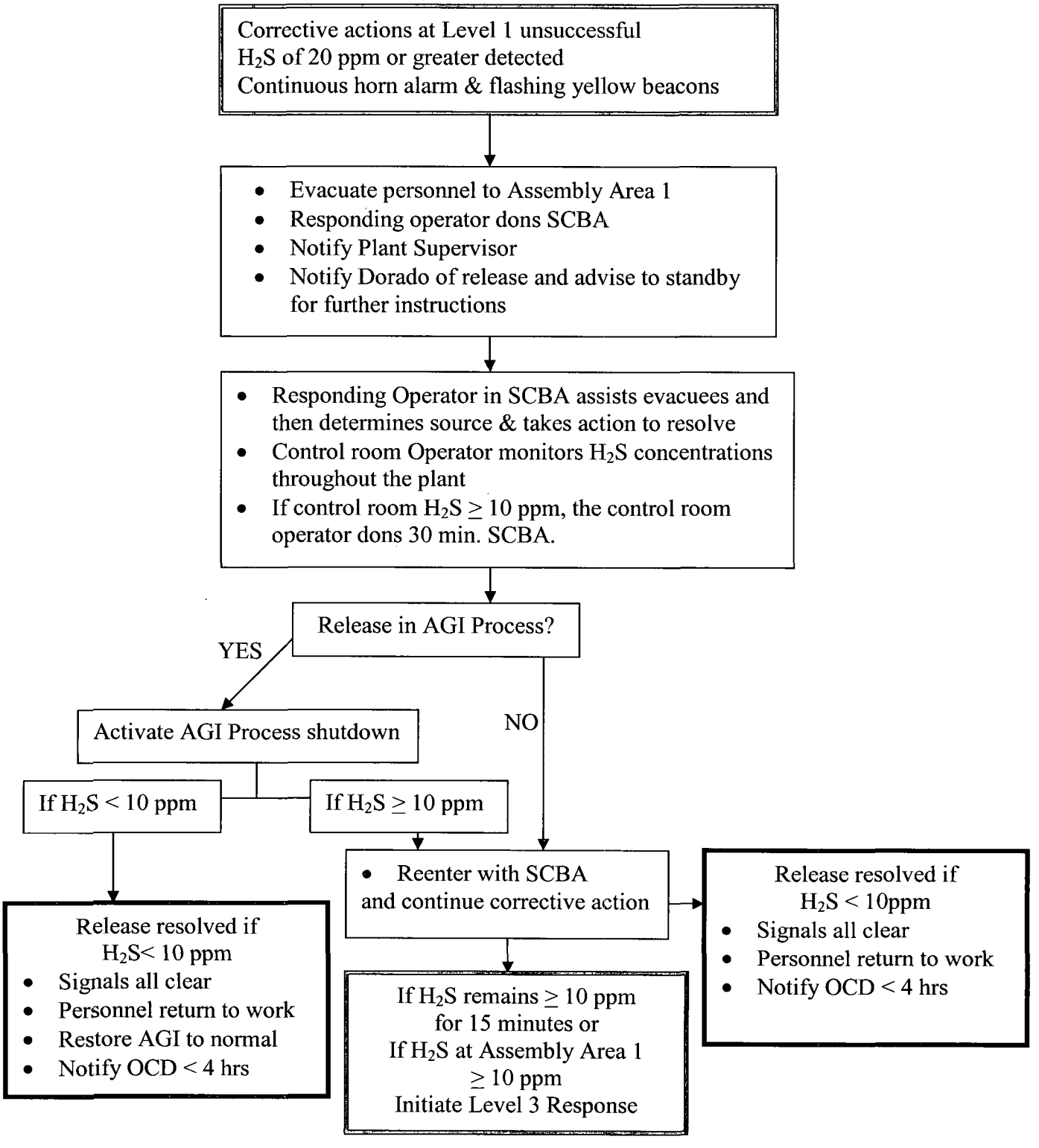
OPERATOR QUICK REFERENCE GUIDE

LINAM RANCH PLANT RELEASE
LEVEL 1 RESPONSE



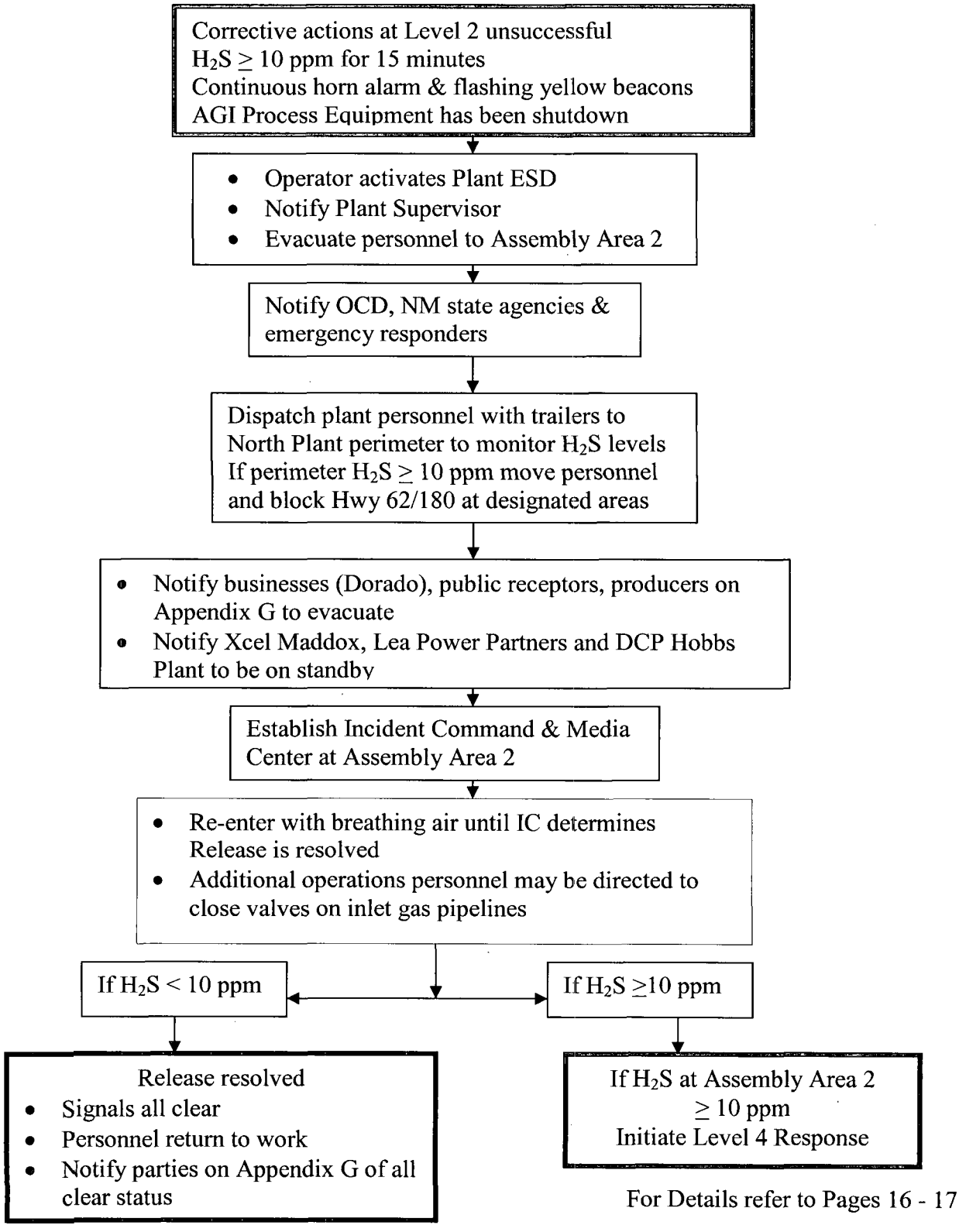
For Details refer to Page 14

LINAM RANCH PLANT RELEASE
LEVEL 2 RESPONSE



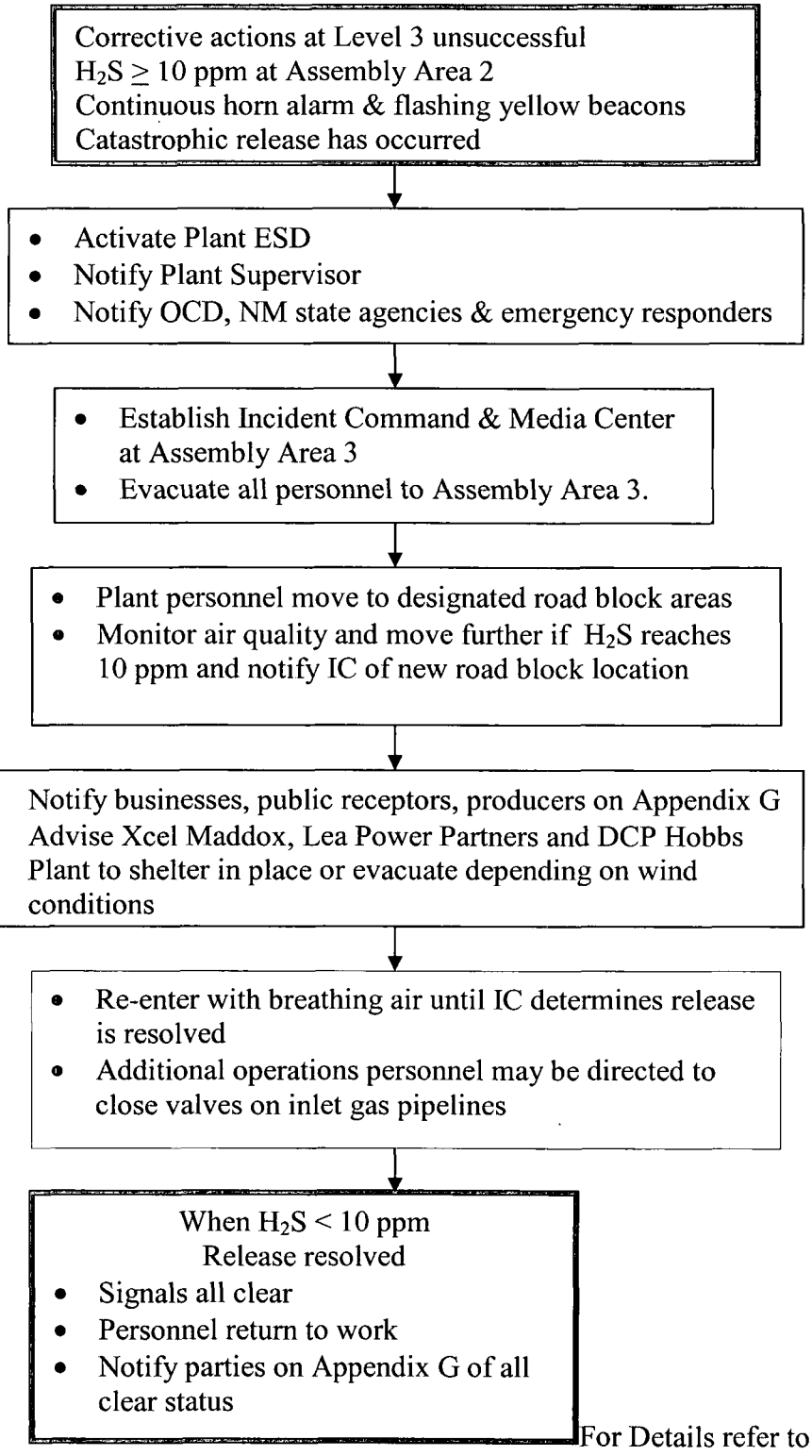
For Details refer to Page 15

LINAM RANCH PLANT RELEASE
LEVEL 3 RESPONSE



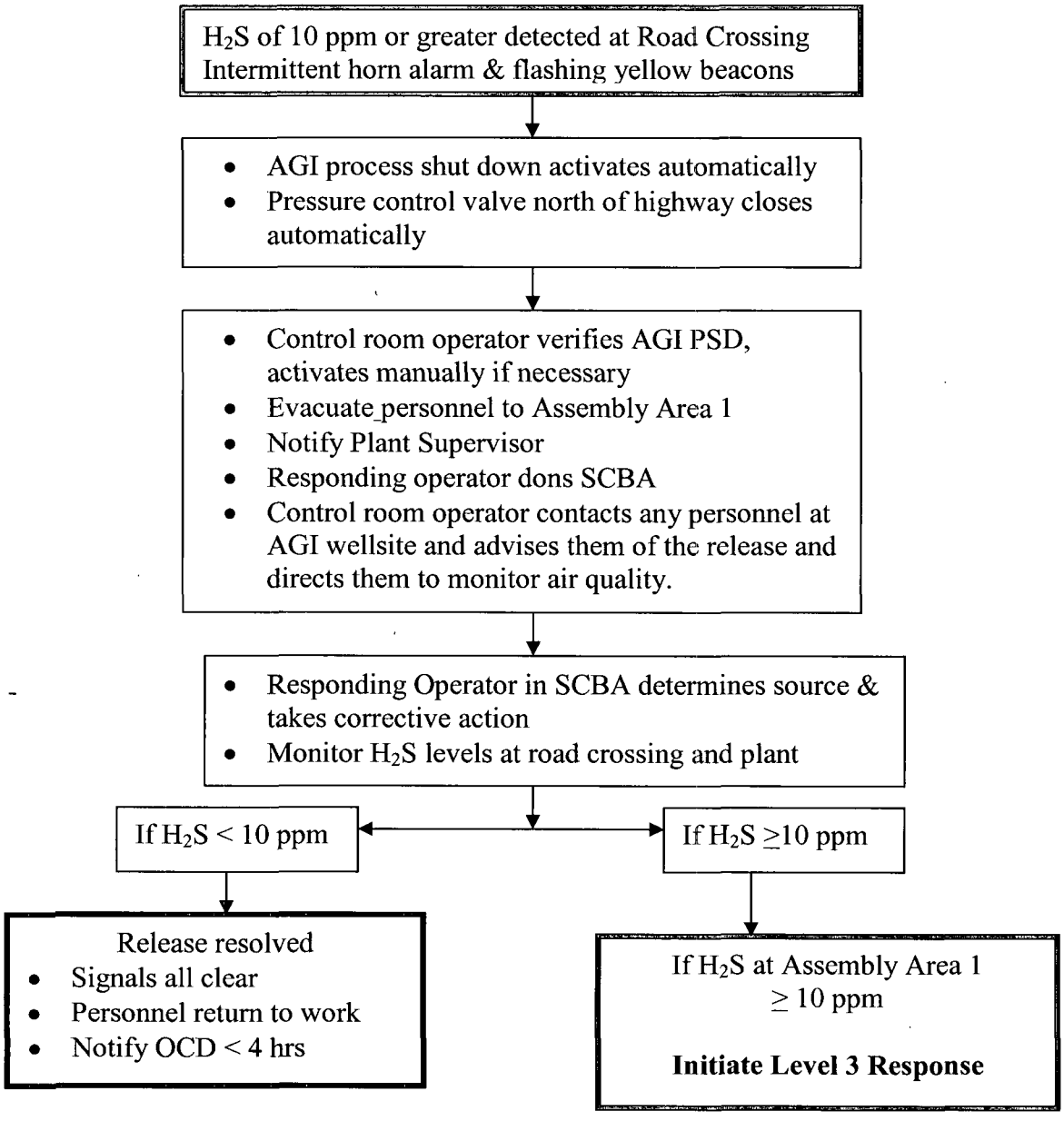
For Details refer to Pages 16 - 17

LINAM RANCH PLANT RELEASE
LEVEL 4 RESPONSE



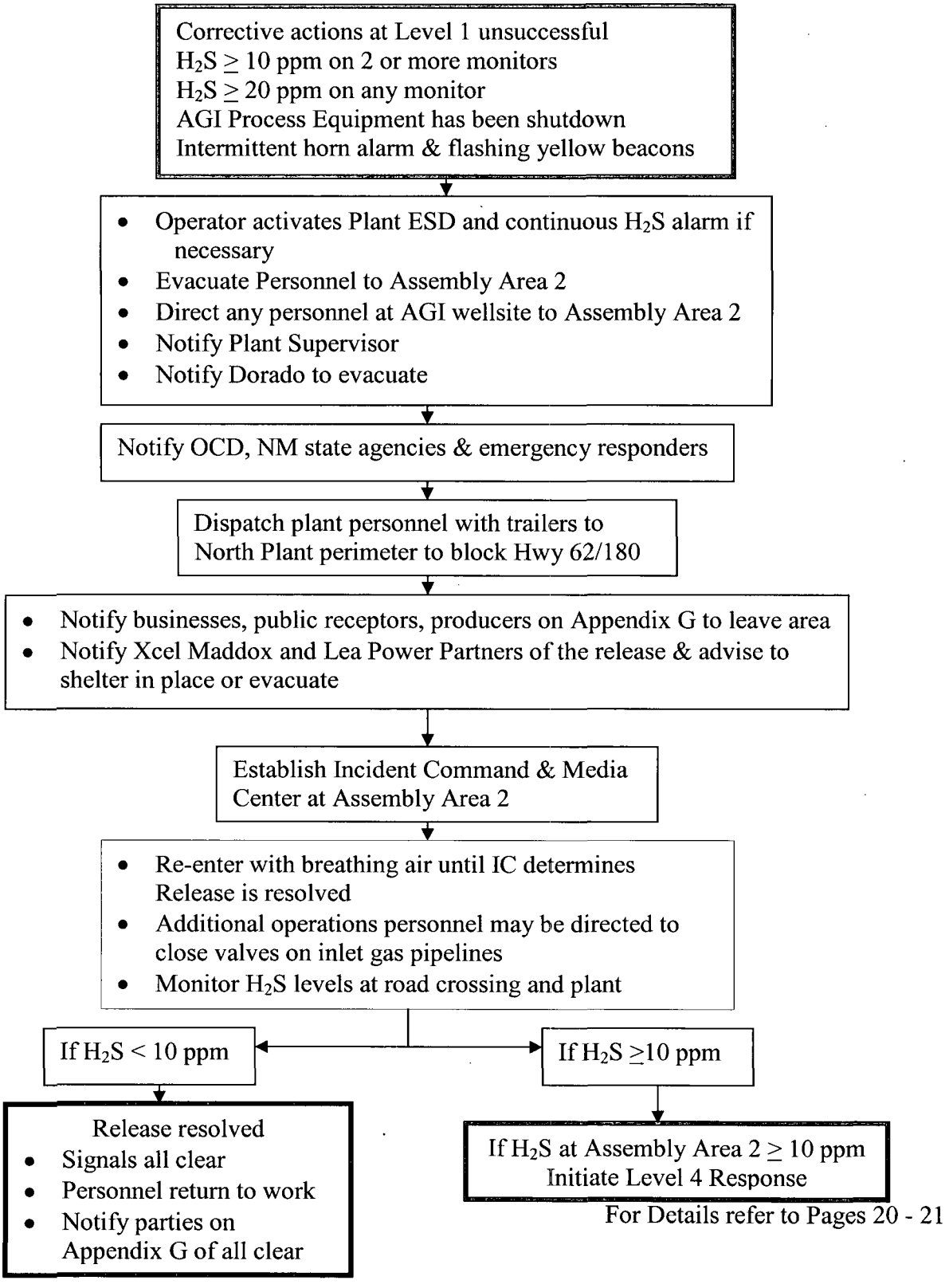
For Details refer to Pages 17 - 18

ROAD CROSSING RELEASE
LEVEL 1 RESPONSE



For Details refer to Page 19

ROAD CROSSING RELEASE
LEVEL 3 RESPONSE
Note: There is no LEVEL 2 Response for Road Crossing Release



For Details refer to Pages 20 - 21

ROAD CROSSING RELEASE
LEVEL 4 RESPONSE

Correction actions at Level 3 are unsuccessful
$H_2S \geq 10$ ppm at Assembly Area 2
Continuous horn alarm & flashing yellow beacons
Catastrophic release has occurred

↓

- Activate Plant ESD
- Notify Plant Supervisor
- Notify OCD, NM state agencies & emergency responders

↓

- Establish Incident Command & Media Center at Assembly Area 3
- Evacuate all personnel to Assembly Area 3.

↓

- Plant personnel move to designated road block areas
- Monitor air quality and move further if H_2S reaches 10 ppm and notify IC of new road block location

↓

- Notify businesses, public receptors, producers on Appendix G to evacuate
- Advise Xcel Maddox Station, Lea Power Partners and DCP Hobbs Plant to evacuate to the west.

↓

- Re-enter with breathing air until IC determines release is resolved
- Additional operations personnel may be directed to close valves on inlet gas pipelines

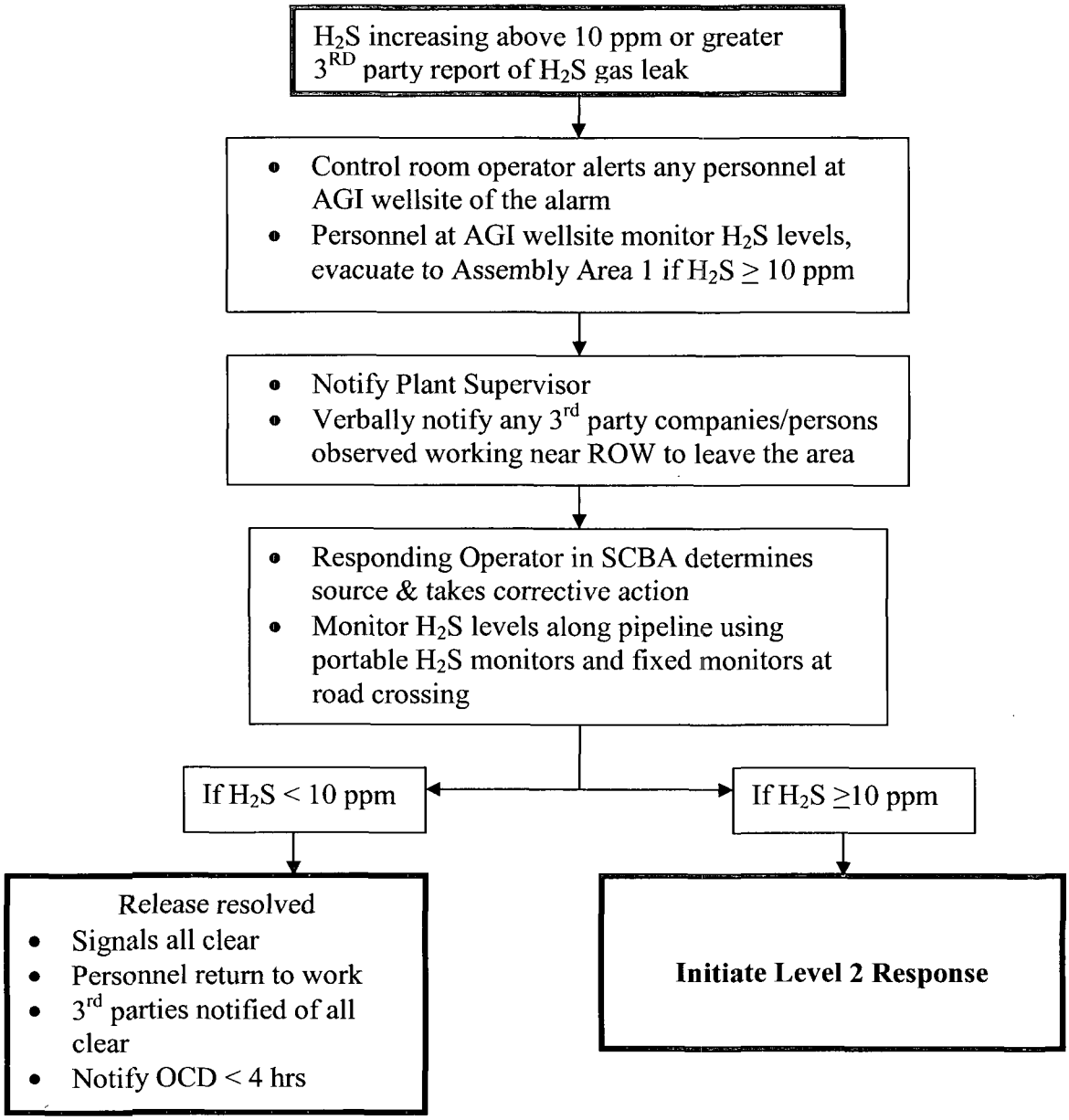
↓

When $H_2S < 10$ ppm at Plant, Road Crossing, Road blocks & Assembly Areas - Release resolved

- Signals all clear
- Personnel return to work
- Notify parties on Appendix G of all clear

For Details refer to Pages 21 - 22

AGI PIPELINE RELEASE
LEVEL 1 RESPONSE



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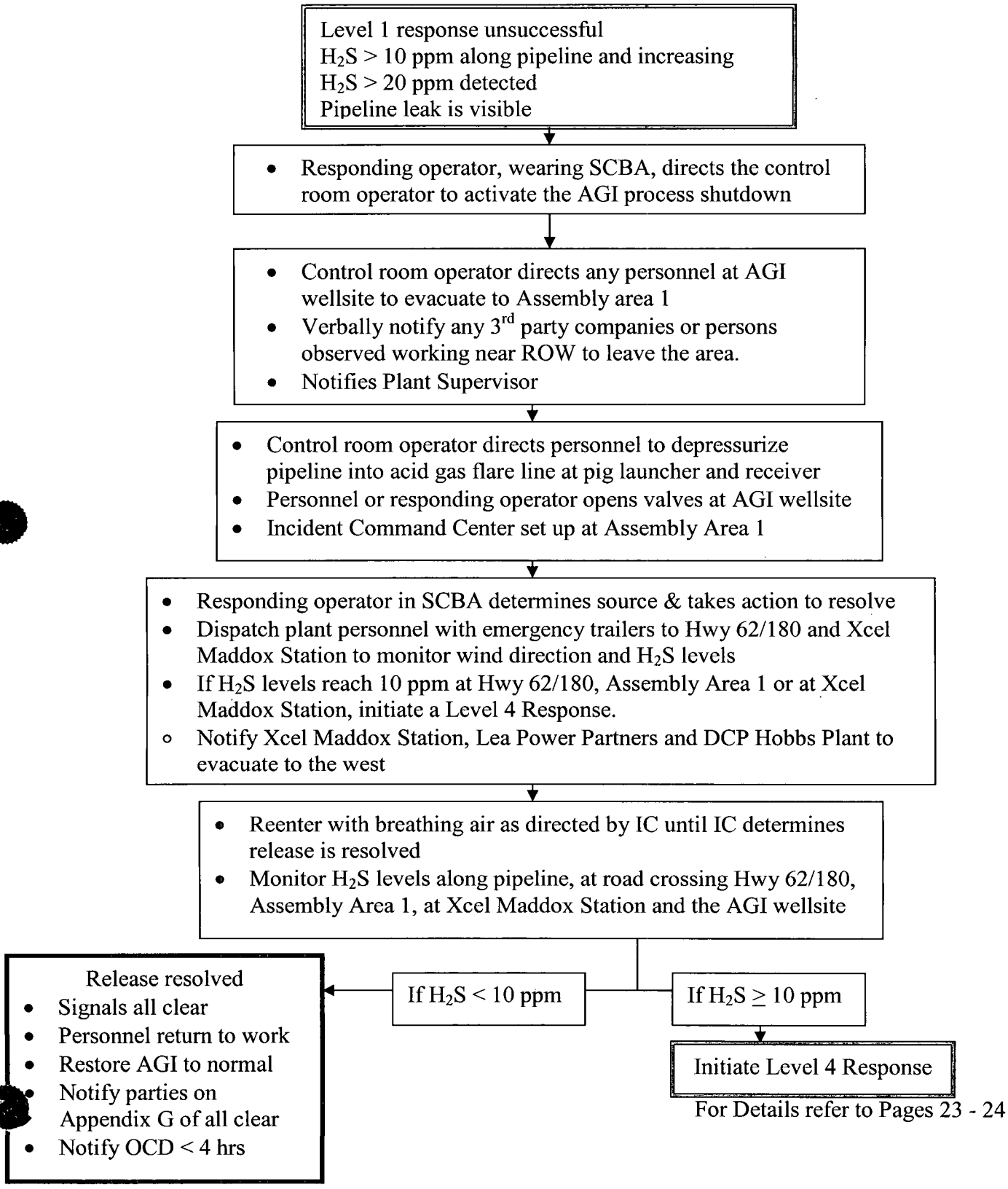
AGI PIPELINE RELEASE
LEVEL 2 RESPONSE



For Details refer to Pages 23 - 24

AGI PIPELINE RELEASE
LEVEL 4 RESPONSE

Note: There is no Level 3 Release for the AGI Pipeline

- Corrective action at Level 2 is unsuccessful
- $H_2S \geq 10$ ppm at Xcel Maddox Station, Hwy 62/180, at Assembly Area 1, or any public area or road
- Catastrophic release occurs

↓

- Activate Plant ESD
- Verbally notify any 3rd party companies or persons observed working near ROW to leave the area.
- Notify Plant Supervisor
- Notify OCD, NM state agencies & emergency responders

↓

- Establish Incident Command & Media Center at Assembly Area 3
- Evacuate all personnel to Assembly Area 3.

↓

- Dispatch emergency trailers designated road block areas on Hwy 62/180
- Monitor air quality and move further if H_2S reaches 10 ppm and notify IC of new road block location

↓

- Notify businesses, public receptors, producers on Appendix G to evacuate
- Advise Xcel Maddox Station, Lea Power Partners and DCP Hobbs Plant to evacuate to the west

↓

- Re-enter with breathing air until IC determines release is resolved
- Additional operations personnel may be directed to close valves on inlet gas pipelines
- Monitor H_2S levels in Linam Ranch Plant, Hwy 62/180 road crossing, AGI wellsite and along the pipeline

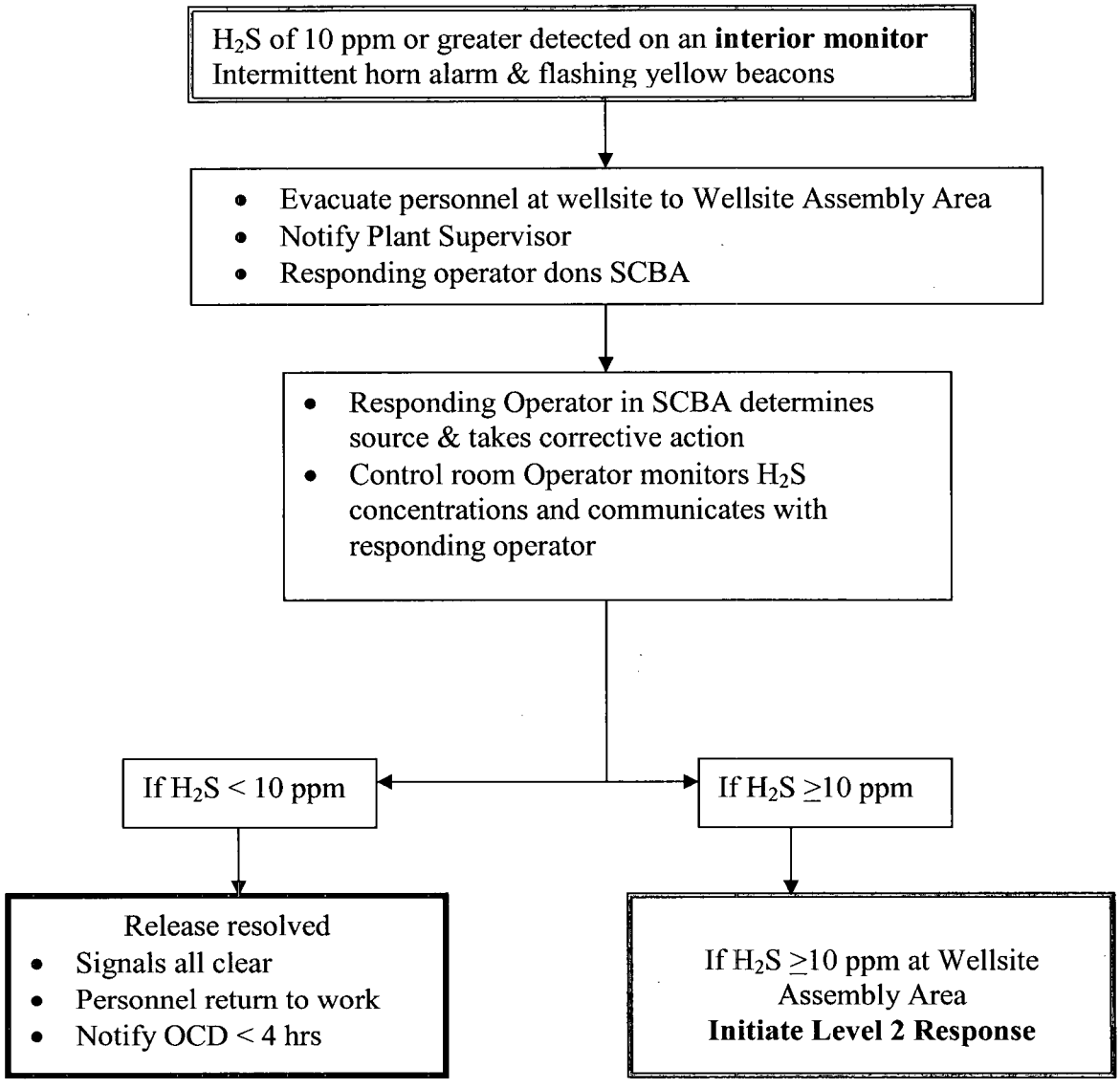
↓

When $H_2S < 10$ ppm -Release resolved

- Signals all clear
- Personnel return to work
- Notify parties on Appendix G of all clear

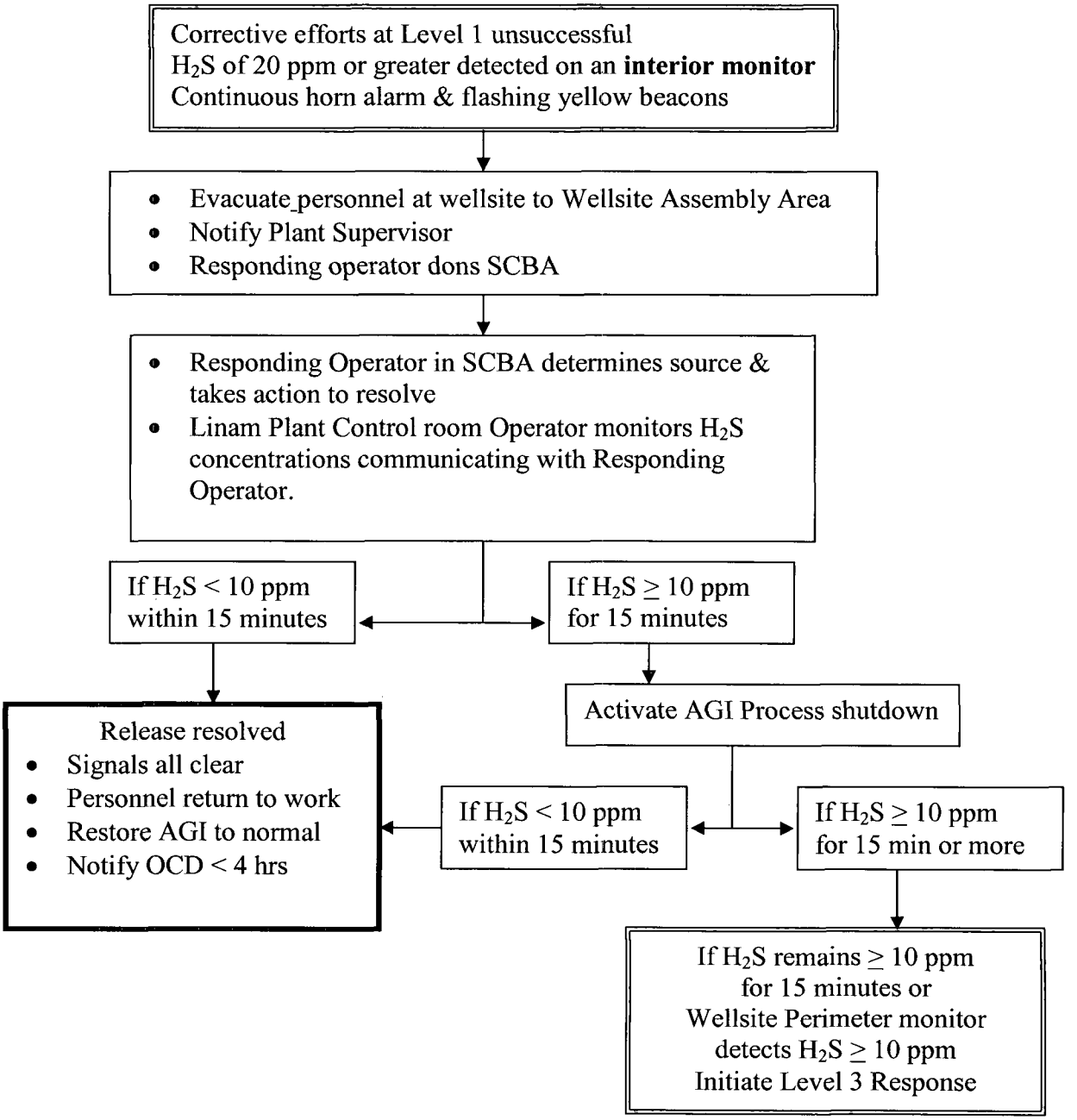
For Details refer to Pages 25 - 26

AGI WELLSITE RELEASE
LEVEL 1 RESPONSE



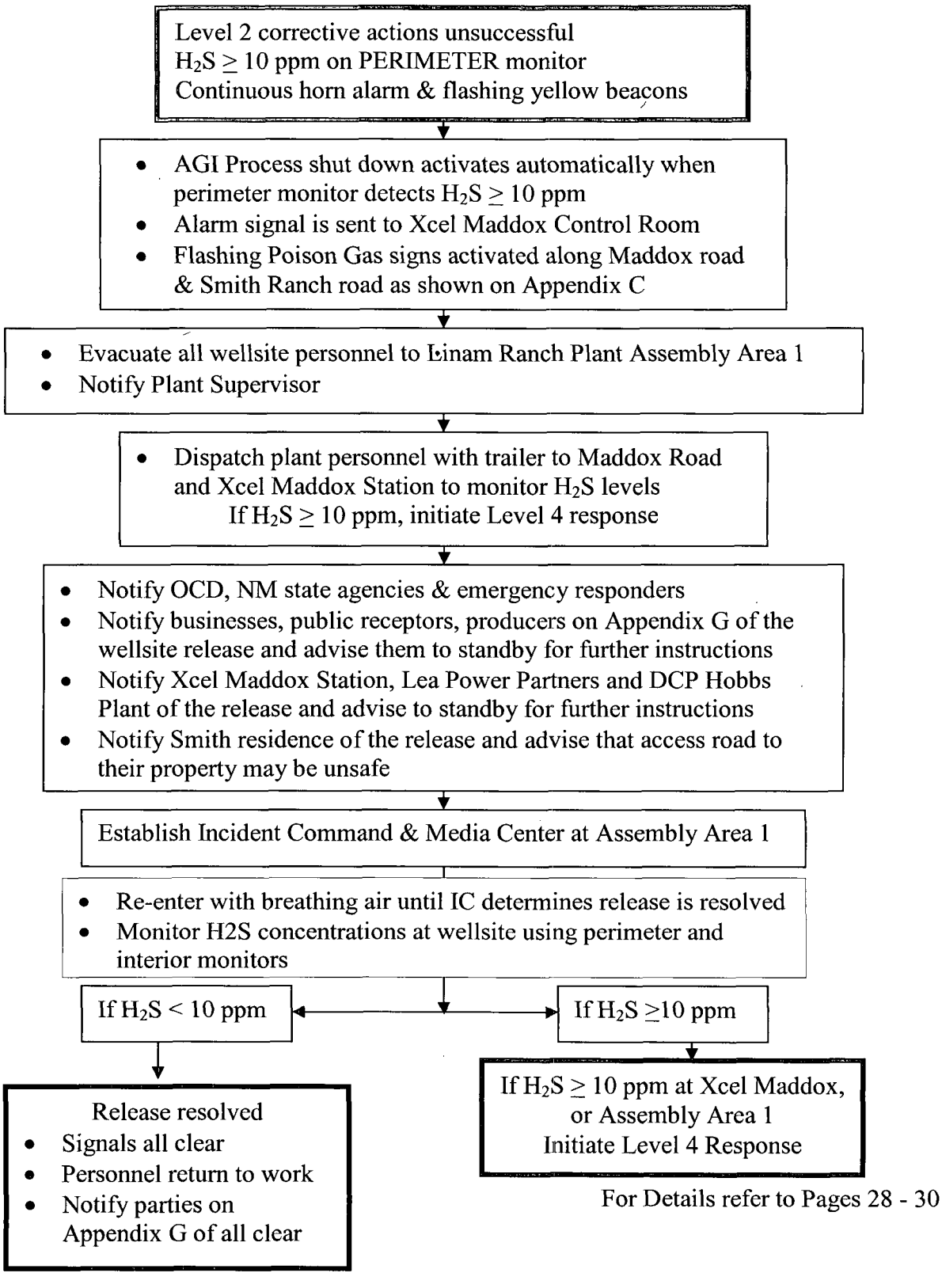
For Details refer to Page 27

AGI WELLSITE RELEASE
LEVEL 2 RESPONSE



For Details refer to Pages 27 - 28

AGI WELLSITE RELEASE
LEVEL 3 RESPONSE



For Details refer to Pages 28 - 30

AGI WELLSITE RELEASE
LEVEL 4 RESPONSE

Level 3 corrective actions are unsuccessful
$H_2S \geq 10$ ppm at Assembly Area 1
$H_2S \geq 10$ ppm at Xcel Maddox Station
$H_2S \geq 10$ ppm at Hwy 62/180
Catastrophic release has occurred

- Activate Plant ESD
- Notify Plant Supervisor
- Notify OCD, NM state agencies & emergency responders

- Establish Incident Command & Media Center at Assembly Area 3
- Evacuate all personnel to Assembly Area 3.

- Plant personnel with emergency trailers move to designated road block areas
- Monitor air quality and move further if H_2S reaches 10 ppm and notify IC of new road block

- Notify businesses, public receptors, producers on Appendix G to evacuate
- Advise Xcel Maddox Station, Lea Power Plant, DCP Hobbs Plant to evacuate
- Notify Smith residence that the access road to their property is closed and to use an alternate evacuation road

- Re-enter with breathing air until IC determines release is resolved
- Additional operations personnel may be directed to close valves on inlet gas pipelines

When $H_2S < 10$ ppm at all locations – release resolved
- Signals all clear
- Personnel return to work
- Notify parties on Appendix G of all clear

For Details refer to Pages 30 - 31

I. INTRODUCTION

The Linam Ranch Gas Plant (hereinafter the "Plant") is a natural gas processing plant which handles and/or generates hydrogen sulfide and/or sulfur dioxide; therefore this Hydrogen Sulfide Contingency Plan (the "H_2S Plan" or "the Plan") has been developed:

1) to satisfy the New Mexico Oil Conservation Division (OCD) Rule 11
2) to conform with API "Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide," RP 55, and
3) to create a site-specific hydrogen sulfide contingency plan that outlines the emergency response procedures that will be implemented 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.

The terms used in this Plan are to be used in the same manner as defined in Title 19 Chapter 15 Part 11 of the New Mexico Administrative code (19.15.11.7- Definitions) unless otherwise defined herein.

The term "public receptor" is used to designate residences, businesses, or public areas.

The Linam Ranch Plant and AGI wellsite have extensive Emergency Shut Down (ESD) and Process Shut Down (PSD) systems designed to isolate incoming and out-going gas and product streams, 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 wellsite has Process Shut Down (PSD) buttons that activate the PSD system for the AGI process which shuts down the AGI related equipment at both the wellsite and plant locations. The locations of the ESD and PSD activation buttons are shown in Appendix D. The ESD and PSD systems are designed to prevent a Level 4 response.

A. PLANT DESCRIPTION & MAP (Figure 1)

The Linam Ranch Gas Plant is located in Lea County, New Mexico and encompasses 164.6 acres. The Plant is owned and operated by DCP Midstream LP.

More specifically, the Plant is located in Section 6, Township 19S, Range 37E in Lea County, New Mexico.

1. Its coordinates are:
   Latitude: 32.6953 N **Longitude: -103.2853 W**

2. Its physical address is:
   139 West Highway 62/180 Hobbs, New Mexico 88240

3. Its mailing address is:
   139 West Highway 62/180 Hobbs, New Mexico 88240

4. 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.

B. ACID GAS INJECTION (AGI) & MAP (Figure 1)

The Linam Acid Gas Injection well is located in Lea County, New Mexico. The mineral and surface lease encompasses 160 acres, with the wellsite being 8.6 acres within a secure fenced area. The AGI wellsite is leased from the State and operated by DCP Midstream LP.

More specifically, the AGI is located in Section 30, Township 18S, Range 37E in Lea County, New Mexico.

1. Its coordinates are:
   Latitude: 32.7167 N **Longitude: -103.2928 W**

2. 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 wellsite gate.

The location of the Plant, AGI Pipeline, and AGI Wellsite are illustrated herein on Figure 1.

FIGURE 1
Linam Ranch Gas Plant &
Acid Gas Injection Property

C. DESCRIPTION OF PLANT OPERATIONS

1. 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, New Mexico. Once gathered at the Plant, the produced natural gas is compressed; treated in an amine process for the removal of carbon dioxide and hydrogen sulfide; 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.

2. Because the natural gas that is gathered and processed at the Plant contains hydrogen sulfide ("sour gas"), it must be treated or processed to remove these and other impurities. The carbon dioxide and hydrogen sulfide (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 wellsite located approximately 2 miles from the Plant.

D. DESCRIPTION OF AGI WELLSITE OPERATIONS

1. The acid gas stream is received at the wellsite 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.

2. The acid gas is injected into the Lower Bone Spring formation at a depth of 8710 feet to 9085 feet below the surface. The wellbore is constructed with 3 casing strings, all with cement circulated to the surface. A permanent packer is set at approximate 8650 feet. The injection tubing is attached to the packer and is equipped with a check valve located below the packer and a hydraulically operated subsurface safety valve located approximately 250 feet below the surface.

3. The wellsite, normally unmanned, is fully automated and is connected to the Linam Ranch Plant control room DCS via a fiber optic line. The wellsite facility operations are monitored and are controlled from the Linam Ranch Plant. Video cameras located at the wellsite provide visibility throughout the AGI wellsite to the Linam Ranch Plant control room.

II. THE PLAN

A. RESPONSIBILITY FOR CONFORMANCE WITH THE H_2S PLAN

It is the responsibility of all personnel on-site to follow the safety and emergency procedures outlined in the Hydrogen Sulfide Contingency Plan (the H_2S Plan) as well as 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.

B. 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 wellsite, specifically those areas within the radii-of-exposure.

C. AVAILABILITY OF THE H_2S PLAN

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 Manager's office at the Hobbs office, and at the Western Region Safety Manager's office in Midland, Texas. **See Appendix H for the H_2S Plan Distribution List**, which lists all the additional entities that have been provided a copy of the H_2S Plan.

D. CONTENT OF THE PLAN

At a minimum, the H_2S Plan will contain information regarding:

1) the emergency procedures to be followed in the event of an hydrogen sulfide (H_2S) or sulfur dioxide (SO_2) release that may pose a threat to the Plant, public or public areas,
2) the characteristics of H_2S and SO_2,
3) a facility description, map and/or drawings, and
4) information regarding training and drills to be conducted related to this Plan.

III. PLAN DESIGN CONSIDERATIONS

A. CHARACTERISTICS OF H_2S, SO_2 AND CARBON DIOXIDE

1. Hydrogen Sulfide (H_2S)

The current inlet gas streams into the Plant contain approximately 4,700 ppm (or 0.47 mole percent) of hydrogen sulfide based on data generated from the sampling of the combined inlet gas stream (average of samples taken Jan.- Oct. 2009 and analyzed by an independent laboratory).

The current inlet to the AGI compression, pipeline, and injection well contains 23.39 mole percent hydrogen sulfide (average of samples taken monthly Jan. – Sept. 2009).

Hydrogen sulfide is a colorless, toxic and flammable gas, and at low concentrations, has the odor of rotten eggs. Hydrogen sulfide gas is heavier than air.

Hydrogen sulfide 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
TWA	10 ppm
STEL	15 ppm
IDLH	100 ppm
Specific Gravity (air = 1.0)	1.189
Boiling Point	-76.5°F
Freezing Point	-121.8°f
Vapor Pressure	396 psia
Auto ignition Temperature	518°F
Lower Flammability Limit	4.3%
Upper Flammability Limit	46.0%
Stability	Stable
pH in water	3
Corrosivity	Reacts with metal, plastics, tissues & nerves

Physical Effects of Hydrogen Sulfide		
Concentration		
ppm	%	Physical Effect
1	0.00010	Can be smelled (rotten egg odor)
10	0.0010	Obvious & unpleasant odor; Permissible Exposure Limit; Safe for 8-hour exposure
15	0.0015	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 & Health (IDLH); Loss of sense of smell in 3-15 minutes; Stinging in eyes and 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
1,000	0.1000	Instant unconsciousness; followed by death within minutes

2. Sulfur Dioxide (SO_2)

Sulfur dioxide is produced as a by-product of H_2S combustion. The waste gas stream consisting of hydrogen sulfide and carbon dioxide 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 wellsite 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.

Sulfur dioxide is heavier than air, but can be picked up by a breeze and carried downwind at elevated temperatures. Sulfur dioxide can be extremely irritating to the eyes and mucous membranes of the upper respiratory tract.

Sulfur Dioxide Properties and Characteristics	
CAS No.	7446-09-05
Molecular Formula	SO_2
Molecular Weight	64.07
TWA	2 ppm
STEL	5 ppm
IDLH	100 ppm
Specific Gravity (air = 1.0)	2.26
Boiling Point	14°F
Freezing Point	-103.9°F
Vapor Pressure	49.4 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 sulfur dioxide 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.
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 my result unless rescued promptly

3. Carbon Dioxide

The current inlet gas streams to the Plant contain approximately 1.6% carbon dioxide based on samples taken Jan. – Oct. 2009.

The current inlet to the AGI compression, pipeline, and injection well contains 76.30 mole percent of carbon dioxide (average of samples taken monthly Jan. – Sept. 2009).

Carbon dioxide gas is colorless, odorless, and non-flammable. Carbon dioxide is heavier than air.

Carbon Dioxide Properties and Characteristics	
CAS No.	124-38-9
Molecular Formula	CO_2
Molecular Weight	44.010
TWA	5,000 ppm
STEL	30,000 ppm
IDLH	40,000 ppm
Specific Gravity (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

B. RADII OF EXPOSURE (ROE)

For the Linam Ranch Plant and AGI wellsite 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 wellsite. The rates and other variables used to calculate the ROE is discussed in greater detail in Appendix B – ROE calculations. Also refer to Appendix C - map showing 500-ppm ROE and the 100- ppm ROE.

	500-ppm ROE	100-ppm ROE
Linam Ranch Plant	**4,057 ft.**	**8,877 ft.**
AGI wellsite	**4,073 ft.**	**8,914 ft.**

IV. EMERGENCY ACTION PROCEDURES

A. EMERGENCY RESPONSE ORGANIZATION

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).

In the event of an accidental release that results in the activation of the H_2S Plan and all personnel have been evacuated out of the affected area, 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, will act as IC until the New Mexico State Police arrive. Once the New Mexico State Police arrive, the ranking State Police officer will assume the duties of the IC.

The Plant Supervisor or his designee shall determine:

1) Plant Shut Downs
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 Manager 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.

B. EMERGENCY RESPONSE

This section explains the procedures and decision process to be used in the event of an H_2S release; much of which has been pre-determined 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.

1. OBJECTIVE

All Plant employees shall be prepared to respond to an H_2S emergency at the Plant, the AGI pipeline, and the AGI wellsite.

Emergency response actions may be taken for a variety of situations that may occur. The Plan is activated in progressive levels, based on the concentration of H_2S that has been released, and the physical location where the release has occurred.

Response Levels

To facilitate the Plan implementation, the release responses were made site-specific. There are four (4) response "sites" – the Linam Ranch Plant, Highway 62/180 Road Crossing, AGI Pipeline, and AGI wellsite.

The Plan has four (4) activation levels that are described in detail below and in outline form in the Response Flow diagrams in Appendix F.

Level 1 - Intermittent alarm sounded and flashing yellow beacons activated for H_2S greater than 10 ppm.

Level 2 - Continuous alarm sounded and flashing yellow beacons activated for H_2S greater than 20 ppm.

Level 3 - Continuous alarm sounded and flashing yellow beacons activated, H_2S levels continue to increase above 20 ppm for 15 minutes, Operators activate AGI process shut down (PSD) and/or Linam Ranch Plant Emergency Shut down (ESD), depending on location of the release. Notification of public receptors and State agencies is initiated.

Level 4 - 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 public receptors and State agencies is initiated.

As soon as the Plan has been activated based on the criteria above, the Plant Supervisor, or his designee, should be notified.

2. EVACUATION AND EMERGENCY ASSEMBLY AREAS

Evacuation for all visitors and all personnel that are not operators begins at the 10 ppm H_2S intermittent alarm and flashing yellow beacon. The responding Plant operator(s) are to put on the 30-min Self Contained Breathing Apparatus (SCBA) and first determine if any personnel are in distress and assist any distressed personnel to evacuate to Emergency Assembly Area 1. Emergency services (911) will be contacted if there are injuries or as otherwise deemed necessary. The operators will then, wearing the SCBA, 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 described in **Appendix F**.

Prevailing winds for the area are from the southwest. Personnel should evacuate along the designated route unless the designated evacuation route is downwind of the release (based on the windsock), then all evacuees should proceed perpendicular and then upwind to the Emergency Assembly Areas.

The Plant and AGI wellsite plot plans show evacuation routes and Emergency Assembly Areas. **(Appendix D)**

The Emergency Assembly Area 1 is:

Parking Area on the north side of the Plant Office Building (see Appendix C)

The Emergency Assembly Area 2 is:

Parking Area at Hobbs Plant Office (see Appendix C)

The Emergency Assembly Area 3 is:

North Parking lot at intersection of Hwy 62/180 and Hwy 483 (see Appendix C)

Wellsite Emergency Assembly Area:

Parking Area outside main gate on west side of wellsite (see Appendix C)

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 wellsite, thus the sign-in sheet will be used at the Emergency Assembly Areas to make a full accounting of all personnel and visitors.

Also at each Emergency Assembly Area, the ambient air quality 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.

3. IMMEDIATE ACTION PLANS/ INITIAL RESPONSES

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.

The following outlines the immediate action plans that are illustrated by flow diagrams in Appendix F. These are to be used when responding to an H_2S release occurring at the Linam Ranch Plant, Highway 62/180 road crossing, the AGI pipeline, or the AGI wellsite. 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.

The individual response plans are listed on the following pages:

LINAM RANCH PLANT RELEASES:

LEVEL 1 RESPONSE - PLANT

A Level 1 response occurs when

- 10 ppm of H_2S or greater is detected at a fixed monitor
- 10 ppm of H_2S or greater is detected on a personal monitor
- an intermittent horn and a flashing yellow light occurs

1. At the initial sound of the intermittent alarm or the flashing yellow beacon, the responding operator will prepare to put on a 30 minute SCBA, the control room operator will remain in the control room and will monitor H_2S concentrations throughout the plant.

   All other personnel in the Plant complex shall immediately evacuate the Plant using the evacuation routes to the Emergency Assembly Area 1 **(see Appendix D)**. At the assembly area, all personnel will be accounted for using the plant sign in sheet and the air quality will be monitored to insure it remains less than 10 ppm H_2S. If H_2S rises to 10 ppm, all personnel will move to Assembly Area 2.

   The Plant Supervisor shall be notified of the release.

2. The responding operator, upon donning the SCBA, will first help any persons in distress evacuate to the Emergency Assembly Area. If deemed necessary, local emergency response service providers will be contacted by Plant personnel designated by the Operator.

3. Wearing the SCBA, the responding operator(s) will determine the source of the release and if possible take corrective actions. If corrective actions are successful and the release is resolved, and the monitored H_2S levels in the Plant return to 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 plant to resume work.

4. The Plant Supervisor or his designee will contact the OCD district office within 4 hours of the release.

   If the release is not resolved and H_2S levels continue to increase, Level 2 Response is initiated.

LEVEL 2 RESPONSE - PLANT

A Level 2 response occurs when

- corrective actions at Level 1 are unsuccessful
- 20 ppm of H_2S or greater is detected at a fixed monitor
- a continuous horn and a flashing yellow light occurs

1. The responding operator will prepare to put on a 30 minute SCBA, the control room operator will remain in the control room and will monitor H_2S concentrations throughout the plant. 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.

   All other personnel in the Plant complex shall immediately evacuate the Plant using the evacuation routes to the Emergency Assembly Area 1 At the assembly area, all personnel will be accounted for using the plant sign in sheet and the air quality will be monitored to insure it remains less that 10 ppm H_2S. If it rises to 10 ppm, H_2S all personnel will move to Assembly Area 2.

   The Dorado Transportation facility should be notified that a release is occurring and to stand by for further instructions.

   The Plant Supervisor shall be notified of the release.

2. The responding operator(s), upon donning the SCBA, will first help any persons in distress evacuate to the Emergency Assembly Area. If deemed necessary, local emergency response service providers will be contacted by Plant personnel as designated by the Operator.

3. Wearing the SCBA, the responding operator(s) will determine the source of the release and if possible take corrective actions. If corrective actions are successful and the release is resolved, and the monitored H_2S levels in the Plant return to 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 plant to resume work.

4. If the release has occurred within the AGI system, the Operator will activate the AGI process shut down, which shuts down and isolates the AGI compressors and equipment and routes the acid gas to the plant acid gas flare. If the release is contained and the monitored H_2S levels in the Plant 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 plant to resume work. Priority will be given to restoring the AGI compressors and equipment to normal operations.

5. The Plant Supervisor or his designee will contact the OCD district office within 4 hours of the release.

If the H_2S levels continue to rise, or remain above 10 ppm for 15 minutes, the Operator will initiate Level 3 Response.

LEVEL 3 RESPONSE - PLANT

A Level 3 response occurs when

- corrective actions at Level 2 are unsuccessful
- 20 ppm of H_2S or greater is detected for greater than 15 minutes

1. Operator will activate the Plant ESD shutting off all incoming and outgoing gas and 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 wellsite.

   The Plant Supervisor will be notified

2. All personnel will be evacuated from Assembly Area 1 to Assembly Area 2, where air quality will continue to be monitored for H_2S. All personnel will be accounted for using the plant sign-in list.

   State agencies including the OCD District Office and Emergency responders will be notified.

3. Plant personnel with H_2S monitors and emergency trailers will be dispatched to the north plant perimeter between the plant and Highway 62/180 and will monitor for H_2S concentrations. If H_2S concentrations reach 10 ppm, plant personnel will move to the designated road block areas shown on ROE map and Highway 62/180 will be blocked.

4. Notifications to area businesses, both manned and unmanned will include the nature of the release and status of containment. Notifications will include but are not limited to the following:

   - Businesses, public receptors, and producers as listed in Appendix G. All will be instructed to immediately alert all company personnel, third party contractors and/or services companies working in the area and those imminently scheduled to work in the area, of the release and evacuation status of the Plant. They should be instructed to immediately leave and not re-enter the Plant vicinity until further instruction. All shall be informed of the road blocks on Highway 62/180.

   - Xcel Maddox and Lea Power Partners and DCP Hobbs Plant will be notified of the release and advised to be on standby for further instructions.

5. Incident Command Center will be established at the Assembly Area 2 – Hobbs Plant. Linam Ranch Plant Distributed Control System (DCS) may be available at this site to assist in monitoring Linam Ranch Plant H_2S levels)

   Establish media staging area adjacent to Assembly Area 2 and direct all media to it.

   The IC will initiate and maintain a Chronological Record of Events log. (Appendix I)

If monitored H_2S levels at Emergency Assembly Area 2 exceed 10 ppm, evacuate to Emergency Assembly Area 3, and initiate a Level 4 Response. All personnel should be accounted for at Assembly Area 3 using the plant sign in sheet and air quality will be monitored for H_2S concentrations.

6. 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.

7. If release is resolved and monitored levels of H_2S in the Plant are less than 10 ppm, the Plant Supervisor or his designee may authorize personnel to return to the Plant. 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.

If the release is not resolved or H_2S levels continue to increase, the IC will initiate Level 4 Response.

LEVEL 4 RESPONSE - PLANT

A Level 4 response occurs when

- if corrective actions at Level 3 are unsuccessful
- H_2S concentrations reach 10 ppm or greater at Assembly Area 2,
- a catastrophic release occurs

1. Operators shall have activated the plant ESD system on evacuation from Plant facilities. Plant Supervisor will be notified of the release. State agencies including the OCD District Office and Emergency responders will be notified.

2. The Incident Command Center, media staging area and all personnel shall have evacuated to Emergency Assembly Area 3. All personnel will be accounted for using the plant sign-in sheet. Initiate and maintain a Chronological Record of Events log.

3. Plant personnel will move to the designated road block areas shown on ROE map and Highway 62/180 will be blocked.

4. Notifications to area businesses, both manned and unmanned will include the nature of the release and status of containment. Notifications will include but are not limited to the following:

   - Businesses, public receptors, and producers as listed in Appendix G. All will be instructed to immediately alert all company personnel, third party contractors and/or services companies working in the area and those imminently scheduled to work in the area, of the release and evacuation status of the Plant. They should be instructed to immediately leave and

not re-enter the Plant vicinity until further instruction. All shall be informed of the road blocks on Highway 62/180.

- Xcel Maddox and Lea Power Partners facilities will be notified of the release and advised to shelter in place or evacuate depending on wind direction.

5. 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.

6. 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.

7. Once release is resolved and monitored levels of H_2S in the Plant are less than 10 ppm, the Plant Supervisor or his designee may authorize personnel to return to the Plant. 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 at the Plant.

ROAD CROSSING RELEASES – HWY 62/180 ROAD CROSSING

LEVEL 1 RESPONSE – ROAD CROSSING

The AGI pipeline has fixed monitors at the Highway 62/180 road crossing – north and south locations and another monitor approximately 100 ft. north of the highway near the Low Pressure isolation valve.

A Level 1 response occurs when

- 10 ppm of H_2S or greater is detected at road crossing fixed monitor
- an intermittent horn and a flashing yellow light occurs

1. If a fixed monitor at the highway crossings reaches 10 ppm H_2S, the AGI process shut down is automatically initiated which shuts down and isolates the AGI compressors and equipment and routes the acid gas to the plant acid gas flare. This will also automatically close an ESD valve located immediately south of Highway 62/180 as well as a control valve located approximately 100' north of Highway 62/180.

   Control room operator verifies the AGI process shut down and activates manually if necessary.

   The responding operator will prepare to put on a 30 minute SCBA, the control room operator will remain in the control room and will monitor H_2S concentrations throughout the plant.

   All other personnel in the Plant complex shall immediately evacuate the Plant using the evacuation routes to the Emergency Assembly Area 1 (see **Appendix D**). At the assembly area, all personnel will be accounted for and the air quality 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 Assembly Area 2.

   The Plant Supervisor shall be notified of the release.

2. The responding operator, upon donning the SCBA, will first help any persons in distress evacuate to the Emergency Assembly Area. If deemed necessary, local emergency response service providers will be contacted by Plant personnel designated by the Operator.

   The control room operator will contact any personnel working at the AGI wellsite, alerts them to the road crossing alarm condition, and directs them to monitor air quality using the fixed monitors at the wellsite.

3. Wearing the SCBA, the responding operator will determine the source of the release and if possible take corrective actions. If corrective actions are successful and the release is resolved, and the monitored H_2S levels in the Plant and the AGI pipeline (including the fixed monitors at the Highway 62/180 road crossing) return to 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 plant to resume work.

4. The Plant Supervisor or his designee will contact the OCD district office within 4 hours of the release.

If the Level 1 road crossing release is not resolved and H_2S levels continue to increase, Level 3 Response is initiated.

LEVEL 2 RESPONSE – ROAD CROSSING

There is no Level 2 Response for a road crossing release.

LEVEL 3 RESPONSE – ROAD CROSSING

A Level 3 response is initiated when:

- level 1 corrective actions are unsuccessful
- more than one AGI pipeline fixed monitor reaches 10 ppm H_2S
- any one of the AGI pipeline fixed monitor reaches 20 ppm H_2S

1. Operator will activate the Plant ESD shutting off all incoming and outgoing gas and 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 wellsite. Operator will activate the continuous H_2S alarm.

   All plant personnel will be evacuated to Assembly Area 2, where air quality will continue to be monitored for H_2S.

   The control room operator will contact personnel working at the AGI wellsite and direct them to evacuate to Assembly Area 2. All personnel will be accounted for using the plant sign-in list.

   The Plant Supervisor will be notified

2. State agencies including the OCD District Office and Emergency responders will be notified.

3. Emergency trailers will be dispatched to block Highway 62/180 at designated locations shown on the ROE Map.

4. Notifications to area businesses, both manned and unmanned will include the nature of the release and status of containment. Notifications will include but are not limited to the following:

   - Businesses (Dorado), public receptors, and producers as listed in Appendix G. All will be instructed to immediately alert all company personnel, third party contractors and/or services companies working in the area and those imminently scheduled to work in the area, of the release and evacuation status of the Plant. They should be instructed to immediately leave and not re-enter the Plant vicinity until further instruction. All shall be informed of the road blocks on Highway 62/180.

   - Xcel Maddox and Lea Power Partners facilities will be notified of the release and advised to shelter in place or evacuate depending on wind direction.

5. Incident Command Center will be established at the Assembly Area 2 as long as H_2S levels remain less than 10 ppm at the Assembly area. Establish media staging area adjacent to Assembly Area 2 and direct all media to it.

   The IC will initiate and maintain a Chronological Record of Events log. Appendix I

   If monitored H_2S levels at Emergency Assembly Area 2 rise to 10 ppm, evacuate to Emergency Assembly Area 3. Establish media staging area adjacent to Assembly Area 3 and direct all media to it.

6. 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.

7. If release is resolved and monitored levels of H_2S in the Plant, the monitors at the Highway 62/180 road crossing, and the AGI wellsite are less than 10 ppm, the Plant Supervisor or his designee may authorize personnel to sign in and return to the Plant and wellsite. Traffic will be restored on Highway 62/180. 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.

If the release is not resolved and/or H_2S levels continue to increase, Level 4 Response is initiated.

LEVEL 4 RESPONSE – ROAD CROSSING

A Level 4 response occurs when

- if corrective actions at Level 3 are unsuccessful
- H_2S concentrations reach 10 ppm or greater at Assembly Area 2,
- a catastrophic release occurs

1. Operators shall have activated the plant ESD system on evacuation from Plant facilities. Plant Supervisor will be notified of the release. State agencies including the OCD District Office and Emergency responders will be notified.

2. The Incident Command Center, media staging area and all personnel shall have evacuated to Emergency Assembly Area 3. All personnel will be accounted for using the plant sign-in sheet. Initiate and maintain a Chronological Record of Events log. H_2S concentrations at Emergency Area 3 will be monitored.

3. Plant personnel will move to the designated road block areas shown on ROE map and Highway 62/180 will be blocked. Personnel will monitor air quality and move further away if H_2S reaches 10 ppm and notify IC of new road block location

4. Notifications to area businesses, both manned and unmanned will include the nature of the release and status of containment. Notifications will include but are not limited to the following:

   - Businesses, public receptors, and producers as listed in Appendix G. All will be instructed to immediately alert all company personnel, third party contractors and/or services companies working in the area and those imminently scheduled to work in the area, of the release and evacuation status of the Plant. They should be instructed to immediately leave and not re-enter the Plant vicinity until further instruction. All shall be informed of the road blocks on Highway 62/180.

   - Xcel Maddox Station, Lea Power Partners, and DCP Hobbs Plant will be notified of the release and advised to evacuate to the west.

5. If escaping vapors have been ignited, the vapors should be allowed to continue to bum unless the fire endangers personnel, the public, other property, or other equipment.

6. 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.

7. Once release is resolved and monitored levels of H_2S in the Plant, the monitors at the Highway 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. Traffic will be restored on Highway 62/180. 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.

AGI PIPELINE RELEASES – PIPELINE

LEVEL 1 RESPONSE – PIPELINE

Level 1 response for the AGI pipeline occurs when:

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

1. The responding operator, upon donning the SCBA, will check the pipeline right of way (ROW), helps any persons in distress, and evacuate any employees or contractors who may be working on or near the pipeline ROW to Linam Emergency Assembly Area 1. If deemed necessary, local emergency response service providers will be contacted by Plant personnel designated by the Operator.

   The control room operator will contact any personnel working at the AGI wellsite, inform them of the H_2S alarm on the pipeline, and direct them to monitor air quality – H_2S concentrations, using the wellsite fixed monitors, and to evacuate to Assembly Area 1 if levels increase to 10 ppm.

   Any third parties observed working near the ROW will be advised verbally of the situation and instructed to leave the area and not return until further notice.

   The Plant Supervisor shall be notified of the release.

2 Wearing the SCBA, the operator(s) will determine the source of the release and if possible take corrective actions. If corrective actions are successful and the release is resolved, and the monitored H_2S levels on the pipeline and road crossing fixed monitors return to less than 10 ppm, the Plant Supervisor or his designee will signal all clear and personnel will be allowed to sign in and resume work on the pipeline ROW. Personnel working at the wellsite will be notified of the all clear.

3. The Plant Supervisor or his designee will contact the OCD district office within 4 hours of the release.

   If the release is not resolved and H_2S levels continue to increase, Level 2 Response is initiated.

LEVEL 2 RESPONSE – PIPELINE

Level 2 Response occurs when:

- Level 1 response is unsuccessful
- H_2S concentration is increasing above 10 ppm, or is detected at 20 ppm
- Pipeline leak is visible.

1. The responding operator will immediately contact the control room operator to activate the AGI process shut down, which shuts down and isolates the AGI compressors and equipment and routes the acid gas to the plant acid gas flare.

   The control room operator will contact personnel working at the AGI wellsite and direct them to evacuate to Emergency Assembly Area 1.

   Any third party visibly observed working near the ROW will be advised verbally of the situation and instructed to leave the area and not return until further notice.

   The Plant Supervisor will be notified.

2. The control room operator will direct that the manual valves at both the Linam Ranch Plant pig launcher and the AGI wellsite pig receiver be opened, and the pipeline will be depressurized into the acid gas flares located at both sites. The responding operator may, if no personnel are present at the wellsite, proceed to the wellsite, using H_2S monitors to insure his safety, to open the manual valve at the pig receiver.

3. The responding operator, upon donning the SCBA, will check the pipeline ROW, help any persons in distress, and evacuate any employees or contractors persons who may be working on or near the pipeline ROW to Linam Emergency Assembly Area 1. If deemed necessary, local emergency response service providers will be contacted by Plant personnel designated by the Operator.

4. Plant personnel with H_2S monitors and emergency trailers will be dispatched to the Highway 62/180 pipeline crossing and to the Xcel power plant on Maddox Road. Personnel will monitor air quality and move further away if H_2S reaches 10 ppm and notify IC of new road block location.

   If H_2S concentrations at Highway 62/180, the Assembly Area 1, or at Xcel power plant on Maddox Road reach 10 ppm, a Level 4 response is initiated. Xcel Maddox Station, Lea Power Partners and DCP Hobbs Plant will be advised to evacuate to the west.

5. Incident Command Center will be established at the Plant Assembly Area 1. Establish media staging area adjacent to Assembly Area 1 and direct all media to it. The IC will initiate and maintain a Chronological Record of Events log. (Appendix I) If monitored H_2S levels at Emergency Assembly Area 1 exceed 10 ppm, evacuate to Emergency Assembly Area 3.

6 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.

If release is resolved and monitored levels of H_2S in the Plant, the monitors at the Highway 62/180 road crossing, the pipeline ROW, and the AGI wellsite 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.

The Plant Supervisor or his designee will contact the OCD district office within 4 hours of the release

If the release is not resolved and/or H_2S levels continue to increase, Level 4 Response is initiated.

LEVEL 3 RESPONSE – PIPELINE

There is no level 3 for a pipeline response.

LEVEL 4 RESPONSE – PIPELINE

A Level 4 response occurs when

- if corrective actions at Level 2 are unsuccessful
- H_2S concentrations reach 10 ppm or greater at - the Xcel Power Plant, Highway 62/180, or any other public area or road.
- a catastrophic release occurs

1. Emergency trailers will be dispatched to block Highway 62/180 at designated locations shown on the ROE Map. Personnel will monitor air quality and move further away if H_2S reaches 10 ppm and notify IC of new road block location.

   Plant operators will activate the plant ESD system.

   The operator will contact any personnel working at the AGI wellsite and direct them to evacuate to Emergency Assembly Area 3. Any third parties observed working near the ROW will be advised verbally of the situation and instructed to leave the area and not return until further notice.

2. The Incident Command Center will be relocated to Emergency Assembly Area 3. All personnel shall evacuate to Assembly Area 3. All personnel will be accounted for using the plant sign-in sheet. Initiate and maintain a Chronological Record of Event log.

3. State agencies including the OCD District Office and Emergency responders will be notified.

4. Notifications to area businesses, both manned and unmanned will include the nature of the release and status of containment. Notifications will include but are not limited to the following:

   - Businesses, public receptors, and producers as listed in Appendix G. All will be instructed to immediately alert all company personnel, third party contractors and/or services companies working in the area and those imminently scheduled to work in the area, of the release and evacuation status of the Plant. They should be instructed to immediately leave and not enter/or re-enter the Plant vicinity until further instruction. All shall be informed of the road blocks on Highway 62/180.

- Xcel Maddox Station, Lea Power Partners and DCP Hobbs Plant will be notified of the release and advised to evacuate to the west.

5. If escaping vapors have been ignited, the vapors should be allowed to continue to bum unless the fire endangers personnel, the public, other property, or other equipment.

6. 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.

7. Once release is resolved and monitored levels of H_2S in the Plant, the monitors at the Highway 62/180 road crossing, the pipeline ROW, and the AGI wellsite are less than 10 ppm, the Plant Supervisor or his designee may authorize personnel to sign in and return to the Plant, AGI wellsite, and pipeline ROW. Traffic will be restored on Highway 62/180. 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.

AGI WELLSITE RELEASES:

LEVEL 1 RESPONSE – AGI WELLSITE

A Level 1 response occurs when

- 10 ppm of H_2S or greater is detected at an **interior** fixed monitor
- 10 ppm of H_2S or greater is detected on a personal monitor
- an intermittent horn and a flashing yellow light occurs

1. The operator and all other personnel in the wellsite shall immediately evacuate the wellsite using the evacuation routes to the Wellsite Assembly Area (see **Appendix D**). At the assembly area, all personnel will be accounted for using the sign in sheet, and the air quality 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 Linam Ranch Plant Assembly Area 1.

   The Plant Supervisor shall be notified of the release.

2. The responding operator, upon donning the SCBA, will first help any persons in distress evacuate to the Wellsite Assembly Area. If deemed necessary, local emergency response service providers will be contacted by Plant personnel designated by the Operator.

   Linam Plant Control room operator monitors H_2S levels and communicates with responding operator.

3. Wearing the SCBA, the operator will attempt to fix the cause of the release. If the release is contained and the monitored H_2S levels in the wellsite 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 wellsite to resume work.

4. The Plant Supervisor or his designee will contact the OCD district office within 4 hours of the release.

If the release is not resolved and H_2S levels continue to increase, Level 2 Response is initiated.

LEVEL 2 RESPONSE – AGI WELLSITE

A Level 2 response occurs when

- Corrective actions at Level 1 were unsuccessful
- 20 ppm of H_2S or greater is detected at an interior fixed monitor
- a continuous horn and a flashing yellow light occurs

1. At the initial sound of the continuous alarm or observance of the flashing yellow beacons, the operators and all other personnel in the wellsite will evacuate using the evacuation routes to the Wellsite Assembly Area (see **Appendix** D). At the assembly area, all personnel will be accounted for using the sign in sheet, and the air quality 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 Assembly Area 1.

The Plant Supervisor shall be notified of the release.

2. The operator, upon donning the SCBA, will first help any persons in distress evacuate to the Emergency Assembly Area. If deemed necessary, local emergency response service providers will be contacted by Plant personnel as designated by the Operator

3. Wearing the SCBA, the operator(s) will attempt to fix the cause of the release. If the operators are unsuccessful in containing the release and H_2S levels continue to rise, or remain above 20 ppm for 15 minutes, the Operator will activate the AGI process shut down, which shuts down the AGI compressors and equipment, closes the pipeline and injection well isolation valves, and depressurizes the wellsite equipment and piping to the wellsite flare. At Linam Ranch Plant, the acid gas stream from the amine system is routed to the plant acid gas flare.

   If the release is contained and the monitored H_2S levels in the wellsite 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 wellsite to resume work. Priority will be given to restoring the AGI compressors and equipment to normal operations.

4. If the wellsite perimeter monitors reach 10 ppm, initiate a Level 3 Response.

If the release is not resolved and H_2S levels continue to increase, Level 3 Response is initiated.

LEVEL 3 RESPONSE – AGI WELLSITE

A Level 3 response is initiated when:

- level 2 corrective actions are unsuccessful
- when a wellsite perimeter monitor has reached 10 ppm H_2S
- Continuous horn alarm & flashing yellow beacons

1. The AGI process shut down 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 wellsite equipment and piping to the wellsite acid gas flare. At Linam Ranch Plant, the acid gas stream from the amine treater is routed to the Linam Ranch Plant acid gas flare.

   An alarm signal is automatically sent to the Xcel Maddox Station, alerting their control room of the 10 ppm H_2S concentration at the DCP AGI wellsite perimeter.

   Flashing Poison Gas signals are activated along Maddox road & Smith Ranch road as shown on Appendix C to alert personnel of potential danger.

2. All personnel will be evacuated from the Wellsite Assembly Area to the Linam Ranch Plant Assembly Area 1. At the assembly area, all personnel will be accounted for using the sign in sheet, and the air quality 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 Assembly Area 3.

The Plant Supervisor shall be notified of the release.

3. Personnel with emergency trailers will be dispatched to monitor H_2S concentration on Maddox road at the Xcel Maddox Power Plant.

   If H_2S concentration at the Maddox Road and Xcel Maddox Station reach 10 ppm, Xcel Maddox and DCP Hobbs will be advised to evacuate and a Level 4 will be initiated. Lea Power Partners will be advised of the situation and be put on notice of the potential need to evacuate.

4. State agencies including the OCD District Office and Emergency responders will be notified.

5. Notifications to area businesses, both manned and unmanned will include the nature of the release and status of containment. Notifications will include but are not limited to the following:

   - Businesses, public receptors, and producers as listed in Appendix G. All will be instructed to immediately alert all company personnel, third party contractors and/or services companies working in the area and those imminently scheduled to work in the area of the release. They should be advised to standby until further instruction.

   - Xcel Maddox Station, DCP Hobbs Plant and Lea Power Partners facilities will be notified of the release and advised to shelter in place or evacuate depending on wind direction.

6. Incident Command Center will be established at the Linam Ranch Plant Assembly Area 1. – Establish media staging area adjacent to Linam Ranch Plant Assembly Area 1 and direct all media to it. The IC will initiate and maintain a Chronological Record of Events log. Appendix I

   If monitored H_2S levels at Linam Ranch Plant Emergency Assembly Area 1 or at the pipeline road crossing rises to 10 ppm, initiate a Level 4 response and evacuate to Assembly Area 3. Establish Incident Command Center and media staging area adjacent to Assembly Area 3 and direct media to it.

   Plant personnel will move to the designated road block areas shown on ROE map and Highway 62/180 will be blocked.

7. 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 on AGI pipeline.

If release is resolved and monitored levels of H_2S in the AGI wellsite are less than 10 ppm, Plant Supervisor or his designee will signal all clear and personnel will be allowed to sign in and re-enter the wellsite to resume work.

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.

If release is not resolved, a Level 4 response is initiated

LEVEL 4 RESPONSE – AGI WELLSITE

A Level 4 response occurs when

- if corrective actions at Level 3 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
- Or a catastrophic release occurs

1. Operators shall have activated the plant ESD system on evacuation from Plant facilities. Plant Supervisor will be notified of the release. State agencies including the OCD District Office and Emergency responders will be notified.

2. The Incident Command Center, media staging area and all personnel shall have evacuated to Emergency Assembly Area 3. All personnel will be accounted for using the plant sign-in sheet. Initiate and maintain a Chronological Record of Events log.

3. Plant personnel will move to the designated road block areas shown on ROE map and Highway 62/180 will be blocked. Personnel will monitor air quality and move further if H_2S reaches 10 ppm and notify IC of new road block.

4. Notifications to area businesses, both manned and unmanned will include the nature of the release and status of containment. Notifications will include but are not limited to the following:

   - Businesses, public receptors, and producers as listed in Appendix G. All will be instructed to immediately alert all company personnel, third party contractors and/or services companies working in the area and those imminently scheduled to work in the area, of the release. They should be instructed to immediately leave and not enter/or re-enter the AGI Wellsite vicinity until further instruction. All shall be informed of the road blocks on Highway 62/180.

   - Xcel Maddox Station, Lea Power Partners and DCP Hobbs Plant will be notified of the release and advised to evacuate to the west.

   - Notify Smith residence that the access road to their property is closed and to use an alternate evacuation road.

5. 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.

6. 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.

7. Once resolved and all monitored levels of H_2S in the AGI wellsite and Plant are less than 10 ppm H_2S, the Plant Supervisor will signal all clear and allow personnel to sign in and re-enter the Plant site and AGI wellsite. All businesses previously notified will be informed that the release had been resolved and advised of the current monitored H_2S levels at the AGI wellsite and Plant.

4. EMERGENCY SHUT DOWN SYSTEM

The Linam Ranch Plant and AGI wellsite have extensive Emergency Shut Down (ESD) and Process Shut Down (PSD) systems designed to isolate incoming and out-going gas and product streams, contain hydrocarbon and H_2S releases, and safely depressurize equipment to flares. These systems are automatically and manually initiated, depending on process conditions. There are manually activated ESD buttons located at exit locations at the Plant and the AGI wellsite as shown on Appendix D. The ESD systems are designed to prevent a Level 4 response. See **Appendix E** for a more detailed description of the ESD systems.

5. 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.

The NMOCD will be notified as soon as possible but no later than 4 hours following a release of H_2S requiring activation of this Plan. This shall be followed up with a full report of the incident using the NMOCD's C-141 form no later than 15 days following the release.

A. DISCOVERY AND INTERNAL REPORTING

1. All personnel, including contractors who perform operations, maintenance, and/or repair work in sour gas areas within the Plant, AGI pipeline, and AGI wellsite wear H_2S monitoring devices to assist them in detecting the presence of unsafe levels of H_2S. When any personnel 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 value 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; and
    - Type and severity of the emergency; and
    - Location of the emergency (area/block, mile markers, latitude & longitude, or building), and the distance to surrounding equipment and/or structures; and
    - 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; and
    - Description of injuries and report of damage to property and structures; and
    - Initiate and maintain a Chronological Record of Events log. This record should record the time, date, and a summary of the event.

2. If any personnel detects H_2S levels of 10 ppm or greater either as a result of his/her personal monitoring device or the intermittent alarms and/or yellow flashing beacons from fixed monitors, the Control Room operator will contact the Plant Supervisor for assistance and the

responding operator will put on the 30-min 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 H2S Contingency Plan can be activated, if necessary.

3. Once the Plant Supervisor is contacted, he or his designee is to notify the appropriate DCP management, EHS personnel, Plant emergency response personnel, and advise them of the existing situation. If necessary, the Control Room Operator will then conduct the notifications to state regulatory agencies including the OCD District Office and emergency response agencies as detailed in Appendix G (Page 65).

4. 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.

B. PUBLIC AWARENESS AND COMMUNICATION

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. Refer to the Response Flow diagram in Appendix F that indicates when certain entities are to be contacted in event of activation of this Plan. **Appendix G** is a listing of the entities to be contacted and **Appendix H** is a list of organizations that have received a copy of the Plan. DCP will inform all state and local response organizations on its Plan as well as those businesses and residences that fall within its 500-ppm and 100-ppm ROE as illustrated in **Appendix C.**

C. PUBLIC AREAS, NEARBY BUSINESSES AND RESIDENTS

The contact information for all residents, businesses and public areas is contained in **Appendix G.** All businesses and public places within the 500 ppm and 100 ppm radius of exposure will be contacted by Plant personnel as designated by Plant Supervisor if the Plan is activated and based on response level as described in the **Plant, Road Crossing, Pipeline, and AGI Wellsite Response** sections of this Plan and advised of the following:

- The nature and extent of the release/emergency at the Plant, Pipeline or AGI wellsite 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 evacuate and/or when it is safe to return to the area.

1. Residences or Public roads:

   There are no residences located within 500 ppm radius of exposures. There are 2 residences within the 100 ppm radius of exposure located east of the plant site on US Highway 62-180.

There are 2 public roads located within the 500 ppm radius of exposure. 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 radius of the AGI wellsite and the pipeline. Both of these roads also have sections within the 100 ppm radius of exposure of the AGI wellsite, pipeline and Plant site. Additionally, a portion of NM Highway 8, south of US Highway 62-180, lies within the 100 ppm radius of exposure of the AGI Pipeline and Plant site.

2. Businesses or Other Public Areas:

There is one 24 - hour manned business within the 500 ppm radius of exposure. The Xcel Maddox Power Plant is located southwest of the AGI wellsite and within the 500 ppm radius of exposure of the AGI wellsite 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 radius of exposure of the Plant Site and the AGI pipeline.

There are 2 additional manned businesses within the 100 ppm radius of exposures. The Lea Power Partners Power Plant lies northwest of the AGI wellsite and within the 100 ppm radius of exposure of the AGI wellsite and the AGI Pipeline. The DCP Hobbs Gas Plant lies within the 100 ppm radius of exposures of the AGI wellsite, 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 radius of exposures for the plant, pipeline, AGI wellsite, all residences, manned and unmanned businesses, and producers listed on Appendix G will be notified if the Plan is enacted.

6. SITE SECURITY

A. In order to have an accurate listing of all personnel on-site in the event of an emergency, a daily sign-in log sheet shall be utilized. The sign-in log sheet shall include at a minimum the person's name, the company name, the time of arrival, and the time of departure. All personnel are required to sign in at the Linam Ranch Plant Office and Control Room.

B. The Incident Commander shall be responsible to assure that all personnel sign-in upon arrival and sign-out upon departure from the job site.

C. The Incident Commander may at his discretion assign the responsibilities for the daily sign-in log sheet to the individual designated as the Record Keeper or another designee.

D. At the discretion of the Incident Commander, a security coordinator and/or a security team may be established, and the access to the job site restricted.

E. Road blocks will occur as outlined in the Response Level detail for Plant, road crossing, pipeline, or AGI wellsite releases.

7. SIGNS & MARKERS

The Plant, AGI wellsite, 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 wellsite, at road crossings, and along the pipeline right of way. Emergency response phone numbers are posted at the entrance to the Plant and AGI wellsite. AGI pipeline markers also include emergency [illegible] numbers.

Signs are located at the Plant and AGI wellsite gate entrances indicating that [illegible] at the Plant office.

8. FIRST-AID STATION

The first aid station will be located at the Emergency Assembly Area.

FIRST AID KITS are located:

- Plant Superintendent Office Building,
- Maintenance/Safety Office Building, and
- Each company vehicle
- Plant Supervisors office
- Linam Ranch Plant Control Room
- Emergency trailers

9. MEDIA SITE

A. If a Level 3 Response occurs, the Media Site will be located adjacent to Emergency Assembly Area 2. It the release is at the AGI Wellsite the Media Site will be at the Emergency Assembly Area 1. The Incident Commander will designate the Media Site adjacent to the Emergency Assembly Area.

B. If a Level 4 Response occurs, the Media Site will be located adjacent to Emergency Assembly Area 3. The Incident Commander will designate a media Site adjacent to the Emergency Assembly Area.

C. The Incident Commander will designate a Media Liaison Officer or assume these duties personally.

D. 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 Incident Commander has approved their entry.

E. Media personnel shall not be allowed to enter DCP Midstream property without the approval of the DCP Midstream Asset Manager or his designee, and shall be escorted by DCP Midstream personnel at all times.

10. EMERGENCY AND SAFETY EQUIPMENT

Refer to **Appendix E** for information pertaining to the Plant's emergency and Safety equipment.

V. TRAINING AND DRILLS

A. TRAINING

Training on the H2S Contingency Plan will be focused on three groups:

1. **DCP Personnel** - Training for DCP personnel shall include the Linam Ranch (Plant personnel) 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 Plan. In addition, all Plant personnel will receive:
   - 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.
   - Hydrogen Sulfide and Sulfur Dioxide Training - All Plant personnel receive annual refresher training on hydrogen sulfide and sulfur dioxide, 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 hydrogen sulfide 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 personal protective equipment (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.

2. **Emergency Response Agencies**
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

All of these entities will have copies of the H_2S Contingency Plan

This 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.

DCP Midstream will also conduct, at a minimum, one annual tabletop drill involving the Emergency Response Organizations listed above on the activation of the Linam Ranch Plant H_2S Contingency Plan.

3. **Business, Public Receptors, and Producers** located within the radii of exposure

DCP Midstream will provide annual training to the businesses, public receptors and producers listed in Appendix G. 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 H2S alarms and significance
- Notification procedures
- Roadblock locations
- Potential evacuation routes,
- Procedures for sheltering in place
- Radii of exposure

B. EMERGENCY RESPONSE DRILLS

1. The Plant will conduct, at least, a tabletop drill annually. Multiple drills during the year may be scheduled at the discretion of the Plant Supervisor.

2. The annual drill will execute this Plan and include, at a minimum, the Local Emergency Response Agencies listed in Section A above and contacting the entities that are identified as being within the 500 ppm and 100-ppm ROE to make sure contact information is current on **Appendix G.** The drills will also include briefing of public officials on issues such as evacuation or shelter-in-place plans.

3. Drill training will be documented and those records will be maintained at the Plant. The documentation shall include at a minimum the following:

   a. Description or scope of the drill, including date and time
   b. Attendees and Participant to the drill
   c. Summary of activities and responses
   d. Post-drill debriefing and reviews

APPENDIX A
WORST CASE SCENARIO

The basis for Linam Ranch Plant worst case calculations is 5700 parts per million (ppm) or 0.57 mole percent of hydrogen sulfide in the inlet gas to the Linam Gas Plant and a maximum daily (24 hour) processing volume of 225,000 Mscf. The ROE assumes an uncontrolled instantaneous release from the area near the amine contact towers of the referenced volume and concentration. Calculations using the ROE formula pursuant to NMAC 19.15.1 1 are provided in **Appendix** B.

It should be noted that this rate, though used as worst case, would unlikely be released due to the Plant emergency shut down (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 shut down valves as follows:

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

The secondary, "outside-of-the ROE" valve locations are shown with roads on Figure 2 in Appendix C. 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.

The basis for AGI pipeline and wellsite for worst case calculations is 28.06 mole percent of hydrogen sulfide in the acid gas from the Linam Gas Plant and a maximum daily (24 hour) volume of 4,600 Mscf. The ROE assumes an uncontrolled instantaneous release from the wellsite or pipeline of the referenced volume and concentration. Calculations using the ROE formula pursuant to NMAC 19.15.11 are provided in **Appendix** B.

It should be noted that this rate, though used as worst case, would unlikely be released due to:

1. The AGI process shut down (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.

2. The Plant emergency shut down (ESD) systems, that when activated shuts down the Plant and closes ESD valves on the inlet pipelines preventing all gas from entering the Plant.

APPENDIX B
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

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

Where:
X = Radius of exposure in feet
Hydrogen Sulfide Conc = Decimal equivalent of mole or volume fraction of hydrogen sulfide 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

a) 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 the Company is using for contingency planning purposes an "escape rate" equal to the 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 hydrogen sulfide concentration of the inlet gas, daily monitoring data indicates variable concentrations with an average for 2009 of 4700 ppm, however 5700 ppm (0.57 mole percent) is a worst case scenario. Thus, the Plant has used a hydrogen sulfide concentration of 5700 ppm for its contingency planning purposes.
Using:
Q = 225,000,000
H_2S conc = 5700 ppm or 0.57 mole%

$$[(0.4546)*(H_2S \text{ concentration})*(\text{gas volume } (Q))]\ 0.6258$$
$$[(0.4546)*(5700*.000001)*(225,000,000)]\ 0.6258$$

500-ppm ROE = 4,057 feet

100-ppm RADIUS OF EXPOSURE CALCULATION

[(1.589)*(H_2S concentration)*(gas volume (Q))] 0.6258
[(1.589)*(5700*.000001)*(225,000,000)] 0.6258

100-ppm ROE = 8,877 feet

AGI PIPELINE AND WELLSITE

a) 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 AGI pipeline and wellsite, the Company is using for contingency planning purposes an "escape rate" equal to the acid gas volume of 4,600 MCFD. The volume of 4,600 MCFD of acid 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 hydrogen sulfide concentration of the inlet gas, daily monitoring data indicates variable concentrations with an average for 2009 of 23.39 mole percent; however 28.06 mole percent is a worst case scenario. Thus, the Plant has used a hydrogen sulfide concentration of 28.06 mole percent for its contingency planning purposes.
Using:
Q = 4,600,000
H_2S conc = 28.06 mole%

[(0.4546)*(H_2S concentration)*(gas volume (Q))] 0.6258
[(0.4546)*(0.2806)*(4,600,000)] 0.6258

500-ppm ROE = 4,073 feet

100-ppm RADIUS OF EXPOSURE CALCULATION

[(1.589)*(H_2S concentration)*(gas volume (Q))] 0.6258
[(1.589)*(0.2806)*(4,600,000)] 0.6258

100-ppm ROE = 8,914 feet

APPENDIX C
100-PPM AND 500-PPM
RADIUS OF EXPOSURE MAP

Linam Ranch Gas Plant
H2S Contingency Plan
Radius of Exposure

500ppm-ROE

100ppm-ROE

Well Site Assembly Area

AGI Well Site

ROE of AGI Pipeline

Assembly Area 2

Assembly Area 3

Assembly Area 1

500ppm-ROE

100ppm-ROE

Lea Power Hobbs Station

Xcel Maddox Station

DCP Hobbs Plant

Maddox Rd.

Lea Power Hobbs Station

Eunice Transportation

Linam Ranch

State Hwy 483

State Hwy 8

62

LEA

T 18 S
R 36 E

T 18 S
R 37 E

T 19 S
R 36 E

T 19 S
R 37 E

21 22 23 24 19 20 21
28 27 26 25 30 29 28
33 34 35 36 31 32 33
4 3 2 1 6 5 4
9 10 11 12 7 8 9

0 0.5 1 2 Miles

N
W E
S

ROE
Public Receptors
H2S Monitors
AGI Pipeline
AGI Well Site
Assembly Areas
Road Blocks
DCP Plants

dcp Midstream

AGI Well Site
H2S Contingency Plan
Radius of Exposure

N
W E
S

Smith Ranch House

100ppm-ROE

500ppm-ROE

Lea Power Hobbs Station

T 18 S
R 36 E

T 18 S
R 37 E

Well Site Assembly Area

AGI Well Site

Xcel Maddox Station

ROE of AGI Pipeline

DCP Hobbs Plant

Maddox Rd.

Assembly Area 2

Assembly Area 3

Dorado Transportation

Linam Ranch

Assembly Area 1

T 19 S
R 36 E

T 19 S
R 37 E

State Hwy 8

State Hwy 483

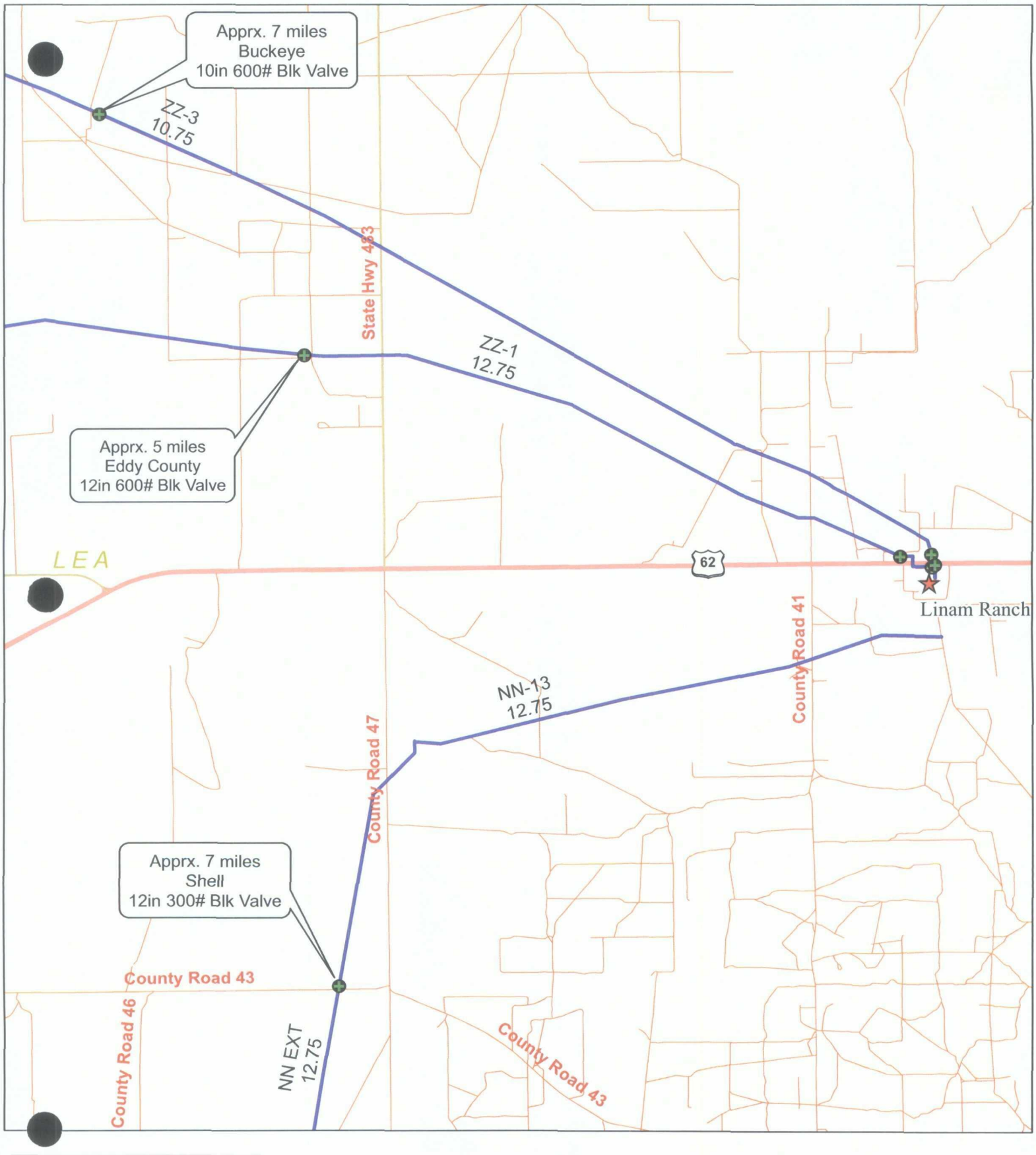
62

0 0.5 1 2 Miles

ROE
AGI Well Site
Assembly Areas
Road Blocks
H2S CautionSignals
Public Receptors
AGI Pipeline
DCP Plants

dcp Midstream

Figure 2



Block Valves

DCP Midstream Gas Plant

DCP Midstream Pipelines

0 0.5 1 2 Miles

dcp Midstream

APPENDIX D
PLANT DIAGRAM WITH EVACUATION ROUTES & EMERGENCY EQUIPMENT LOCATIONS

APPENDIX E
DESCRIPTION OF H_2S MONITORING & ALARM SYSTEMS

AGI PIPELINE

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

1. 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 wellsite (end of pipeline) by more than the setpoint (10%), the pipeline inlet ESD valve will be closed and the acid gas stream will be diverted to the plant acid gas flare.
2. Pipeline Low Pressure alarm. The pipeline normal operating pressure is projected to be 80 psig. Should the flowing pressure decrease below the setpoint (50 psig), a low pressure shut down 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 wellsite 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 shutdown on a high discharge pressure signal.

A. EMERGENCY SHUT DOWN SYSTEMS

LINAM RANCH PLANT

There are 17 Emergency Shut Down (ESD) manual stations located at various points in the facility (Appendix D). These Plant ESD stations also activate the AGI Process Shut Down (PSD).

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 a catastrophic release has occurred.

When any of the 17 manual stations are activated, the Plant equipment will be shut down, 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 AGI well wing valve will be automatically closed. The AGI wellsite equipment will be automatically depressurized to the wellsite acid gas flare.

Activating the ESD system should allow the Plant to avoid a Level 3 or Level 4 response.

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 on Figure 2 in Appendix C. These block valves furthest upstream isolate the entire system from the field gathering lines coming into the Plant.

AGI WELLSITE

There are 5 AGI Process Shut Down (PSD) stations located at various points in the AGI wellsite **(Appendix D).**

The AGI Process Shut Down 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 wellsite and efforts to resolve the issue for 15 minutes have failed. The AGI Process shut down is automatically activated if the perimeter monitors reach 10 ppm H2S.

The AGI wellsite interior monitors do not automatically activate an AGI Process Shut Down.

The AGI Process Shut Down system shuts down the AGI compressors and equipment, closes the pipeline and injection well isolation valves, the subsurface safety valve, and depressurizes the wellsite equipment and piping to the wellsite flare. (There are also 3 AGI Process Shut Down stations located within the Linam Ranch Plant)

B. PLANT ALARMS, VISIBLE BEACONS & WIND INDICATORS

LINAM RANCH PLANT

1. Colored beacons, horns, and wind direction indicators are located in various locations throughout the Plant and are indicated on **Appendix D.**

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. At the initial sound of this intermittent alarm, the responding Plant operator will put on a SCBA and all other personnel in the Plant complex shall immediately proceed in a safe manner to the Emergency Assembly Areas as prescribed by the Emergency Action Plan on page 14 of this Plan.

3. A flashing yellow beacon signifies an H_2S release of 10 ppm and all personnel in the Plant complex shall immediately proceed in a safe manner to the Emergency Assembly Area 1 located north of the main office. If this area is not determined to be safe all personnel will move to Assembly Area 2 which is at the Hobbs Plant, located approximately 1.5 miles northwest of Linam Ranch Plant off Maddox Road. Evacuation routes and Assembly Area 1 are indicated on **Appendix D.**

4. 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 WELLSITE

1. Colored beacons, horns, and wind direction indicators are located in various locations throughout the AGI wellsite and are indicated on **Appendix D.**

2. The audible signal for an emergency response and wellsite 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. At the initial sound of this intermittent alarm, the operator will put on a SCBA and all other personnel in the wellsite shall immediately proceed in a safe manner to the Emergency Assembly Areas as prescribed by the Emergency Action Plan on page 23 of this Plan.

3. A flashing yellow beacon signifies an H_2S release of 10 ppm and all personnel in the Plant complex shall immediately proceed in a safe manner to the Wellsite Emergency Assembly Area located west of the main gate. If this area is not determined to be safe, all will move to Assembly Area 1 which is at the Linam Ranch Plant.

4. Wind direction indicators are installed throughout the wellsite. At least one wind direction indicator can be seen at any location within the wellsite, as well as, from any point on the perimeter of the wellsite.

GAS DETECTION EQUIPMENT

1. The Plant and AGI wellsite areas utilize Det-tronics Remote H_2S Sensors. These sensors are a fixed point monitor to detect the presence of hydrogen sulfide in ambient air. The sensors are connected to Det-tronics alarm panel PLC's, 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 wellsite horns are activated with an intermittent alarm at 10 ppm and a continuous alarm at 20 ppm.

2. The fixed hydrogen sulfide monitors are strategically located throughout the Plant and AGI wellsite to detect an uncontrolled released of hydrogen sulfide. The Plant operators are able to monitor the ppm level of **H_2S** of all the Plant and AGI wellsite 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 wellsite motor control center buildings. These sensors are all located on the plot plans on **Appendix D.** 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.

3. Hand held 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 4 handheld monitors in the control room that are used by individuals for special projects and maintenance work. All personnel working in Linam Ranch Plant and the AGI wellsite wear personal H_2S monitors. The hand held gas detectors have sensors for oxygen, LEL (explosive hydrocarbon atmospheres), hydrogen sulfide, and carbon dioxide. The personal monitors are set to alarm and vibrate at 10 ppm.

D. RESPIRATORS

1. The Plant and AGI Wellsite have 30 minute Self-Contained Breathing Apparatus (SCBA) respirators and cascade hose reel systems strategically located throughout the Plant and Wellsite.

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 work loads or 3 hours at medium/heavy work loads. 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.

2. The respirator containers and equipment are identified in the process area and the locations are shown on **Appendix** D.

3. All Plant personnel are trained and fit tested annually to use the SCBA respirators.

E. PROCESS PURGE SYSTEM

All vessels, pumps, compression equipment, and piping in the acid gas injection process is 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 wellsite. 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.

F. FIRE FIGHTING EQUIPMENT

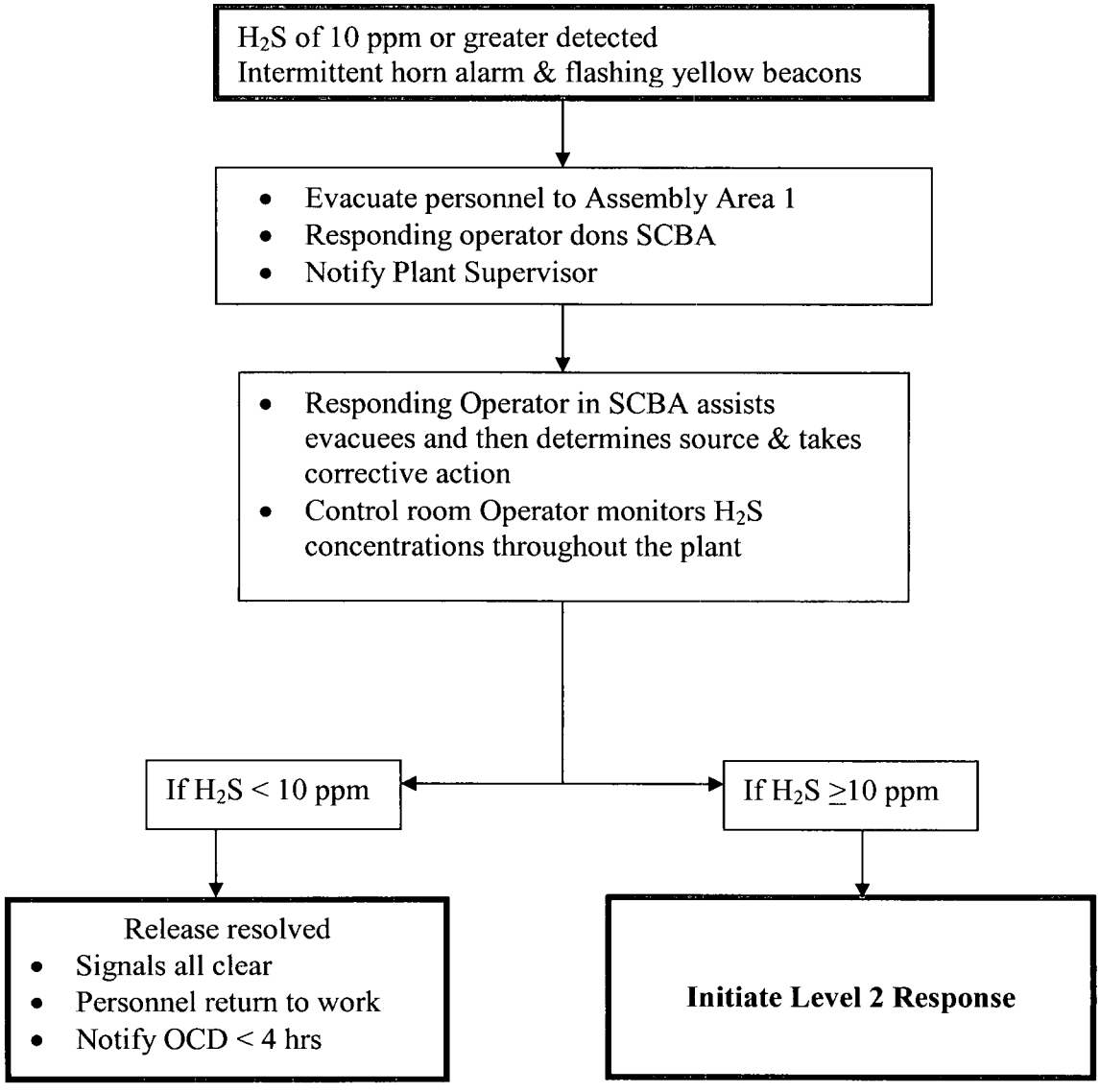
1. The Plant personnel are trained only for insipient stage fire fighting.

2. 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. **See Appendix** D.

3. The Plant does have a fire water system, utilized primarily at fixed monitors for equipment protection.

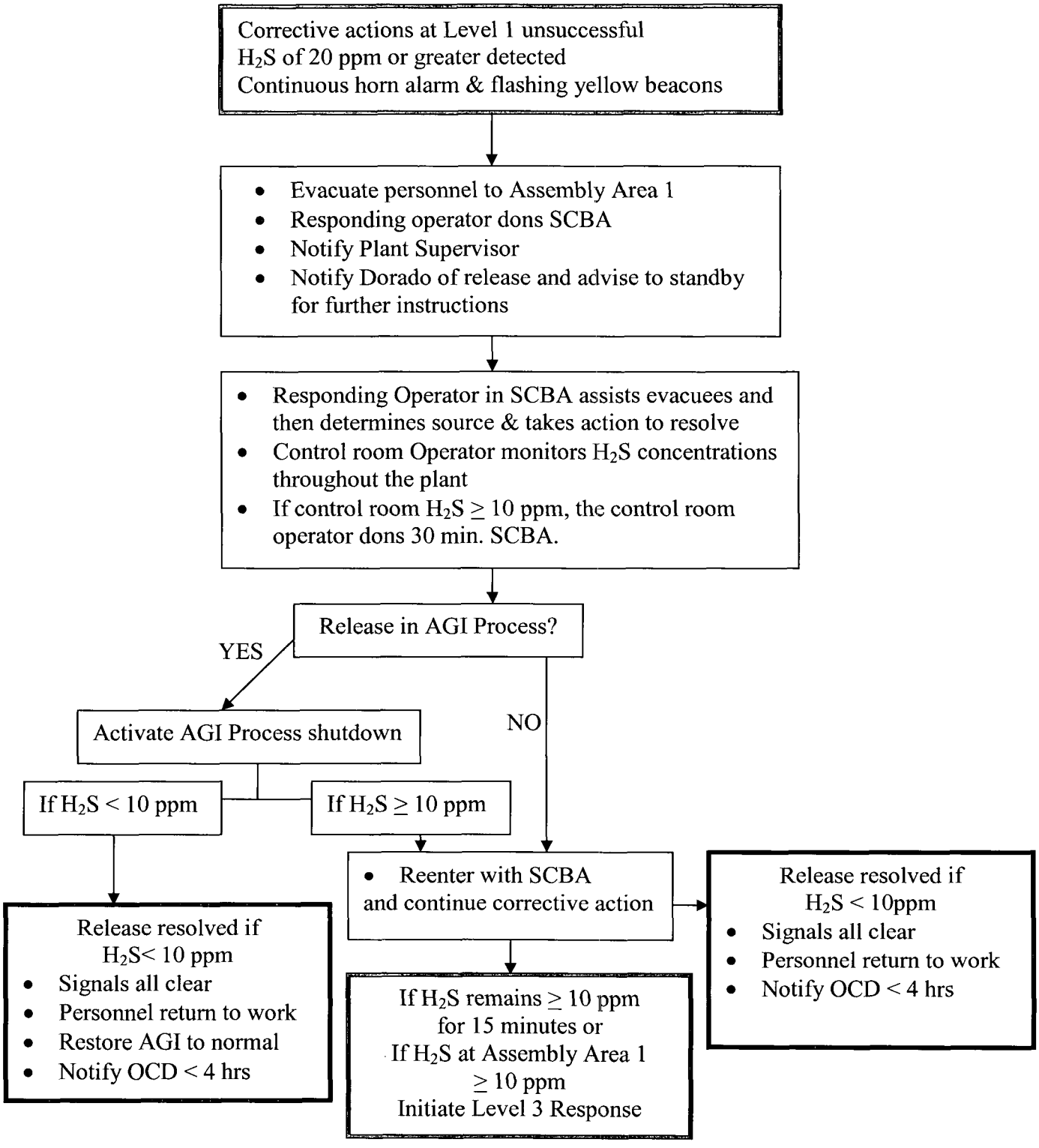
APPENDIX F
H_2S CONTINGENCY PLAN FLOW DIAGRAMS

LINAM RANCH PLANT RELEASE
LEVEL 1 RESPONSE



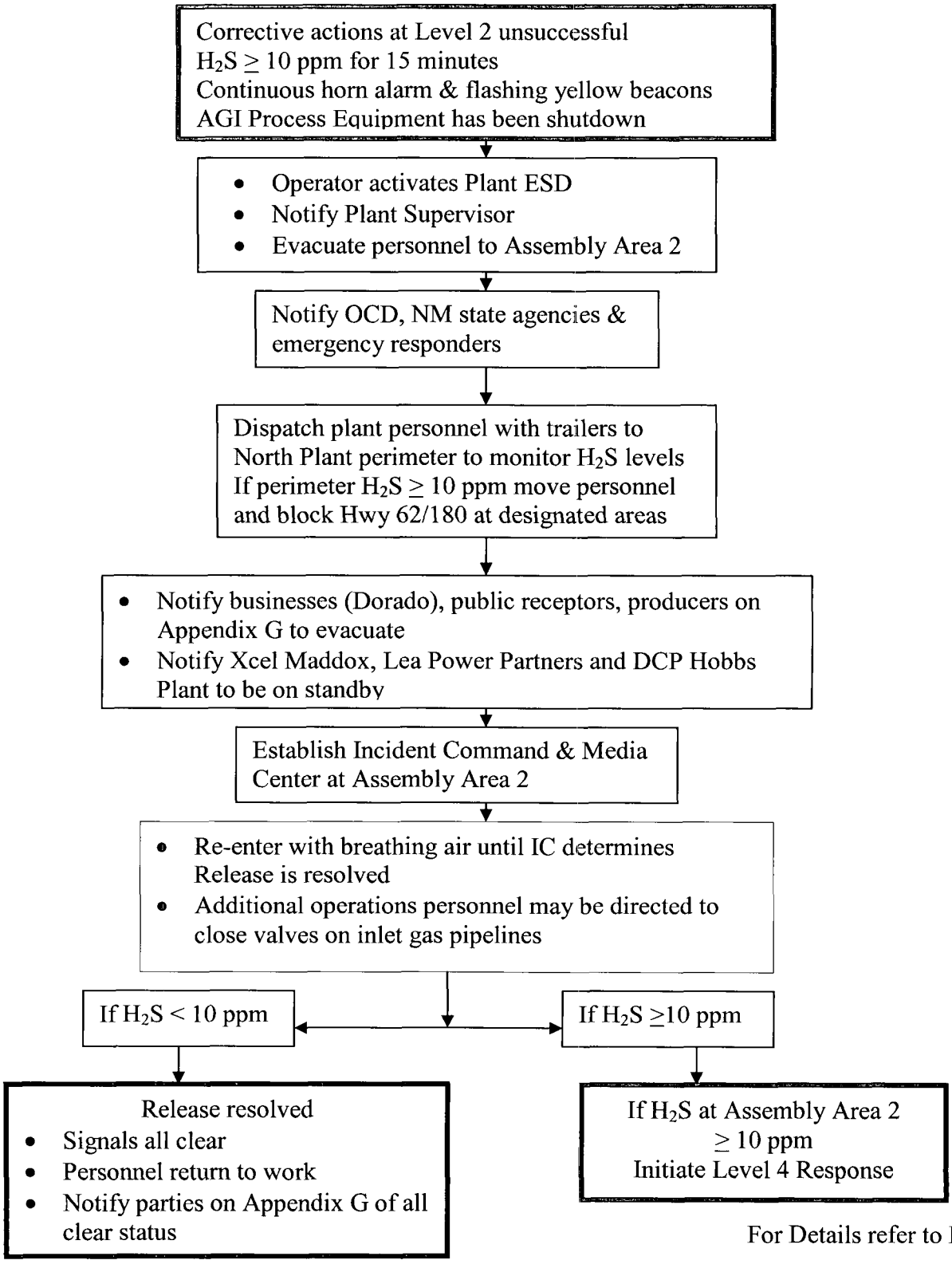
For Details refer to Page 14

LINAM RANCH PLANT RELEASE
LEVEL 2 RESPONSE



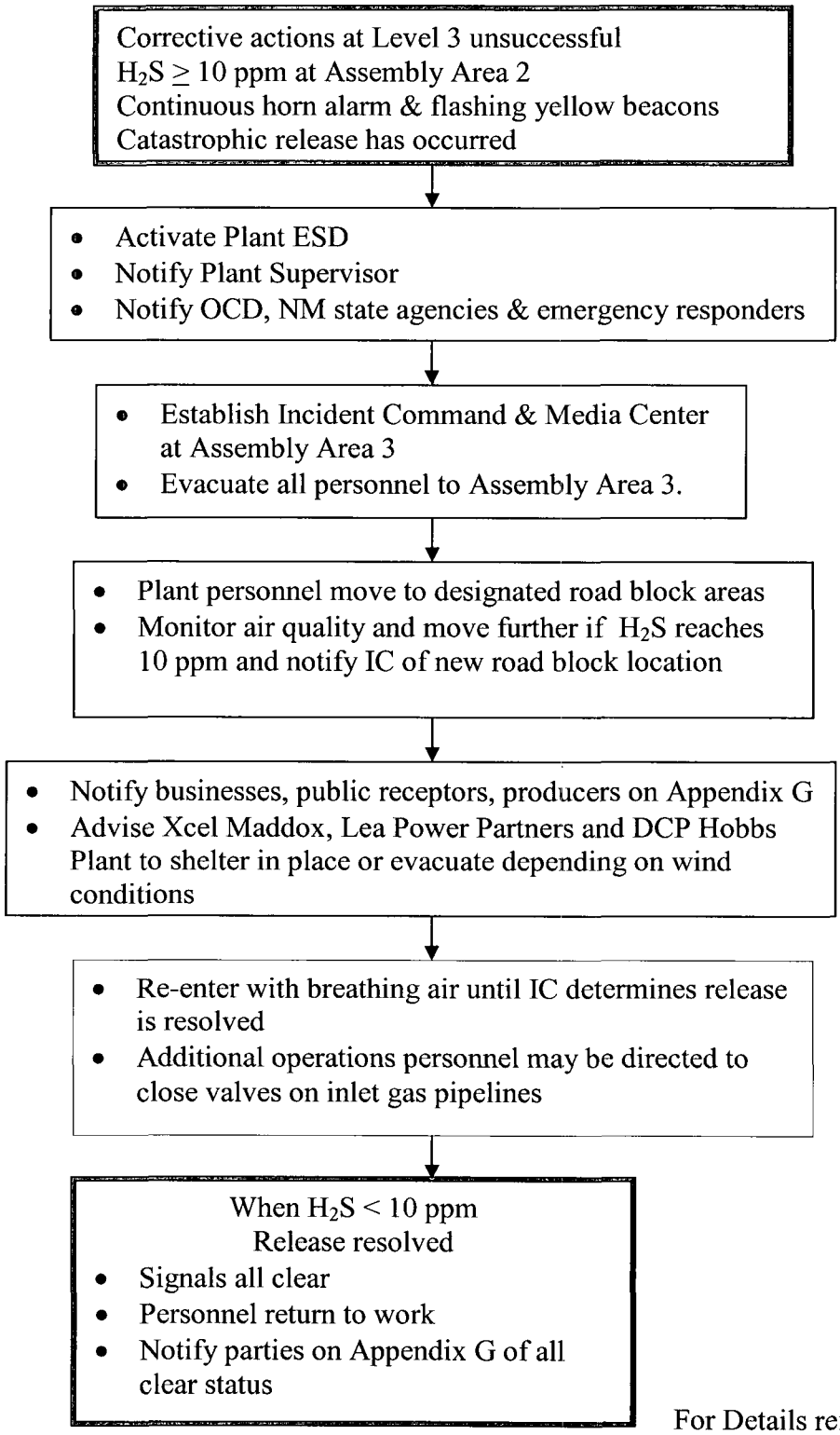
For Details refer to Page 15

LINAM RANCH PLANT RELEASE
LEVEL 3 RESPONSE



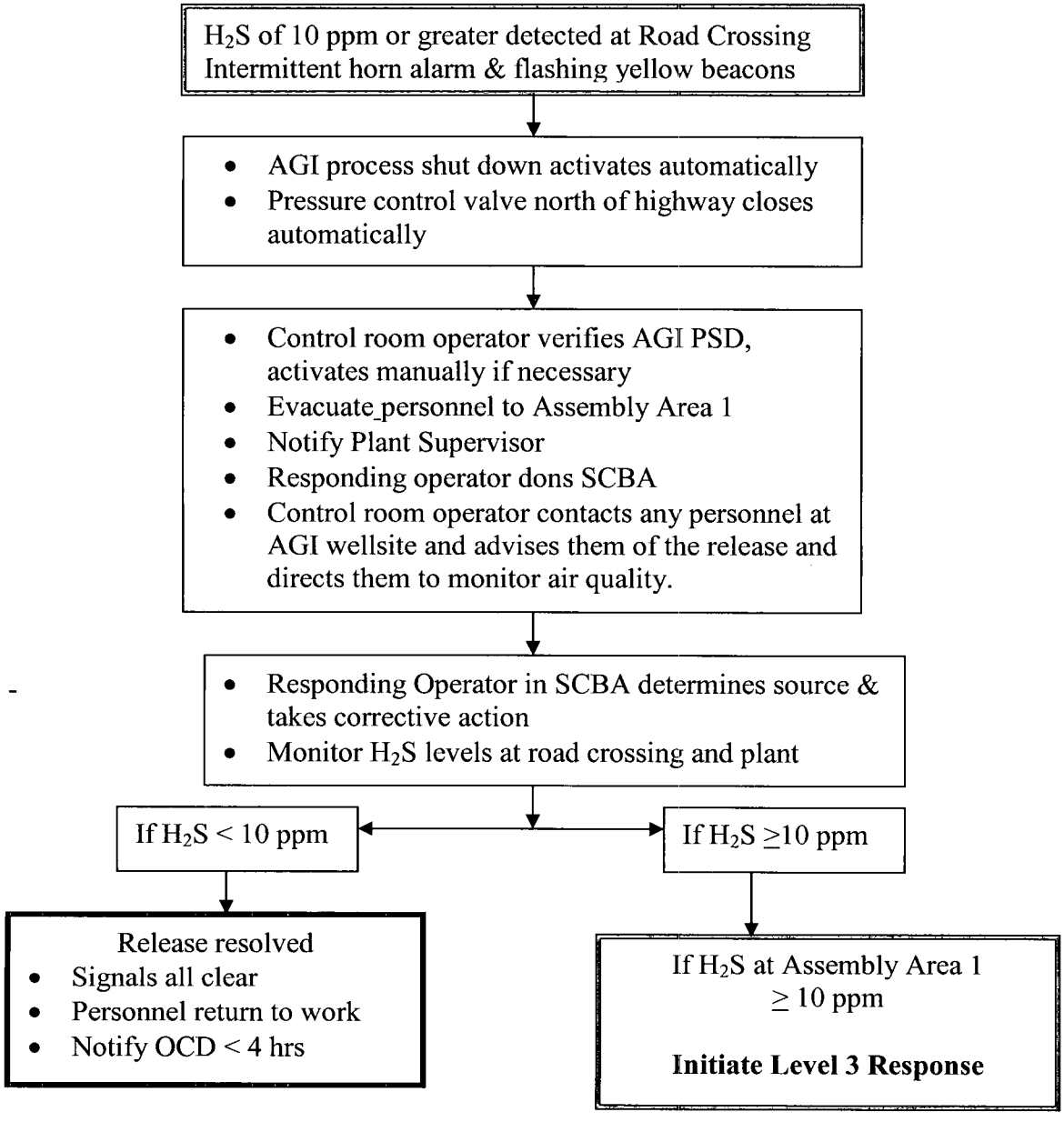
For Details refer to Page 16

LINAM RANCH PLANT RELEASE
LEVEL 4 RESPONSE



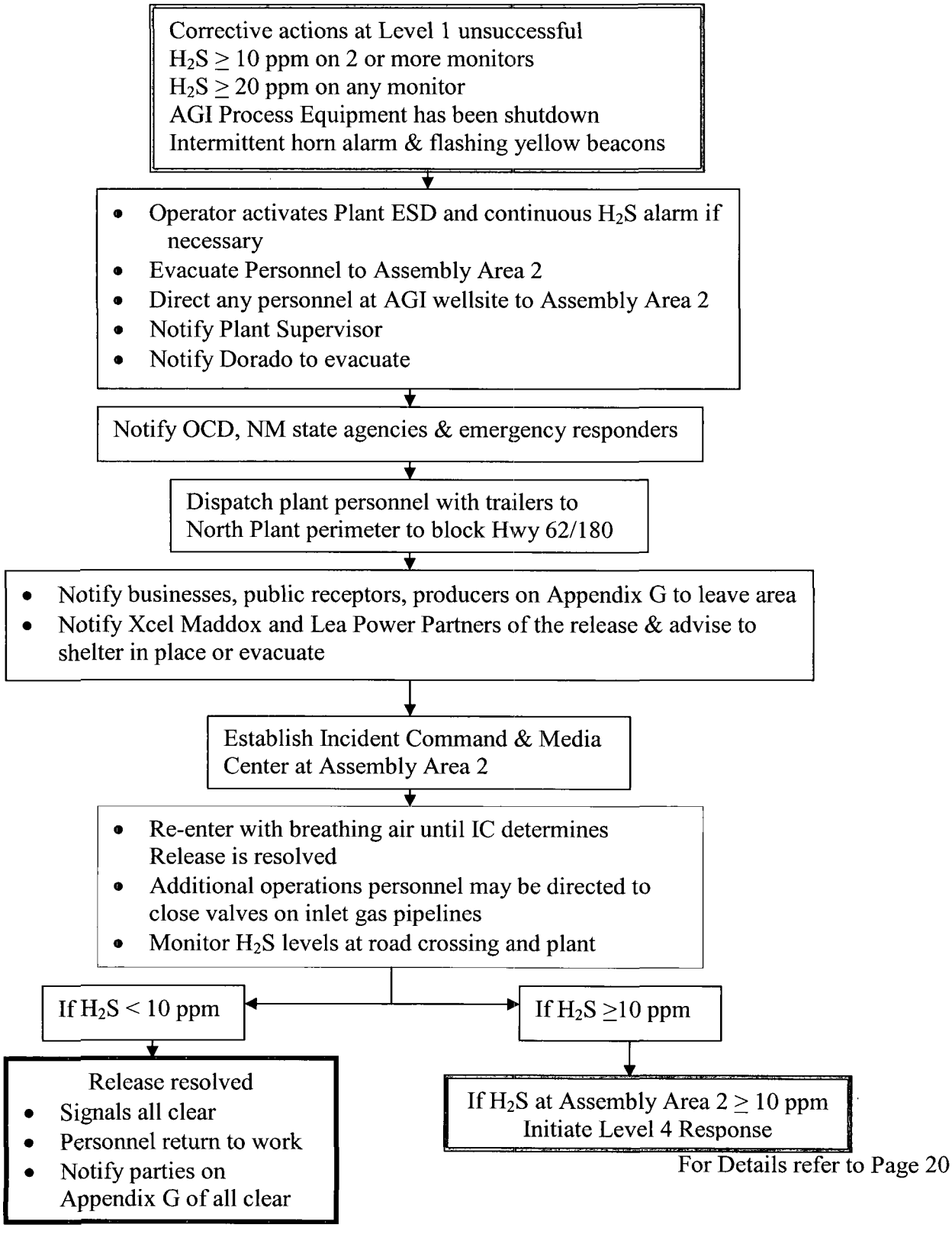
For Details refer to Page 17

ROAD CROSSING RELEASE
LEVEL 1 RESPONSE



For Details refer to Page 19

ROAD CROSSING RELEASE
LEVEL 3 RESPONSE
Note: There is no LEVEL 2 Response for Road Crossing Release



For Details refer to Page 20

ROAD CROSSING RELEASE
LEVEL 4 RESPONSE

Correction actions at Level 3 are unsuccessful
$H_2S \geq 10$ ppm at Assembly Area 2
Continuous horn alarm & flashing yellow beacons
Catastrophic release has occurred

↓

- Activate Plant ESD
- Notify Plant Supervisor
- Notify OCD, NM state agencies & emergency responders

↓

- Establish Incident Command & Media Center at Assembly Area 3
- Evacuate all personnel to Assembly Area 3.

↓

- Plant personnel move to designated road block areas
- Monitor air quality and move further if H_2S reaches 10 ppm and notify IC of new road block location

↓

- Notify businesses, public receptors, producers on Appendix G to evacuate
- Advise Xcel Maddox Station, Lea Power Partners and DCP Hobbs Plant to evacuate to the west.

↓

- Re-enter with breathing air until IC determines release is resolved
- Additional operations personnel may be directed to close valves on inlet gas pipelines

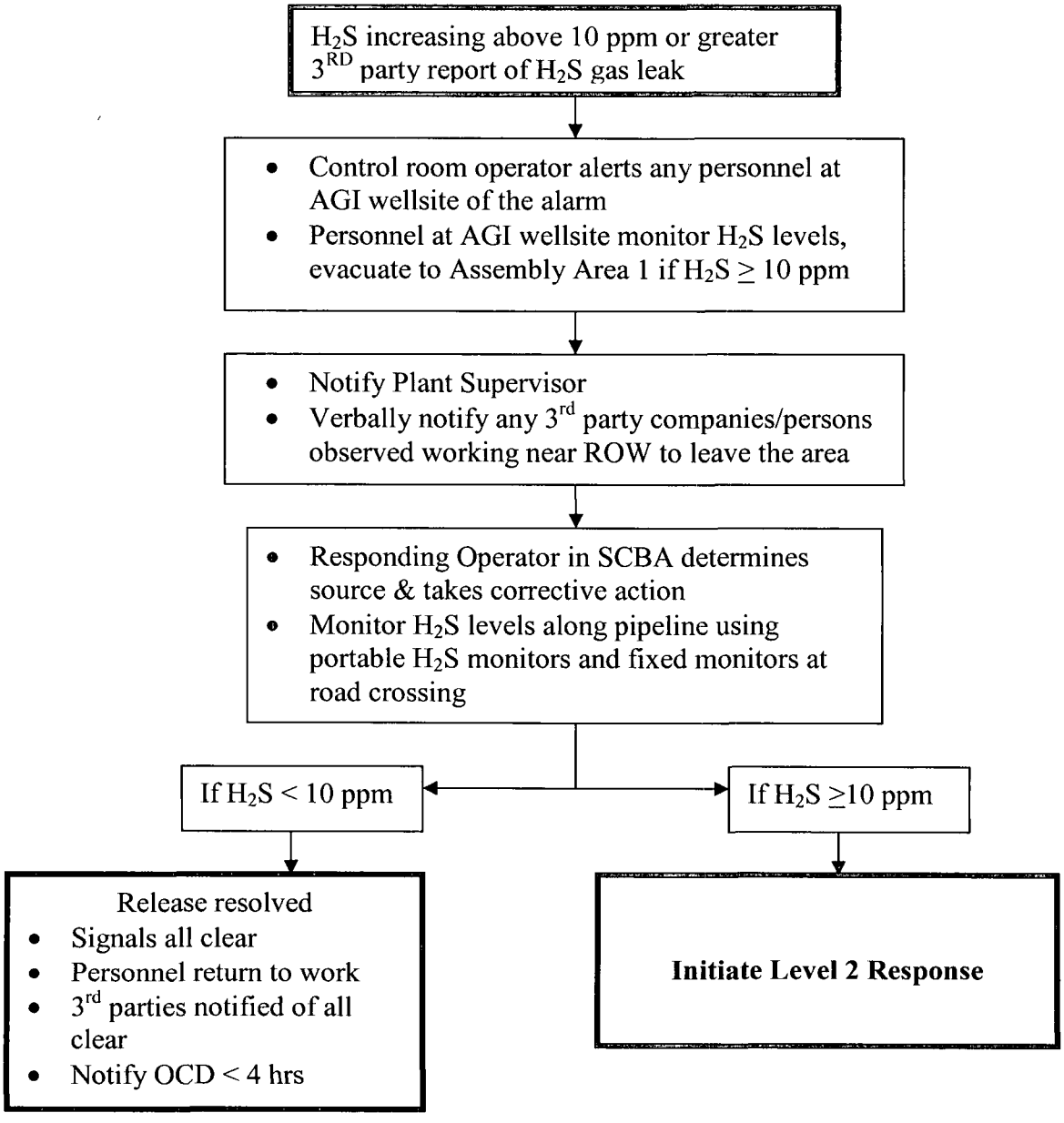
↓

When $H_2S < 10$ ppm at Plant, Road Crossing, Road blocks & Assembly Areas - Release resolved

- Signals all clear
- Personnel return to work
- Notify parties on Appendix G of all clear

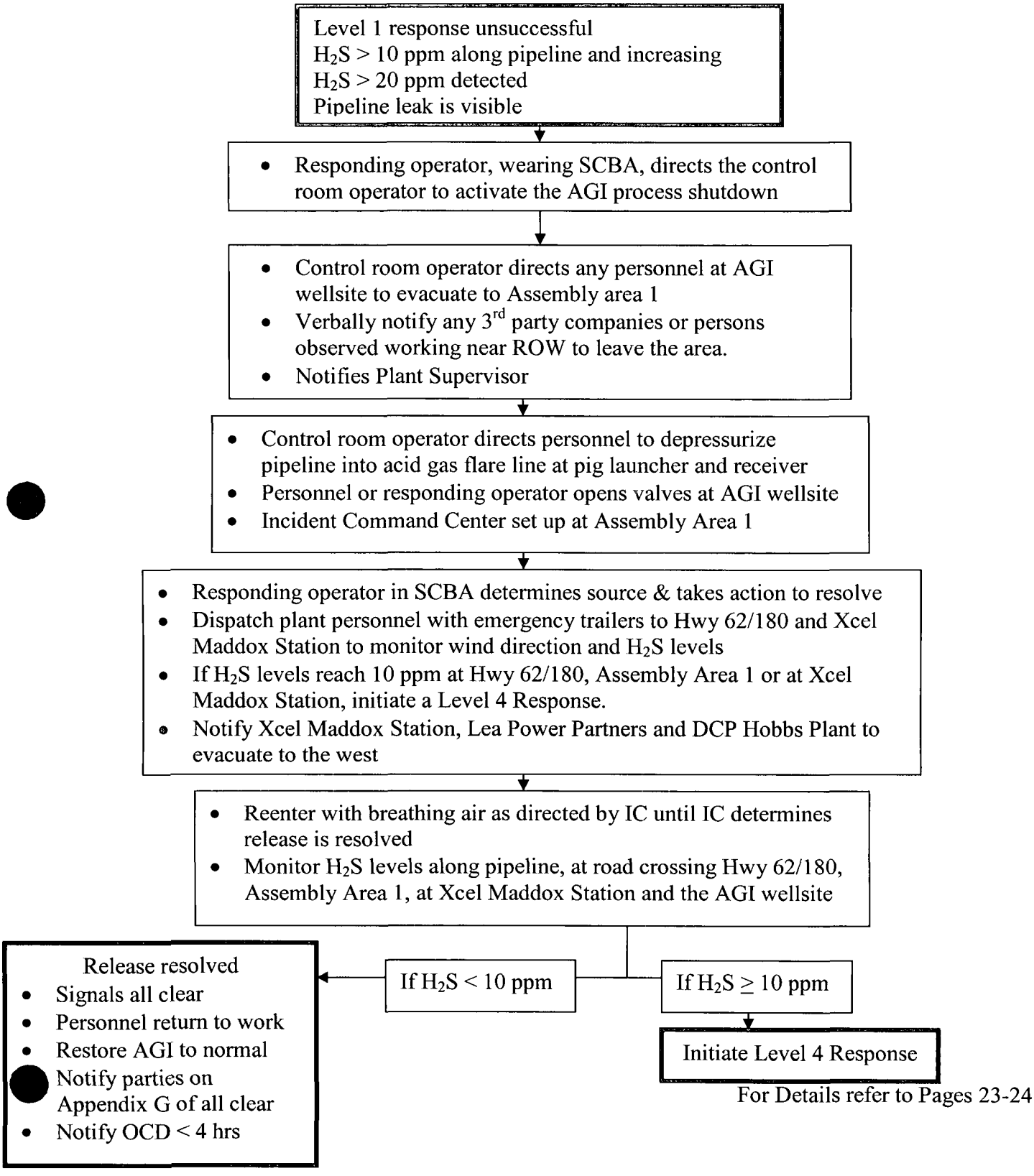
For Details refer to Page 21

AGI PIPELINE RELEASE
LEVEL 1 RESPONSE



For Details refer to Page 23

AGI PIPELINE RELEASE
LEVEL 2 RESPONSE



For Details refer to Pages 23-24

AGI PIPELINE RELEASE
LEVEL 4 RESPONSE

Note: There is no Level 3 Release for the AGI Pipeline

- Corrective action at Level 2 is unsuccessful
- $H_2S \geq 10$ ppm at Xcel Maddox Station, Hwy 62/180, at Assembly Area 1, or any public area or road
- Catastrophic release occurs

- Activate Plant ESD
- Verbally notify any 3rd party companies or persons observed working near ROW to leave the area.
- Notify Plant Supervisor
- Notify OCD, NM state agencies & emergency responders

- Establish Incident Command & Media Center at Assembly Area 3
- Evacuate all personnel to Assembly Area 3.

- Dispatch emergency trailers designated road block areas on Hwy 62/180
- Monitor air quality and move further if H_2S reaches 10 ppm and notify IC of new road block location

- Notify businesses, public receptors, producers on Appendix G to evacuate
- Advise Xcel Maddox Station, Lea Power Partners and DCP Hobbs Plant to evacuate to the west

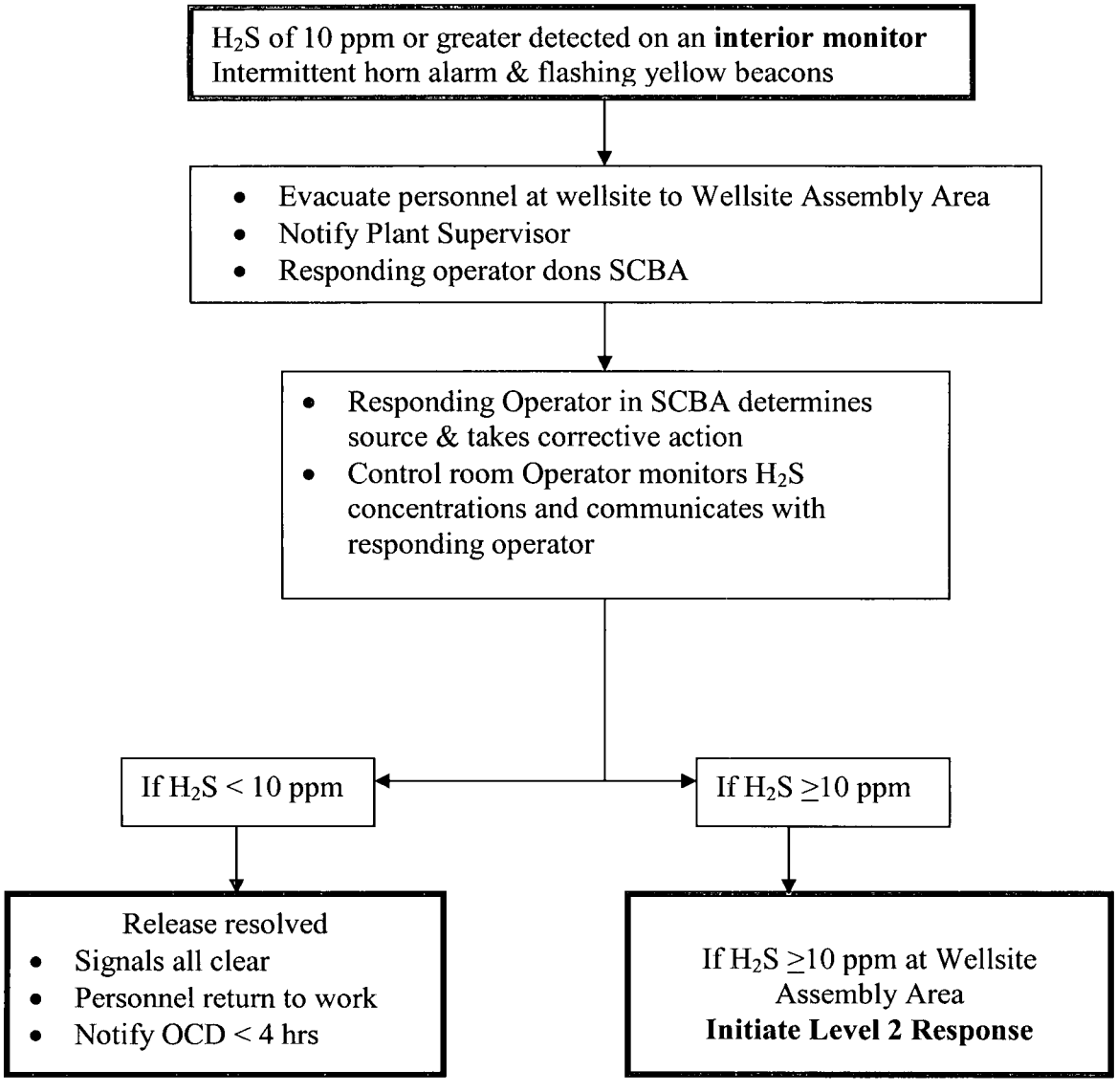
- Re-enter with breathing air until IC determines release is resolved
- Additional operations personnel may be directed to close valves on inlet gas pipelines
- Monitor H_2S levels in Linam Ranch Plant, Hwy 62/180 road crossing, AGI wellsite and along the pipeline

When $H_2S < 10$ ppm -Release resolved

- Signals all clear
- Personnel return to work
- Notify parties on Appendix G of all clear

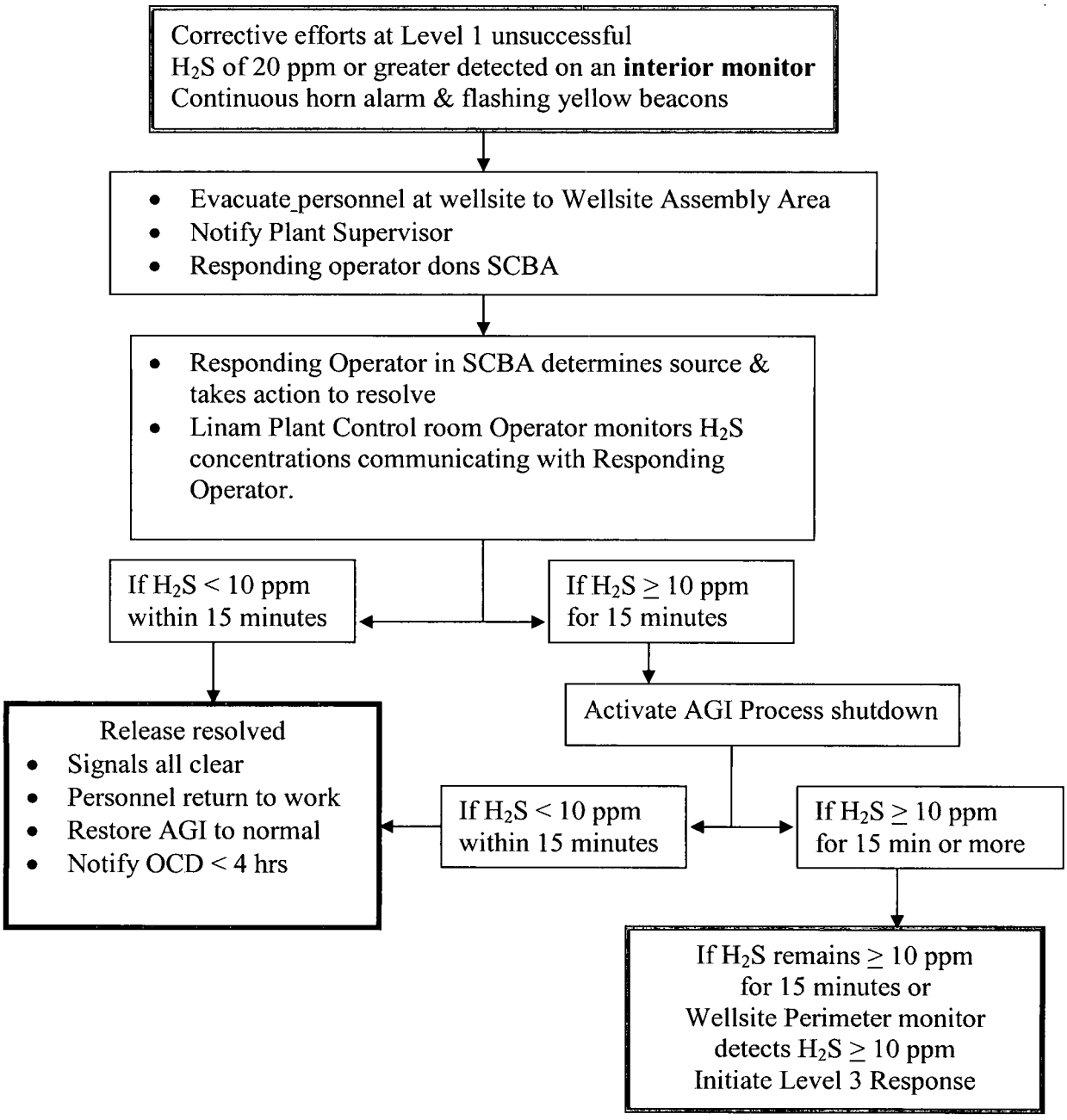
For Details refer to Pages 25-26

AGI WELLSITE RELEASE
LEVEL 1 RESPONSE



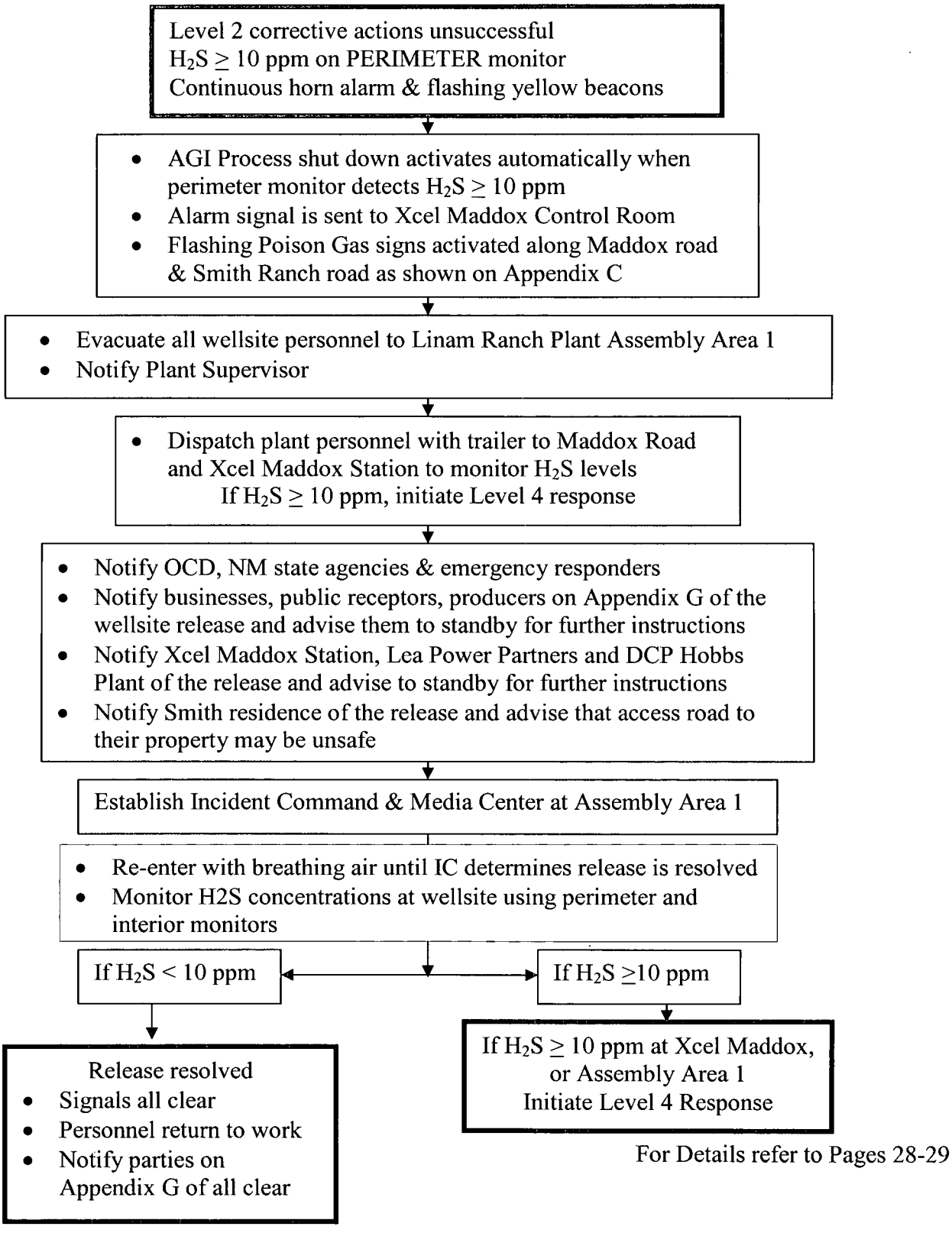
For Details refer to Page 27

AGI WELLSITE RELEASE
LEVEL 2 RESPONSE



For Details refer to Pages 27-28

AGI WELLSITE RELEASE
LEVEL 3 RESPONSE



For Details refer to Pages 28-29

AGI WELLSITE RELEASE
LEVEL 4 RESPONSE

Level 3 corrective actions are unsuccessful
$H_2S \geq 10$ ppm at Assembly Area 1
$H_2S \geq 10$ ppm at Xcel Maddox Station
$H_2S \geq 10$ ppm at Hwy 62/180
Catastrophic release has occurred

- Activate Plant ESD
- Notify Plant Supervisor
- Notify OCD, NM state agencies & emergency responders

- Establish Incident Command & Media Center at Assembly Area 3
- Evacuate all personnel to Assembly Area 3.

- Plant personnel with emergency trailers move to designated road block areas
- Monitor air quality and move further if H_2S reaches 10 ppm and notify IC of new road block

- Notify businesses, public receptors, producers on Appendix G to evacuate
- Advise Xcel Maddox Station, Lea Power Plant, DCP Hobbs Plant to evacuate
- Notify Smith residence that the access road to their property is closed and to use an alternate evacuation road

- Re-enter with breathing air until IC determines release is resolved
- Additional operations personnel may be directed to close valves on inlet gas pipelines

When $H_2S < 10$ ppm at all locations – release resolved
- Signals all clear
- Personnel return to work
- Notify parties on Appendix G of all clear

For Details refer to Pages 29-30

APPENDIX G
EMERGENCY CALL LIST
LINAM RANCH AND AGI COMPLEX

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 Blv 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 McInroroe	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

A. DCP COMPANY INTERNAL NOTIFICATIONS

Name	Title	Office No.	Cell No.
	Linam Ranch Plant Operators	575-391-5792 575-391-5793 575-391-5794	575-390-6299
Harvey Hargrove	Linam Ranch Plant Operator III	575-391-5703	575-602-1656
Matt Hendricks	Linam Ranch Plant Supervisor	575-391-5701	575-390-0292
Kelly Jamerson	SENM Asset Manager	575-397-5539	325-226-3357
Lewis Hill	SENM Manager Area Operations	575-234-6405	575-706-1442
Sandy Ballard	SENM Asset Safety Coordinator	575-785-2020	575-390-6064
Charlie Powell	SENM Asset Safety Coordinator	575-234-6403	575-706-2003
Ronnie Trammel	V.P. Operations Western Region	432-620-4066	432-557-6898
Rick Cargile	President Southern Business Unit	713-735-3700	713-416-4003
Ken Duncan	Safety Manager Western Region	432-620-4148	432-664-9324
	DCP Gas Control – Houston,TX	800-435-1679	

B. COUNTY AND LOCAL LAW ENFORCEMENT

AGENCY	PHONE NUMBER
EMERGENCY DISPATCH	911
OIL CONSERVATION DIVISON – DISTRICT 1 LEA CO.	575-393-6161
LEPC	575-605-6561
NEW MEXICO STATE POLICE	575-392-5588
LEA COUNTY SHERIFF'S OFFICE	575-396-3611
STATE EMERGENCY RESPONSE COMMISSION	505-476-9681
NEW MEXICO OFFICE OF EMERGENCY MANAGEMENT	505-476-9600

APPENDIX H
H_2S PLAN DISTRIBUTION LIST

New Mexico Oil & Gas Conservation Division

New Mexico Environment Department

New Mexico Department of Public Safety (Hobbs Office)

New Mexico Department of Public Safety (State Office)

Hobbs Fire Department

Lea County Fire Department

Lea County Sheriff Department

Lea County Emergency Manager

Lea County LEPC

Hobbs Police

Lea County Regional Medical Center

Linam Ranch Plant Office

DCP Hobbs Plant Office

Linam Emergency Trailers

Linam Ranch Plant Supervisor's Office

AGI Wellsite MCC Building

Xcel Maddox Power Plant

Lea Power Partners Hobbs Plant

INCIDENT COMMAND 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

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☐ Final Report

Name of Company	Contact
Address	Telephone No.
Facility Name	Facility Type

Surface Owner	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County

Latitude_____ **Longitude**_____

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? ☐ Yes ☐ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☐ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Describe Area Affected and Cleanup Action Taken.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION	
Printed Name:	Approved by District Supervisor:	
Title:	Approval Date:	Expiration Date:
E-mail Address:	Conditions of Approval:	Attached ☐
Date: Phone:		

* Attach Additional Sheets If Necessary

September 2, 2009

UPS *Tracking Number 1Z F46 915 13 9671 6187*

Mr. Leonard Lowe
Environmental Engineer
New Mexico Oil Conservation Division
New Mexico Energy, Minerals
& Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

Subject: H2S Contingency Plan for DCP Midstream L.P.'s Linam Ranch Gas Plant Acid Gas Injection Well
Lea County, New Mexico

Dear Mr. Lowe:

Per New Mexico Oil Conservation Division (NMOCD) requirement in Order # R- 12546, enclosed is DCP Midstream, LP's ("DCP MIDSTREAM") Hydrogen Sulfide (H_2S) Contingency Plan for the Linam Ranch Acid Gas Injection (AGI) Well, which is located approximately 1.5 miles north of the Linam Ranch Gas Plant in Lea County, New Mexico. This submittal follows the Linam Ranch Discharge Permit (GW-015) Modification request received by your office on 8/28/09 and the additional modification request for below grade tanks associated with the AGI well received by your office on 9/1/09.

We would appreciate the opportunity to meet with you if you have any questions regarding the H_2S Contingency Plan or the modified Discharge Permit request. Our intent is to commence operation, including testing, of the AGI well in mid to late September, and we are available to meet with you in Santa Fe at your convenience.

If you have any questions concerning this submittal, please contact me at 303-605-1713 or 303-619-4995 for assistance. Please send all correspondence regarding this H_2S Contingency Plan to rmlang@dcpmidstream.com or to my attention at DCP Midstream, LP, 370 17th Street, Denver, CO 80202 so I can route it to the appropriate DCP personnel to address your questions or comments.

Sincerely,
DCP Midstream, LP

Ruth M Lang

Ruth M. Lang, P.G.
Manager of the Water Waste Remediation Group

Enclosure

H_2S Contingency Plan

Acid Gas Injection Facility
Linam Ranch Gas Plant

Hobbs, New Mexico

September 2, 2009

H_2S Contingency Plan

TABLE OF CONTENTS

DCP Midstream
Acid Gas Injection Facility
Linam Ranch Gas Plant
Hydrogen Sulfide Contingency Plan

I. INTRODUCTION

DCP Midstream, L.P. conducts its business responsibly by providing employees and any other person working or visiting, a safe work place. The Acid Gas Injection Facility - Linam Ranch Gas Plant Hydrogen Sulfide Contingency Plan was developed to satisfy the Oil and Conservation District Rule 118; and paragraph 7.6 of the guidelines published by the API in its publication entitled "Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide," RP-55.

This plan provides guidelines to assist in responding to and managing an emergency in the event of an H_2S release from a pipeline or facility. The goals of this plan are to provide tools to enable an efficient, coordinated and effective response to emergencies. This plan contains written guidelines to evaluate and respond to an incident, and to prevent or minimize personal injury or loss, to avoid environmental hazards, and to reduce damage to personal property.

II. DEFINITIONS USED IN THIS PLAN

ANSI	The acronym "ANSI" means the American National Standards Institute.
API	The acronym "API" means the American Petroleum Institute.
Area of Exposure (AOE)	The phrase "area of exposure" means the area within a circle constructed with a point of escape at its center and the radius of exposure as its radius.
ASTM	The acronym "ASTM" means the American Society for Testing and Materials.
Dispersion Technique	A "dispersion technique" is a mathematical representation of the physical and chemical transportation characteristics, dilution characteristics and transformation characteristics of hydrogen sulfide gas in the atmosphere.
Escape Rate	The "escape rate" is the maximum volume (Q) that is used to designate the possible rate of escape of a gaseous mixture containing hydrogen sulfide, as set forth herein. (a) For existing gas facilities or operations, the escape rate shall be calculated using the maximum daily rate of the gaseous mixture produced or handled or the best estimate thereof. For an existing gas well, the escape rate shall be calculated using the current daily absolute open flow rate against atmospheric pressure or the best estimate of that rate. (b) For new gas operations or facilities, the escape rate shall be calculated as the maximum anticipated flow rate through the system. For a new gas well, the escape rate shall be calculated using the maximum open flow rate of offset wells in the pool or reservoir, or the pool or reservoir average of maximum open flow rates. (c) For facilities or operations not mentioned, the escape rate shall be calculated using the actual flow of the gaseous mixture through the system or the best estimate thereof.
GPA	The acronym "GPA" means the Gas Processors Association.
LEPC	The acronym "LEPC" means the Local Emergency Planning Committee established pursuant to the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. Section 11001.
NACE	The acronym "NACE" means the National Association of Corrosion Engineers.
PPM	The acronym "ppm" means "parts per million" by volume.
PHV	Potentially Hazardous Volume means the volume of hydrogen sulfide gas of such concentration that: (a) the 100-ppm radius of exposure includes any public area; (b) the 500-ppm radius of exposure includes any public road; or (c) the 100-ppm radius of exposure exceeds 3,000 feet.
Public Area	A "public area" is any building or structure that is not associated with the well, facility or operation for which the radius of exposure is being calculated and that is used as a dwelling, office, place of business, church, school, hospital, or government building, or any portion of a park, city, town, village or designated school bus stop or other similar area where members of the public may reasonably be expected to be present.
Public Road	A "public road" is any federal, state, municipal or county road or highway.
Radius of Exposure	The radius of exposure is that radius constructed with the point of escape as its starting point and its length calculated using the following Pasquill-Gifford derived equation, or by such other method as may be approved by the division: (a) For determining the 100-ppm radius of exposure: $X= [(1.589)(\text{hydrogen sulfide concentration})(Q)]^{(0.6258)}$, where "X" is the radius of exposure in feet, the "hydrogen sulfide concentration" is the decimal equivalent of the mole or volume fraction of hydrogen sulfide in the gaseous mixture, and "Q" is the escape rate expressed in cubic feet per day (corrected for standard conditions of 14.73 psia and 60 degrees F).

(b) For determining the 500-ppm radius of exposure: $X=[(0.4546)(\text{hydrogen sulfide concentration})(Q)]^{(0.6258)}$, where "X" is the radius of exposure in feet, the "hydrogen sulfide concentration" is the decimal equivalent of the mole or volume fraction of hydrogen sulfide in the gaseous mixture, and "Q" is the escape rate expressed in cubic feet per day (corrected for standard conditions of 14.73 psia and 60 degrees F).

Regulatory Threshold

(1) Determination of Hydrogen Sulfide Concentration.

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

(b) The tests used to make the determination referred to in the previous subparagraph shall be conducted in accordance with applicable ASTM or GPA standards or by another method approved by the division.

(c) If a test was conducted prior to the effective date of this section that otherwise meets the requirements of the previous subparagraphs, new testing shall not be required.

(d) If any change or alteration may materially increase the concentration of hydrogen sulfide in a well, facility or operation, a new determination shall be required in accordance with this section.

(2) Concentrations Determined to be Below 100 ppm. If the concentration of hydrogen sulfide in a given well, facility or operation is less than 100 ppm, no further actions shall be required pursuant to this section.

(3) Concentrations Determined to be Above 100 ppm.

(a) If the concentration of hydrogen sulfide in a given well, facility or operation is determined to be 100 ppm or greater, then the person, operator or facility must calculate the radius of exposure and comply with applicable requirements of this section.

(b) If calculation of the radius of exposure reveals that a potentially hazardous volume is present, the results of the determination of the hydrogen sulfide concentration and the calculation of the radius of exposure shall be provided to the division. For a well, facility or operation existing on the effective date of this section, the determination, calculation and submission required herein shall be accomplished within 180 days of the effective date of this section; for any well, facility or operation that commences operations after the effective date of this section, the determination, calculation and submission required herein shall be accomplished before operations begin.

(4) Recalculation. The person, operator or facility shall calculate the radius of exposure if the hydrogen sulfide concentration in a well, facility or operation increases to 100 ppm or greater. The person, operator or facility shall also recalculate the radius of exposure if the actual volume fraction of hydrogen sulfide increases by a factor of twenty-five percent in a well, facility or operation that previously had a hydrogen sulfide concentration of 100 ppm or greater. If calculation or recalculation of the radius of exposure reveals that a potentially hazardous volume is present, the results shall be provided to the division within sixty (60) days.

III. CHARACTERISTICS OF HYDROGEN SULFIDE (H_2S) AND SULFUR DIOXIDE (SO_2)

Hazards of Hydrogen Sulfide

At normal atmospheric conditions, hydrogen sulfide (H_2S) is a colorless gas. It is commonly referred to by other names such as Rotten Egg Gas, Acid Gas, Sour Gas, Sewer Gas, Poison Gas and Sulfur Gas. It has a characteristic "rotten egg" smell at low concentrations. At higher concentrations, it has a sweet odor. At still higher concentrations, an odor cannot be detected at all due to olfactory nerve anesthesia. Odor must *not* be used as means of determining the concentration of H_2S gas! Hydrogen sulfide can form explosive mixtures at concentrations between 4.3% and 46%, by volume. Its auto-ignition temperature is 500 degrees F (260 degrees C). When burning, its flame is practically invisible. It is denser than air (1.19 times heavier than air) and may accumulate in low places. Hydrogen sulfide gas tends to interact with high carbon steel, causing embrittlement and fine fractures in metal components and piping.

H_2S acts as a chemical asphyxiate, preventing the body from utilizing oxygen in the tissue. Breathing may stop after a few seconds of exposure to H_2S gas in concentrations of 600-700 ppm. This produces symptoms such as panting, pallor, cramps, dilation of eye pupils and loss of speech. This is generally followed by immediate loss of consciousness. Death may occur quickly from respiratory paralysis and cardiac arrest. The table below illustrates the physical effects of hydrogen sulfide on a healthy adult.

Table 1 Effect of exposure to Hydrogen Sulfide Gas on a Healthy Adult

Concentration			Physical Effects
percent (%)	ppm	grains per ft^3	
0.001	10	0.65	Obvious and unpleasant odor. Safe for 8 hours exposure.
0.01	100	6.48	Kills smell in 3 to 15 minutes; may sting eyes and throat.
0.02	200	12.96	Kills smell shortly; stings eyes and throat. IDLH
0.05	500	32.96	Dizziness; breathing ceases in a few minutes; artificial respiration / oxygen must be given promptly.
0.07	**700**	45.36	**Unconscious quickly; death will result if not rescued promptly.**
0.10	**1000**	64.80	**Unconscious at once; followed by death within minutes.**

Properties of H_2S

COLOR	Colorless.
ODOR	Very offensive, commonly referred to as the odor of rotten eggs.
VAPOR DENSITY	1.189 (Air=1.0) H_2S is heavier than air.
BOILING POINT	-76 degrees F (-24 degrees C).
EXPLOSIVE LIMITS	4.3 to 46% by volume in air.
IGNITION TEMPERATURE	500 degrees F (260 degrees C).
WATER SOLUBLE	Yes (4 volumes gas in 1 volume water at 32 degrees F (0 degrees C).
FLAMMABILITY CORROSIVE	Forms explosive mixtures with air or oxygen.

Toxicity Table – H_2S

1 ppm = .0001% (1/10,000 of 1%)	Can smell (rotten egg odor).
10 ppm = .001% (1/1000 OF 1%)	Allowable for 8 hours exposure. (PEL & TLV)
100 ppm = .01% (1/100 of 1%)	Kills smell in 3-15 minutes. May burn eyes and throat. Considered to be IDLH atmosphere (Immediately Dangerous to Life and Health).
200 ppm = .03% (2/100 of 1%)	Kills smell rapidly. Burns eyes and throat.
500 ppm = .05% (5/100 of 1%)	Loses sense of reasoning and balance. Respiratory disturbances in 2-15 minutes. Needs prompt artificial resuscitation.
700 ppm = .07% (7/100 of 1%)	Will become unconscious quickly. Breathing will stop and death will result if not rescued promptly. Immediate artificial resuscitation is required.
1000 ppm = .1% (1/10 OF 1%)	Unconscious at once. PERMANENT BRAIN DAMAGE MAY RESULT UNLESS RESCUED PROMPTLY.
	ppm=parts of gas per million parts of air by volume. 1% = 10,000 ppm.

Properties of Sulfur Dioxide SO_2

Sulfur Dioxide - SO_2	**Physical and Chemical Properties**
Chemical Formula	SO_2
Molecular Weight	64
Boiling Point	14 degrees Fahrenheit
Non-Combustible	Produced by burning of H_2S Gas
Vapor Pressure	>1 atm @ 68 degrees Fahrenheit
Melting Point	-104 degrees Fahrenheit
Specific Gravity	Heavier than air, 2.26 degrees gravity
Colorless gas	SO_2 is colorless gas, very irritating to the eyes and lungs
Odor	Pungent odor and can cause injury or death to persons exposed to it
Reactions	Reacts with water or steam to produce toxic and corrosive gases
Sulfur Dioxide - SO_2	**Hazards of Sulfur Dioxide**
Toxicity	The physiological effects on humans when inhalation of SO_2 occurs, varies at different levels of concentration and may be as follows
Concentrations SO_2	Physiological Effects SO_2
0.3-1 ppm	Detection level – pungent odor
2 ppm	Threshold Limit Value (TLV) Time Weighted Average (TWA)
5 ppm	15 minute Short Term Exposure Limit (STEL) permitted by OSHA
6 – 12 ppm	Irritation of the throat and nose
20 ppm	Eye irritation
100 ppm	Immediately Dangerous to Life or Health (IDLH) set by NIOSH

IV. EMERGENCY RESPONSE POLICY AND AUTHORITY

It is the policy of DCP MIDSTREAM to take the necessary actions required to safeguard DCP MIDSTREAM personnel and the public from emergency incidents. Such emergency incidents may include fires, hazardous materials releases, and incidents resulting from natural hazards such as tornadoes.

In the event of an emergency incident, DCP MIDSTREAM personnel will take prompt action within their immediate work area to ensure that all appropriate DCP MIDSTREAM personnel, corporate personnel, and the public are alerted or notified that an emergency incident exists.

Whenever possible, DCP MIDSTREAM personnel will take immediate action to limit the effects of the emergency. Four objectives will be considered when developing an appropriate emergency response. These objectives are:

- Life safety.
- Environmental protection.
- Protection of company and public property.
- Preventing interruption of business and public services such as highway access, water, and utilities.

While all four of the above objectives are important, life safety will always remain the first and highest priority.

All DCP MIDSTREAM personnel have the responsibility, if necessary, to immediately alert other DCP MIDSTREAM personnel that an emergency condition exists and to take appropriate action to protect life, property, and the environment. All emergency response actions by DCP MIDSTREAM personnel are voluntary. Emergency response actions taken by individuals should be within the limitations of their training, experience, and physical abilities. At no time will Linam Ranch Plant personnel assume an unreasonable risk during an emergency response. An unreasonable risk exists when:

- The task exceeds the physical abilities of the individual.
- The individual is not properly trained to complete the task.
- The individual does not have adequate experience to complete the task.

V. RESPONSE PROCEDURES FOR UNINTENTIONAL (ACCIDENTAL) RELEASES

If a hazardous H_2S leak is detected, the following emergency plan of action should be put into effect to adequately ensure the safety of DCP MIDSTREAM employees, contractors and the public. These response sequences should be altered to fit the prevailing situation and event/site-specific requirements.

1. Upon detecting a leak, immediately move away from the source and attempt to get out of the affected area by moving upwind, or cross wind if travel upwind is not possible. The H_2S contingency plan may be activated in two ways: 1) The incident commander determines that a significant risk exists and manually initiates the plan; 2) the plan is automatically initiated if 100 ppm H_2S is confirmed by one of two pipeline highway crossing detectors (Area 1) or one of seven well site perimeter stations (Area 2).

2. Alert other personnel in the area. Assist personnel in distress if this can be done without endangering yourself. Proceed to the designated emergency assembly area.

3. If injury has occurred, immediately call emergency services (911).

4. If possible, take immediate measures to control present or potential discharge and to eliminate possible ignition sources.

5. Notify the supervisory foreman. Upon arriving at the scene, the supervisor should formally assume the role of the Incident Commander (IC). Until relieved by the supervisor, the senior employee having initially discovered the leak should fill the role of IC.

6. The IC will assess the situation and direct further actions to be taken. If assistance is required from law enforcement, safety or medical agencies, consult the emergency services telephone listing under Section XIII. The DCP Midstream Division Operations Vice-President or his designee should also be notified.

7. If the IC deems it necessary, ensure that steps are taken to stop traffic through the area, most importantly, highway traffic. Roadblocks must be set up outside the 10-ppm H_2S boundary, verified using a calibrated H_2S monitor. Call emergency services (911) for assistance in quarantining the area, if needed. Refer to maps in Section XVII for highway and pipeline locations. The plan provides the initial road block locations corresponding to which area the leak has occurred.

8. Initiate evacuation of nearby residents, if deemed necessary. Coordinate with emergency services.

9. Personnel equipped with self-contained breathing apparatus (SCBA) and portable H_2S monitoring equipment will determine the cause and extent of the leak. Personnel should enter the area from upwind of the site. If a reading of 10 ppm or higher of H_2S is obtained, then backup personnel equipped with SCBA will also be required.

10. No one will be intentionally exposed to H_2S concentrations in excess of 10 ppm without proper Personal Protection Equipment (PPE), IC authorization and backup personnel.

11. If possible, de-energize all sources of ignition, using lockout/tagout procedures.

12. If possible, perform shutdown on appropriate equipment and systems.

13. Trained personnel will continuously monitor H_2S concentrations, wind direction and area of exposure and will advise public safety and emergency personnel on current conditions.

14. Protective measures shall be maintained until the threat of injury from H_2S poisoning has been eliminated. The area must be checked with monitoring equipment and cleared below 10 ppm before allowing entry without proper PPE.

15. Notify DCP Midstream Division Health & Safety Manager. Assistance will be provided to ensure all proper notifications and reporting are made to local, state and federal agencies.

16. As soon as possible, **but no more than four hours after plan activation,** notify the New Mexico Oil Conservation Division – Lea County (See Section XIII). At a minimum, the following information will be needed:

    - The company name.
    - Facility name.
    - Your name and telephone number for them to contact you.
    - The location and source of the discharge.
    - A description of the area affected by the discharge, the probable concentration of H_2S in the region and the wind direction/velocity.
    - If necessary, request additional assistance from the agency.

VI. EMERGENCY INCIDENT MANAGEMENT

Emergency incident management will follow the Incident Command System (ICS) as described by the Federal Emergency Management Act (FEMA). The intent of using ICS for all emergency incidents provides automatic continuity with outside agencies and assists in establishing a "unified command" of the incident. DCP Midstream provides instruction and training on the ICS, which is beyond the scope of this contingency plan. However a brief overview of the system is provided below.

The Incident Command System (ICS) utilizes a flexible, modular approach to organizing resources to effectively respond to emergency events. FEMA suggests that the basic Incident Command System has five functional areas:

- Command;
- Operations;
- Planning;
- Logistics; and,
- Finance.

However, for incidents such as those described in this plan, it seems more likely that the basic Incident Command System would be comprised of: 1) Command; 2) Operations Chief; and, 3) Safety Officer. Larger incidents may require additional positions such as Public Information Officer, Logistics Chief, Planning Chief, Finance Chief, Staging Manager, Medical Group Supervisor and Environmental Group Supervisor. The exact number and combination of positions will vary depending upon the type, size and duration of the incident.

In every incident, command must first be established. The first person to discover the problem is, by default, the Incident Commander (IC) until this responsibility is transferred to someone else. This responsibility should be formally transferred to the Facility/Field Supervisor as soon as practical. Who is acting as the IC should be clear and apparent at all times.

The Incident Commander (IC) is responsible for the overall management of the incident. Where the IC does not delegate or assign a position, the IC retains that responsibility. The IC should be careful to have no more than 5 to 8 people reporting directly to him. The IC establishes the strategy and goals for the incident and is ultimately responsible for the safety and success of the response activities.

An Operations Chief (OPS) is responsible for implementing the strategy to accomplish the goals defined by the IC. An OPS directs all tactical operations, oversees response personnel and may assist the IC in the development of the action plan.

The Safety Officer is assigned by and reports directly to the IC. This position is responsible for identifying hazardous or unsafe situations, and developing measures necessary to assure the safety of response personnel and any victims of the incident. He/she should ensure that any personnel responding to the incident are using the proper PPE and have adequate training. The Safety Officer has the authority and responsibility to terminate or suspend operations that he believes are unsafe or will place people in imminent danger.

VII. PERSONNEL VEHICLES AND EQUIPMENT

Plant personnel are equipped with personal H_2S monitors and portable gas detection devices.

The plant has two fully equipped emergency response trailers located at the egress stations for easy access if the facility is evacuated. Also, there are self contained breathing apparatus (SCBA's) located strategically throughout the facility.

Personnel have cellular and two-way radios for inter-company communication.

All DCP MIDSTREAM personnel working with the Linam AGI facility are equipped with personal H_2S monitors and portable gas detection devices.

Communications to DCP MIDSTREAM field personnel is via mobile cellular telephones or two-way radios.

Each DCP MIDSTREAM field truck is also equipped with a fire extinguisher in order to enable assistance as needed.

VIII. EVACUATION PROCEDURE

Evacuation may become necessary to protect personnel and the public from hazards associated with an incident. Orderly evacuation is essential to protect the general public as well as DCP MIDSTREAM personnel and property.

DCP MIDSTREAM personnel have reviewed the affected area for this plan and have determined the safe evacuation routes and assembly areas to reduce confusion if evacuation becomes necessary. The DCP MIDSTREAM Facility/Field Operator may assign runners to direct evacuation and account for personnel during emergencies. (See Section XIV for evacuation routes).

Designated Assembly Areas shall be at a safe distance from the incident in an appropriate direction (upwind, upstream, and upgrade). If the Assembly Areas do not provide adequate shelter, transportation to a central shelter should be arranged after all personnel are accounted for. As the incident progresses, the IC must continuously evaluate the adequacy of the assembly area and necessity of the shelter.

DCP MIDSTREAM personnel evacuating their work areas should evacuate the facility and initiate the plant ESD system, and proceed to the Designated Assembly Area. Facility personnel will account for all personnel, ensure the evacuated area is secured and report the status of the evacuation to the IC. Evacuated personnel shall remain at the assembly area or shelter until directed otherwise by the IC.

- Local law enforcement and/or emergency management authority must be notified in conjunction with any community evacuation or public protective measures initiated.
- Emergency Response Plan initiated.
- Assess the scene; protect yourself.
- Summon EMS to the scene; provide information on the nature and number of injuries.
- If trained, provide First Aid/CPR as necessary, until EMS arrives at the scene; injured personnel should not be moved unless the situation is life threatening.
- Evacuate unnecessary personnel from the area.
- Establish a secure perimeter around the area to prevent unauthorized entry.
- Initiate the site security plan.
- Notify Facility/Field Supervisor and make appropriate notifications to local Fire and EMS.
- Make other internal management contact as appropriate.

In case of a fatality:

- Do not move the victim.
- Do not release name of victim(s).
- Contact local law enforcement.
- Contact local medical examiner.
- Preserve the accident site.
- Restrict all radio communications concerning the incident.

Make appropriate government agency notification and conduct post-incident activities.

IX. COORDINATION WITH STATE EMERGENCY PLANS

The Hydrogen Sulfide Contingency Plan as described will be coordinated with the New Mexico Oil Conservation Division (NMOCD) and with the New Mexico State Police consistent with the New Mexico Hazardous Materials Emergency Response Plan (HMER). A copy of this plan will be submitted to the New Mexico State Police and Local Emergency Planning Committee for Eddy County.

LEPC

575-396-8607

NEW MEXICO STATE POLICE

575-392-5588

LEA COUNTY SHERIFF'S OFFICE

575-396-3611

NEW MEXICO OFFICE OF EMERGENCY MANAGEMENT/ DEPT. OF HOMELAND SECURITY AND EMERGENCY MANAGEMENT

505-476-9635 - Emergency (24 hr Duty Officer)

505-476-9600 - Office

X. NOTIFICATION OF THE OIL CONSERVATION DIVISION

The person, operator or facility shall notify the New Mexico Oil Conservation Division (NMOCD) upon a release of hydrogen sulfide requiring activation of the Hydrogen Sulfide Contingency Plan as soon as possible, but no more than four hours after plan activation, recognizing that a prompt response should supersede notification. The person, operator or facility shall submit a full report of the incident to the NMOCD on Form C-141 no later than fifteen (15) days following the release.

OIL CONSERVATION DIVISION
DISTRICT 1
LEA COUNTY
575-393-6161

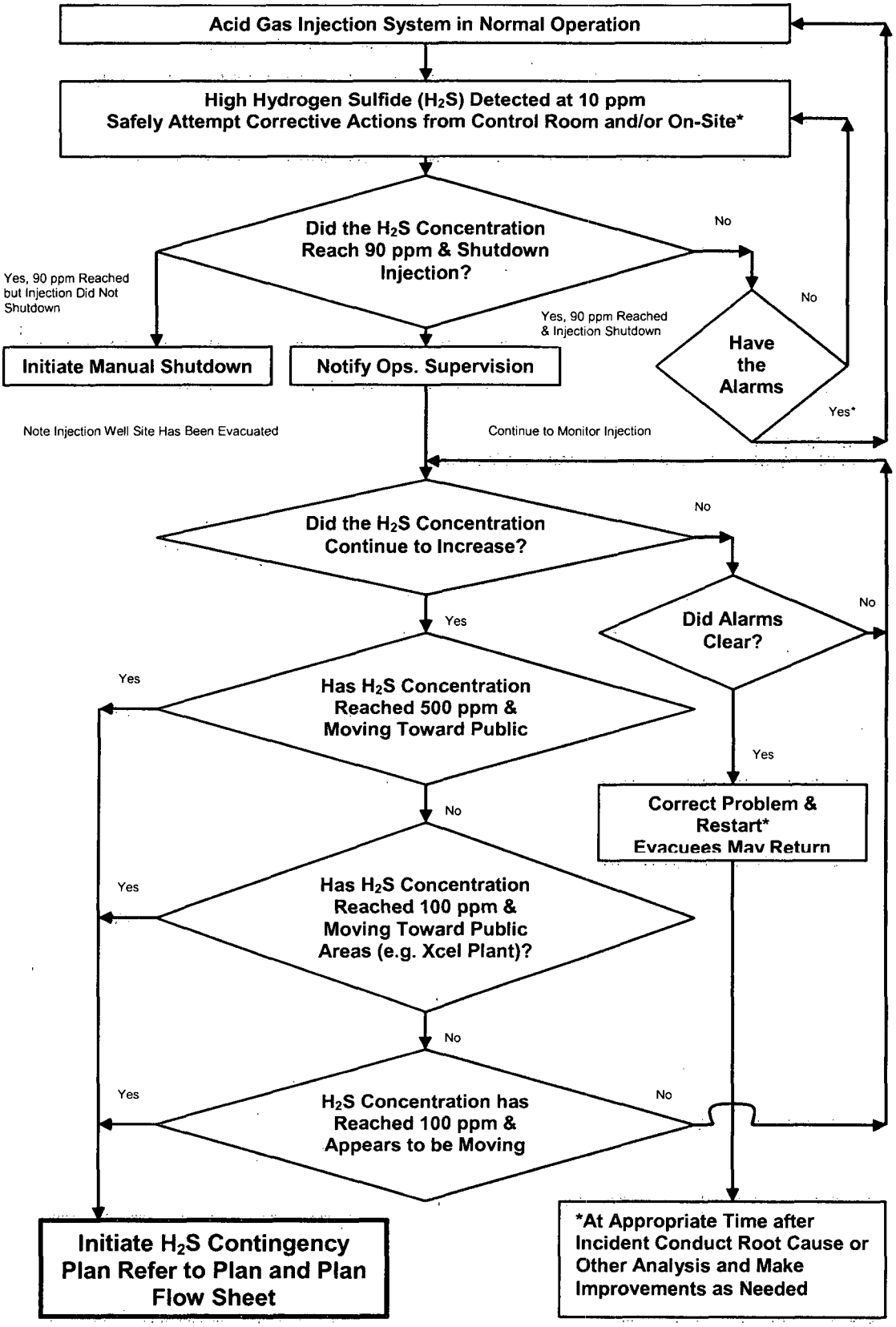
XI. PLAN ACTIVATION

The Hydrogen Sulfide Contingency Plan shall be activated when the Incident Commander (IC) believes that a release creates a concentration of hydrogen sulfide that exceeds or is likely to exceed the following activation levels:

- 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 of the release.

The Linam Ranch AGI Hydrogen Sulfide Release Flow Chart is presented on the next page.

Hydrogen Sulfide Release Flow Chart



XII. TRAINING AND DRILLS

Training for all affected DCP MIDSTREAM personnel will be conducted prior to completion of the project and introduction of product. Training will then be given as needed for any personnel who may later be affected by this project.

This training will include:

- Training on the responsibilities and duties of essential DCP MIDSTREAM personnel.
- On-site or classroom tabletop drills which simulate a release or other situation affecting the facility.
- Annual H_2S Hazard Training.

Initial training is to take place upon employment with the company and refresher training is to be conducted annually – or sooner if there is a change in the plan or the need for training is determined.

All training will be documented and training records will be maintained on file at the Linam Ranch Gas Plant.

All drills will be evaluated and documented including any recommendations resulting from findings. Recommendations will be assigned to DCP MIDSTREAM personnel for completion by an established date. Upon completion, the action plan will be documented and records will be filed at the Linam Ranch Gas Plant.

Only trained and certified personnel from responding agencies will participate in any rescue exercise.

The Hydrogen Sulfide Contingency Plan will also provide for training of noted residents in this plan as appropriate on the proper protective measures to be taken in the event of a release, and shall provide for briefing of public officials on issues such as evacuation or shelter-in-place plans. Literature will be passed out to the noted residents with emergency numbers to be utilized in the event of an incident associated with this or any DCP MIDSTREAM equipment and/or piping.

XIII. EMERGENCY DCP MIDSTREAM CONTACT TELEPHONE NUMBERS

Use the following phone number in the event of a catastrophic release and/or emergency situation on the pipeline.

Telephone Numbers of DCP MIDSTREAM Personnel

Linam Plant Operators	Control Room	575-391-5792 575-391-5793 575-391-5794
	Operator Cell #	575-390-6299

Then Call:

Linam Gas Plant Operator III Harvey Hargrove	Office 575-391--5703	Cell 575-602-1656
Linam Gas Plant Supervisor Gary Minatra	Office (575) 391-5701	Cell (432) 556-1535
SENM Asset Manager Kelly Jamerson	Office 575-397-5539	Cell (325) 226-3357
Manager Area Operations Lewis Hill	Office 575-234-6405	Cell 575-706-1442

Then Call:

Asset Safety Coordinator Sandy Ballard	Office (575) 391-5710	Cell (575) 390-6064
Asset Safety Coordinator Charlie Powell	Office (575) 234-6403	Cell (575) 706-2003
24 HOUR TELEPHONE DCP Gas Control – Houston, TX	800-435-1679	

Remember – Our 4 Objectives in an Emergency Are:

1. **Life Safety.**
2. **Environmental Protection.**
3. **Protection of Company and Public Property.**
4. **Preventing interruption of business and public services such as Highway Access, Water & Utilities.**

Life Safety Will Always Remain the First and Highest Priority!

In case of an emergency in the Artesia/Carlsbad Asset requiring assistance for fire, ambulance, medical authorities or HazMat issues – immediately call:

911

Responder Emergency Numbers

Facility	Eunice, New Mexico	Hobbs, New Mexico
Fire Department	911	911
Medical Facility	575-492-5000	575-492-5000
State Police	575-392-5588	
Sheriff Department	575-396-3611	
LEPC	575-393-8607	

Telephone Numbers of Public Agencies

Agency Name	Phone Number
Oil Conservation Division District 1 – Lea County	575-393-6161
New Mexico Office of Emergency Management/Dept. of Homeland Security and Emergency Management	575-476-9635 (24 hr Emergency) 575-476-9600 (Office)
State Emergency Response Commission (SERC)	575-393-6161
Bureau of Land Management - Hobbs	575-392-8736

Telephone Numbers of Emergency Resources

Organization	Phone Number
Spill – Cleanup Contractors	
DCP vacuum truck	575-441-1253
Smith & Sons Construction	575-631-6407

XIV. DETAIL INFORMATION - POTENTIALLY HAZARDOUS AREAS

No. 1. AGI Pipeline Inlet and Linam Ranch Plant

DRIVING DIRECTIONS:
From Hobbs: Take Highway US 62/180 west seven miles. Linam Ranch Plant and Inlet to the Acid Gas Pipeline is on the left (south) side of the highway.
Location: NE ¼ Section 6-T19S-R37E, Lea County
Latitude: 32° 41' 43.1"
Longitude: -103° 17' 7.8"

No. 2. AGI Pipeline Outlet and AGI Well-Site

To Acid Gas Injection Facility: Proceed an additional mile west on Highway US 62/180 from the Linam Ranch Plant. Turn north on the Maddox Plant Road (County Highway 41) and proceed 1.25 miles north. Turn right on the Acid Gas Injection Facility road and proceed about 0.25 miles east to the site.
Location: SW ¼ Section 30-T18S-R37E, Lea County
Latitude: 32° 43' 00.7"
Longitude: -103° 17' 33.8"

EVACUATION ROUTE:

At all times note the wind direction before evacuating procedures begin.

Evacuation for all persons inside of the AGI Facility fences would be west to the Maddox Plant Road (wind conditions permitting). Then, proceed south of the facility as a group to account for all persons.

ROAD BLOCKS:

In emergencies involving a large acid gas pipeline leak near the Linam Ranch Plant (Area 1 - pipeline inlet) US Highway 62/180 will initially be blocked at Maddox Road to the West and State Road 8 to the East. Dedicated response trailers with amber flashers will be utilized. The plan will also make provisions for blocking Maddox Road at approximately one mile north and one mile south of the plant if necessary.

For most emergencies involving the Acid Gas Compressor Site (Area 2) Maddox Road will be blocked about ¼ mile north of US 62/180 and at Maddox Lake to the West. In addition to road blocks, warning signs with automated flashing amber lights are strategically located at road intersections to an approximate early warning radius of ½ mile around the facility. They are located NE at Smith Ranch Road, NW at Maddox Road, and SW at Maddox Road. An additional warning sign is placed at the nearest public location approximately 200m North of the facility fence line at Smith Ranch Road.

COMMAND POST:

The Command Post will be established at one of the roadblock locations. The site will be dependent of the wind direction.

The Incident Commander, after arriving at the scene, has the authority to assess the situation and determine the severity level of the incident. The Incident Commander may determine that the Contingency Plan as written cannot be activated effectively. The Emergency Response Plan may then be activated depending on the Incident Commander's evaluation of the situation.

PUBLIC RECEPTORS LOCATED INSIDE RADIUS OF EXPOSURE (ROE):

Area 1: There are residential public receptors located in the ROE for Acid Gas Injection at the Linam Ranch Gas Plant. The receptors listed include those within the ROE of the acid gas pipeline from the Linam Ranch Plant to the Acid Gas Injection Facility. US Highway 62/180 runs directly east and west to the south of the facility. This is a highly traveled road and would need to be blocked as stated.

	RESIDENT'S NAME	EMERGENCY TELEPHONE NUMBER	RESIDENT'S ADDRESS
1.	Bill Carlin	575-393-2766	9800 W. Carlsbad Hwy., Hobbs, NM
2.	L.S. Webber	575-393-4784	9801 W. Carlsbad Hwy., Hobbs, NM
3.	Joe Handley (Located on border of ROE)	575-397-6546	9201 W. Carlsbad Hwy., Hobbs, NM
4.	DCP MIDSTREAM _ Linam AGI Well-Site (Located on border of ROE)	TBD	
5.	DCP MIDSTREAM – Hobbs Plant	575-393-5826	
6.	Maddox Station (Located of border of ROE)	575-391-3410 – Maddox Control 575-391-3411 – Maddox Control 575-631-4966 - Maddox Cell 575-391-3711 - Cunningham CR 575-391-3710 - Cunningham CR 575-631-4967 – Cunningham Cell	9 Miles W of Hobbs on Hwy 62/180
7.	Maddox Lake (Located on border of ROE)	No Number – Notify Maddox Station	

Area 2: There are residential public receptors located in the ROE for Acid Gas Injection Well-Site. The receptors listed include those within the ROE of the acid gas pipeline from the Linam Ranch Plant to the Acid Gas Injection Facility. US Highway 62/180 runs directly east and west to the south of the facility. This is a highly traveled road and might need to be blocked as stated. Depending on the incident County Road 41 (Maddox Road) might be blocked instead.

	RESIDENT'S NAME	EMERGENCY TELEPHONE NUMBER	RESIDENT'S ADDRESS
1.	Randy & Naomi Smith	575-885-9011 575-361-1512 – Cell	NNE of Maddox Road Hobbs NM (Sec18, 18S,37E)
2.	Lea Power Partners – Hobbs Generating Station	575-397-6788 – Control Room 575-779-5037 – Control Rm Cell 575-397-6706 – Roger Schnabel 801-360-4189 – R. Schnabel Cell	98 N. Twombly Lane Hobbs, NM 88242
3.	DCP MIDSTREAM – Linam Ranch Plant (Located of border of ROE)	Plant Operator to sound alarm for evacuation as required.	

Table continued on next page

	RESIDENT'S NAME	EMERGENCY TELEPHONE NUMBER	RESIDENT'S ADDRESS
4.	DCP MIDSTREAM – Hobbs Plant	575-393-5826	
5.	Maddox Station	575-391-3410 – Maddox Control 575-391-3411 – Maddox Control 575-631-4966 – Maddox Cell 575-391-3711 – Cunningham CR 575-391-3710 – Cunningham CR 575-631-4967 – Cunningham Cell	9 Miles W of Hobbs on Hwy 62/180
6.	Maddox Lake	No Number – Notify Maddox Station	

If a significant leak occurs along the acid gas pipeline route between the Linam Ranch Plant and the Well-Site consideration should be given to notifying those on both lists for Area 1 and Area 2.

XV. DCP MIDSTREAM PUBLIC AWARENESS PROGRAM

DCP Midstream (DCP MIDSTREAM) participates in an extensive annual Public Awareness Program and Damage Prevention Program.

DCP MIDSTREAM participates with the Local Emergency Planning Committee to educate persons residing in Lea County about the hazards associated with gas gathering pipelines.

DCP MIDSTREAM participates with the Pipeline Group to educate Excavators and Contractors about Damage Prevention to underground facilities and is a member company of the New Mexico One-Call System.

DCP MIDSTREAM installs pipeline markers and signs at all facilities and road crossings to identify our underground pipelines and maintains these markers on an annual schedule.

Residents living within a ¼ mile radius of all DCP MIDSTREAM pipelines receive a Public Awareness brochure that explains the DCP Midstream Public Awareness and Damage Prevention program. This brochure is printed in both English and Spanish. It contains visual documentation of pipeline markers, aerial markers and casing vent markers Residents are encouraged to report any damage or vandalism to these markers in their neighborhood. This brochure also educates the public on how to respond to a pipeline emergency and includes a 24 hour/7 day week emergency telephone number.

DCP MIDSTREAM PUBLIC AWARENESS BROCHURES WILL BE PRESENTED TO EACH RESIDENT LIVING WITHIN THE RADIUS OF EXPOSURE.

XVI. EMERGENCY SHUTDOWN EQUIPMENT

DCP Midstream (DCP MIDSTREAM) has an installed automatic and manually activated emergency shutdown system (ESD) at the Acid Gas Injection Facility at the Linam Ranch Gas Plant. The plant operator and/or Incident Commander (IC) may use these systems to shutdown and isolate the equipment in the facility. This is a fail safe system that will shut valves and equipment if any portion of the system fails. The Acid Gas Injection system will be normally controlled from the Linam Ranch Plant Control Room and shutdown of equipment and ESD valves at the well-site may be accomplished from this system as well as at the well-site.

When activated the ESD shuts an automatic valve on the inlet acid gas feed stream, shuts an automatic valve on the compressed acid gas to the acid gas injection well, and sends a signal to the wellhead panel to shut down automatic valves on the wellhead. The major equipment is shutdown. The specific major equipment items at injection well site that are shutdown in an ESD include the acid gas compressors and associated coolers and pumps. The fuel gas, which is used for flare fuel and purge gas is left on-line; however an automatic valve is provided in this line at the well-site that can be actuated separately in the control system to close this valve.

In the wellhead control panel there is a separate shutdown for the subsurface safety valve (SSSV). The SSSV can be closed if required. The SSSV will close automatically and the acid gas compressor will shutdown upon detection of high or low pressure in the wellhead piping. The SSSV will shut if there is a fault in the wellhead control panel.

DCP MIDSTREAM has also installed hydrogen sulfide detectors throughout the Well-Site Facility in key locations to detect possible leaks. Upon detection of hydrogen sulfide at 10 ppm levels at any detector a visible beacon is activated at that detector and an alarm is sounded. All personnel proceed immediately to a designated area near the Facility office outside the fence (or alternate area south of the plant depending on wind direction and their location in the well-site facility). Upon detection of hydrogen sulfide at 90 ppm levels at any detector, a further evacuation alarm is sounded throughout the Facility.

In addition to sounding evacuation alarm sirens, at concentrations of 90 ppm in the acid gas compressor area the acid gas compressor is shutdown and isolation valves upstream and downstream of the unit are closed, including the wellhead automatic wing valve. Refer to the "Plant H_2S Alarm System Location Plan" for the locations of the hydrogen sulfide detectors.

In addition to the hydrogen sulfide detectors near equipment, the well-site facility will also contain perimeter hydrogen sulfide detectors. These detectors are located along the fence line of the facility and will be used by the operators to determine if the hydrogen sulfide release is moving off-site toward the public roads, the nearest residence, and the Xcel Maddox Station Power Plant.

The well site perimeter monitors provide an automatic notification of the Xcel Energy - Maddox Station if the H_2S Contingency Plan is activated for the AGI Well-Site (Area 2). This is due to the proximity of the Maddox Station to the Well Site. The notification will include a transmitted signal that the contingency plan has been invoked, a hard-wired signal that the plan has been invoked, and that a shutdown due to high hydrogen sulfide concentration has occurred. The signal is directly linked to the Xcel Plant control/alarm system so that alarms will sound throughout the Maddox Plant to notify the operator(s).

The Randy Smith residence, located at the extremity of the ROE, will be notified via an automatic flashing warning sign located near his ranch road, visible at a distance greater than 1 mile from the well site.

In addition to these systems the well-site facility contains portable fire extinguishers that may be used in an emergency. The well-site facility also has air packs used for escape or rescue located throughout the facility at key locations. The facility also has a breathing air system at the compressor units consisting of air bottles, tubing, and a manifold to connect 5 minute air packs. These are primarily used when performing maintenance work on the compressor units; however, they can also be used during an emergency if required. Refer to the "Emergency Equipment Location Plan" for the location of this equipment.

For emergency equipment and shutdown descriptions within the existing Linam Ranch Plant refer to the separate contingency plan for the Linam Ranch Plant Site. There will be additional hydrogen sulfide detectors installed at the plant site around the new acid gas compressor and near the new ESD valves. There will be ESD valves installed between the amine system and AGI compressor, on the AGI pipeline leaving the plant, and on the acid gas pipeline north of the underground road crossing of U.S. Highway 62/180. The ESD valves will be shutdown and the booster compressor stopped at 90 ppm hydrogen sulfide concentration in the acid gas compressor or acid gas pipeline ESD valve areas.

In the event of an acid gas booster compressor shutdown at the Linam Ranch Plant there are existing pressure controls to automatically divert the acid gas volume to the Linam Ranch Plant Acid Gas Flare. Depending on the incident the rest of the Linam Ranch Plant could continue to operate if appropriate.

During shutdowns of the well-site compression or the injection well the acid gas will also be flared at the Linam Ranch Plant. Note that the Acid Gas Flare will flare large volumes at the Well-Site only under extreme emergencies in the event the compressor is over-pressured and a Pressure Safety Valve (PSV) relieves to the acid gas flare.

Emergency Equipment on site at the Acid Gas Injection Facility:

Quantity	Description
9	Ansul 30# Fire Extinguishers
6	5# ABC Fire Extinguishers
5	Wind Socks
1	150# Fire Extinguisher – Wheeled Units
35	Fixed Ambient H_2S Monitors
8	SCBA – 30-Minute Breathing Air Packs
4	First Aid Kits
2	Fire Blankets (wool)
2	Eye Wash Stations
1	Emergency Showers
2	PPE Boxes

XVII. ATTACHMENTS, MAPS AND DRAWINGS

LISTING OF ATTACHMENTS, MAPS AND DRAWINGS

1. Worst Case Scenario
2. Calculated Radius of Exposure (ROE)
3. Site Plot Plan
4. Maps – Calculated Radius of Exposure (ROE)
   a. Quantitative Risk Analysis (QRA) ROE
   b. Pasquill-Gifford Calculated ROE
5. Safety Equipment Location Plan
6. Electrical Classification Drawing
7. Hazardous Material Incident Notification Information Checklist
8. Contingency Plan Simplified Flowchart.

Attachment 1 - Worst Case Scenario

Worst Case Scenario for Acid Gas Injection at the Linam Ranch Gas Plant:

The basis for worst case calculations is 28% hydrogen sulfide in the acid gas from the Linam Ranch Gas Plant, which is at typical maximum concentration observed at the plant. The current permit limit for the Plant is 225 MMscfd as stated the Air Quality Permit No. 094, issued on December 3, 2004 by the State of New Mexico, Environment Department, Air Quality Bureau. This results in 4.6 MMscfd of Acid Gas containing 1.29 MMscfd of hydrogen sulfide.

Note that essentially all of the hydrogen sulfide in the plant feed gas is separated from the processed gas and becomes the acid gas stream. Therefore, the worst case calculated radius of exposure will be the same for the Acid Gas Injection Facility and for the Linam Ranch Gas Plant as a whole. Furthermore, the worst case scenario is being assumed in the standard calculations since it would be a rupture that results in release of all of the hydrogen sulfide from the acid gas. Calculations using the Pasquill-Gifford equations as described in OCD Rule 118 are presented on the following page.

DCP MIDSTREAM also had a Quantitative Risk Analysis (QRA) study completed by an expert engineering contractor with experience, calculation methods, and computer programs for this type of analysis. The QRA considers the piping and equipment configuration, the actual gas volume based on operating conditions (pressure and temperature), and various release scenarios. Based on this information detailed calculations are completed to determine the hazard distances at 1% probability of fatality, which is approximately equal to the 100 ppm ROE. A second set of calculations is completed at 99% probability of fatality, which is approximately equal to the 500 ppm ROE. This study was completed at 5 MMscfd of acid gas with 25.2% hydrogen sulfide. This is a similar volume of hydrogen sulfide of 1.26 MMscfd compared to the standard calculations. Use of the QRA calculated ROE in place of the Pasquill-Gifford equations would require specific approval of the OCD. These QRA calculated numbers are also presented for information. They may provide some relative indication of the severity of various emergency situations.

Attachment 2 - Calculated Radius of Exposure (ROE)

Alternative Calculations of Radius of Exposure (ROE) – for reference or consideration for approval by the division:

ACID GAS INJECTION FACILITY for LINAM RANCH GAS PROCESSING PLANT

QRA

HYDROGEN SULFIDE RADIUS OF EXPOSURE CALCULATIONS
(alternative distances from QRA)
March 2006

Linam Plant (Area 1)	H_2S Concentration Mole %	Max Escape Rate MMSCFPD	Hazard Distance at 1% probability of fatality (equivalent to100 PPM ROE) (Ft)	Hazard Distance at 99% probability of fatality (equals 500 PPM ROE) (Ft)
Acid Gas to Compressor	25.2	5.0	960	675
Acid Gas Compressor	25.2	5.0	670	450
Inlet Acid Gas Pipeline at Plant (8" underground line)	25.2	5.0	675	N/A
Well-Site (Area 2)				
Compressor Suction Line (8" above ground line)	25.2	5.0	1055	685
Compressor Unit & 3" line to well head	25.6	5.0	1400	920
Wellhead with SSSV failure	25.6	5.0	1815	1315
Wellhead with down hole check and SSSV failure	25.6	5.0	4185	2595

Total hydrogen sulfide flow is 1.26 MMscfd

Standard Calculations of Radius of Exposure (ROE):

ACID GAS INJECTION FACILITY at LINAM RANCH GAS PROCESSING PLANT

HYDROGEN SULFIDE RADIUS OF EXPOSURE CALCULATIONS USING VOLUME AND H_2S CONCENTRATION FROM EXISTING LINAM RANCH H_2S CONTINGENCY PLAN

March 2006

Linam Plant (Area 1)	H_2S Concentration Mole %	Max Escape Rate MMSCFPD	100 PPM ROE (Ft)	500 PPM ROE (Ft)
Acid Gas Pipeline or Compressor at Plant	28.0620	4.6	8914	4073
AGI Well-Site(Area 2)				
Acid Gas Pipeline Inlet	28.0620	4.6	8914	4073
Compressor Unit at Well-Site	28.0620	4.6	8914	4073
Wellhead	28.0620	4.6	8914	4073

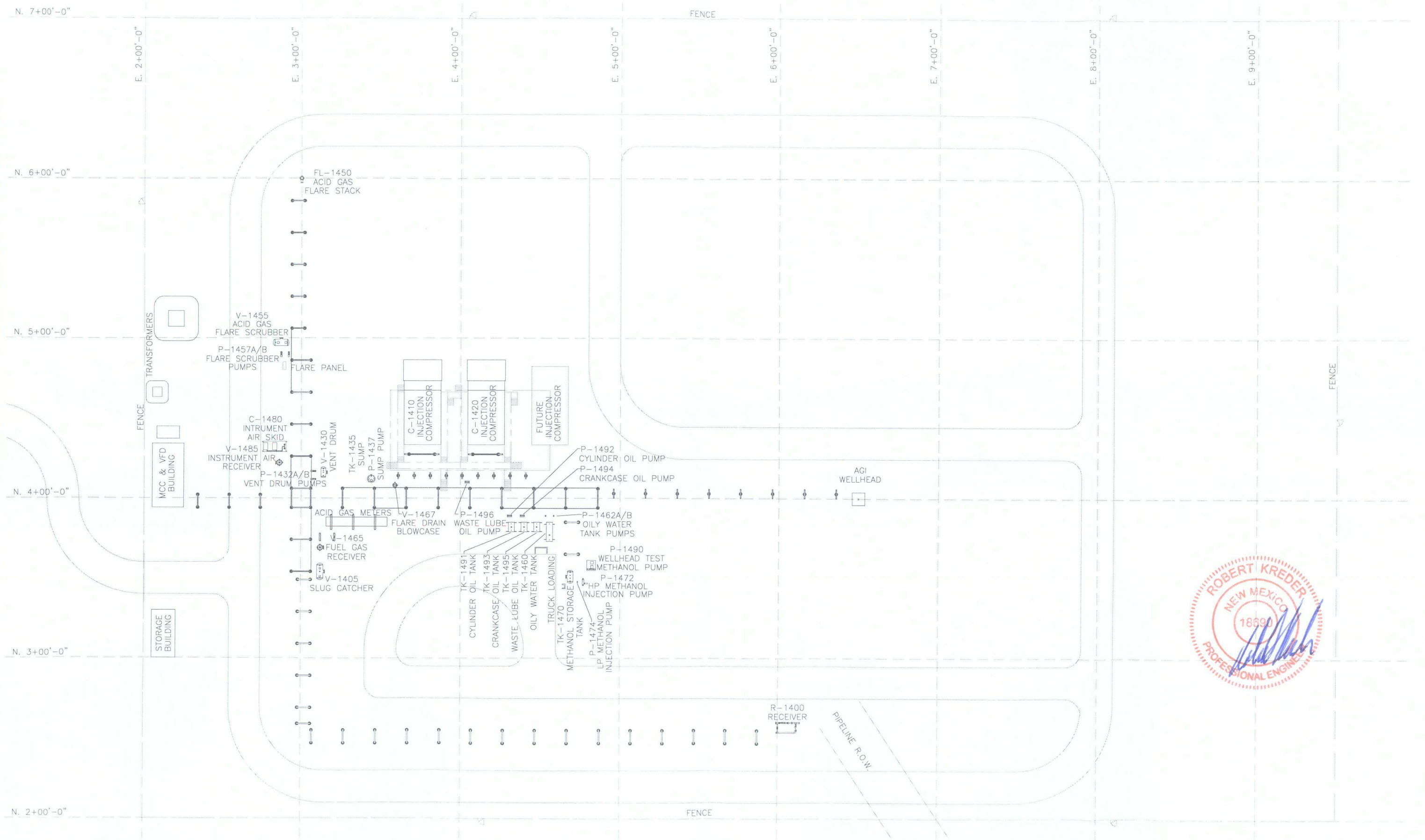
Pasquill-Gifford Equations

100 PPM ROE = [(1.589)*(H_2S Mole Fraction)*(Q)] ^ 0.6258
500 PPM ROE = [(0.4546)*(H_2S Mole Fraction)*(Q)] ^ 0.6258
Where Q = scfpd

Note: Total hydrogen sulfide flow of 1.29 MMscfd

Attachment 3 – Site Plot Plan

AGI Well Site
Linam Ranch Plant



ROBERT KREDER
NEW MEXICO
18890
PROFESSIONAL ENGINEER

REV.	DATE	REVISION	BY	CHK'D	ENGR.
0	03/24/09	ISSUED FOR CONSTRUCTION	MAC		RAK
1	5/18/09	REVISED RECEIVER R-1400 LOCATION	MAC		RAK

REV.	DATE	REVISION	BY	CHK'D	ENGR.

NOTES:

PREPARED BY
ZAP
ENGINEERING & CONSTRUCTION SERVICES, INC.
12567 W. Cedar Drive Ph. (720) 529-4430
Lakewood, CO. 80228 ZAPECS.com

dcp Midstream

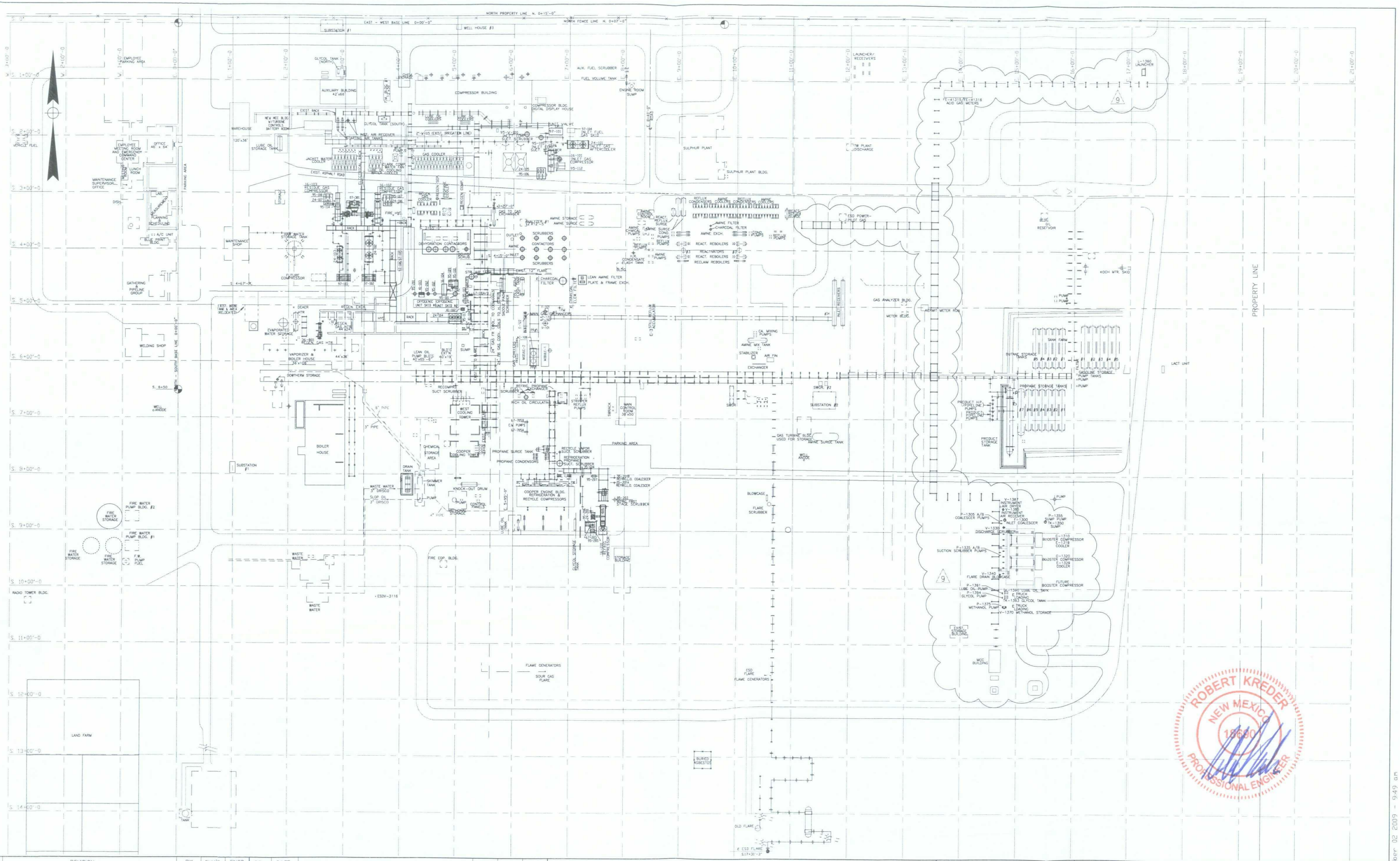
PLOT PLAN
ACID GAS INJECTION WELL SITE

LINAM RANCH PLANT

DRAWN: MAC DATE: 01/18/08

JA NO.	FILE NAME
	MP14-001
AFE NO.	SCALE
	NONE
BASE NO.	
DWG NO. MP14-001	1

PLOT TIME: September 02 2009 - 9:52 am



ROBERT KREDER
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REV.	DATE	REVISION	BY	CHK'D	ENGR.
0	4/11/95	ISSUED FOR CONSTRUCTION	E.A. M.	D.C.	
1	522/95	REVISED MPTES 16, 19 & 27	E.A. M.	D.C.	
2	7/20/95	ADDED INLET REC'S, REGEN COMP., PROPANE COOL	JAM		
3	11/7/95	REMOVED GENERAL NOTES AND LEGEND	JAM		
4	3/30/99	UPDATED DRAWING	JC		
5	12/05/05	UPDATED PLOT PLAN	P.L.		
6	07/26/06	ADDED WATER WASH EQP.	P.L.		
7	8/23/06	REMOVED EQUIPMENT PER FIELD MARKS	wrt		
8	8/4/08	ADDED ESD FLARE & BOILER EQUIPMENT	wrt		
9	3/13/09	ADDED AGI EQUIPMENT	MAC		

NOTES:

dcp Midstream

PLOT PLAN
LINAM RANCH
GAS PLANT

LINAM RANCH PLANT — WEST PERMIAN BASIN

DRAWN: E.A. MOWERS — DATE: 9/6/94

JA NO.	FILE NAME 07307MP002
AFE NO.	SCALE 1"=80'
BASE NO. 07-3-07	
DWG. NO. MP-002	9

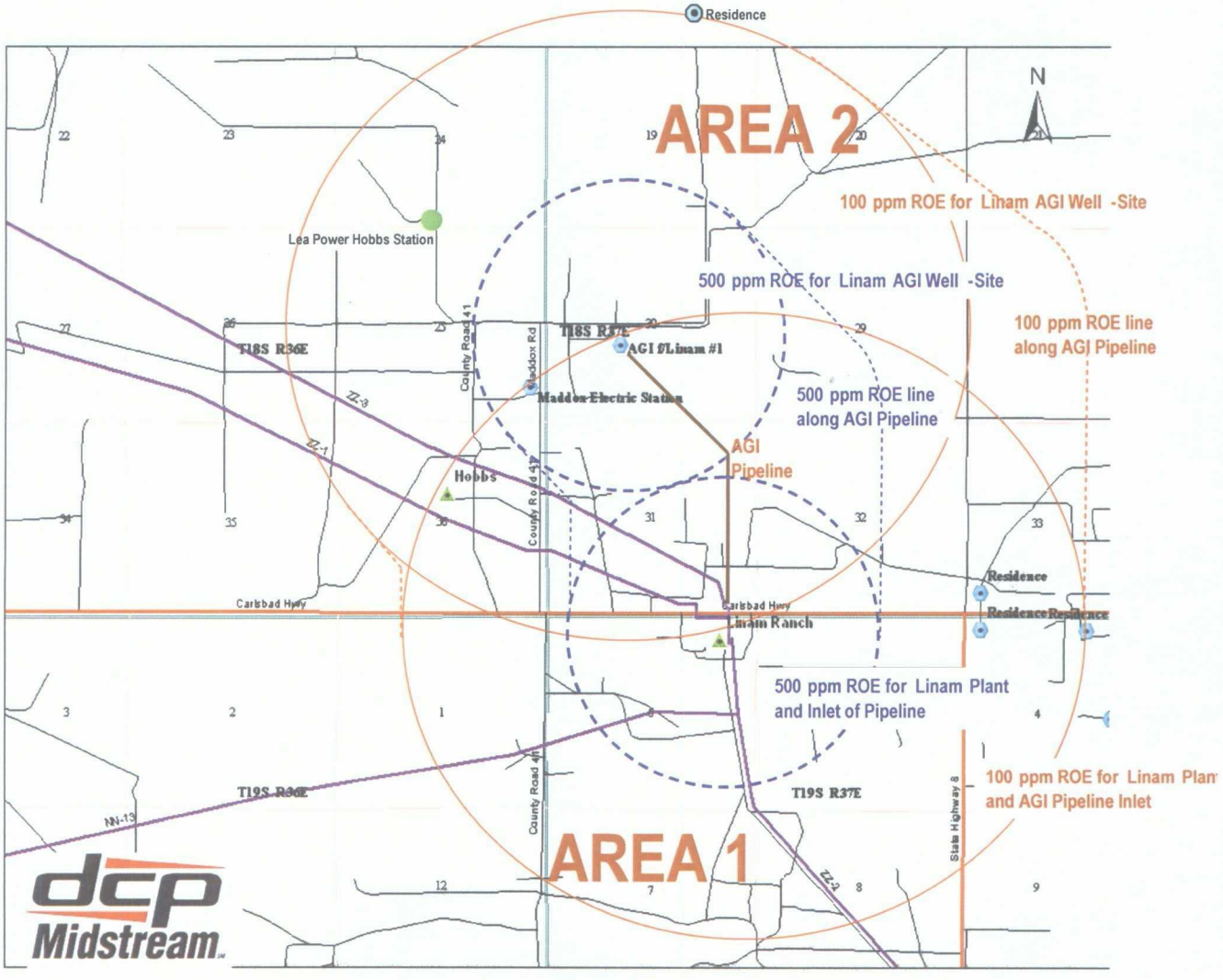
PLOT TIME: September 02 2009 - 9:49 am

Attachment 4 – Maps of Calculated Rates of Exposure

Calculated Radius of Exposure

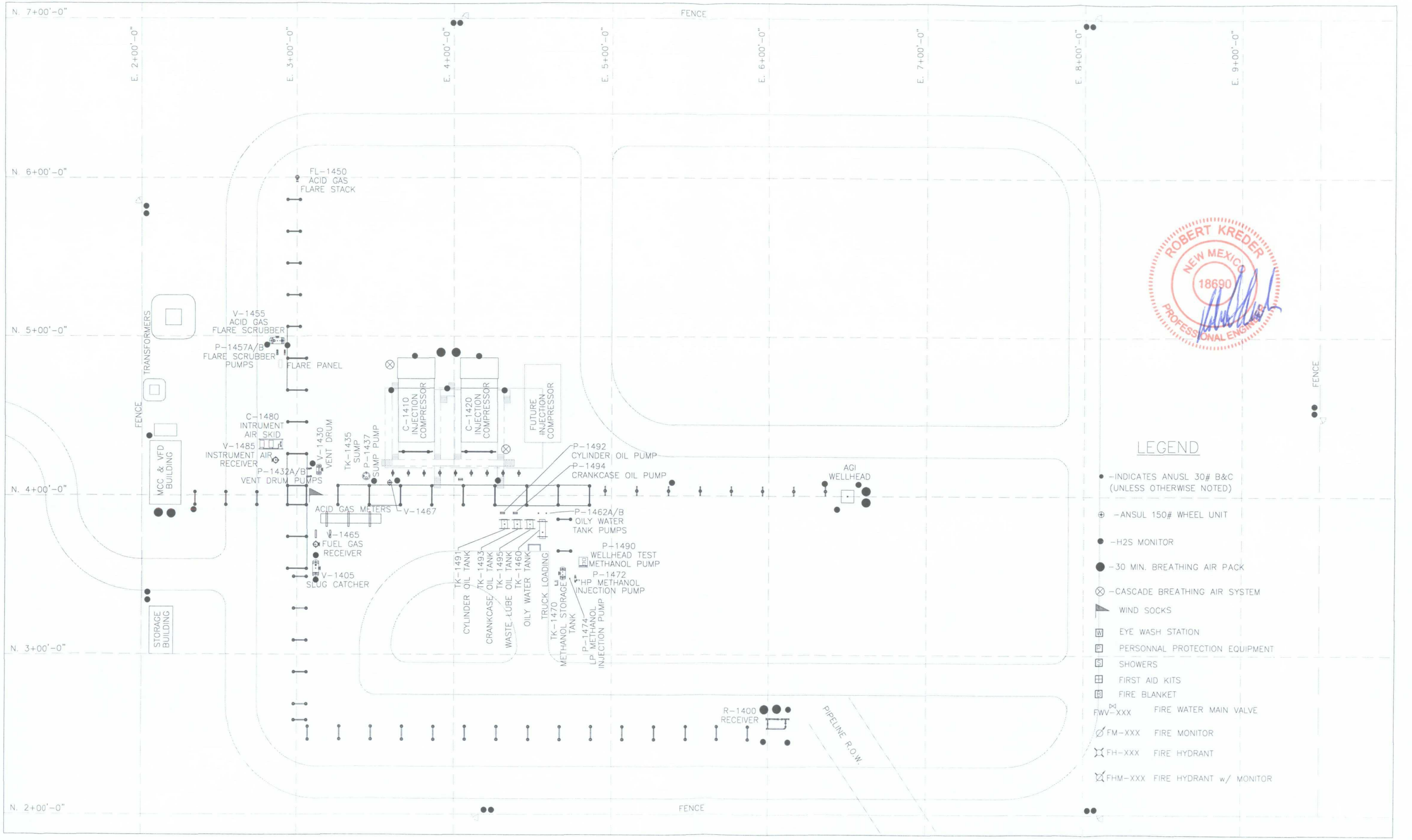
(Drawing Prepared with calculated ROE from Pasquill-Gifford Equations as specified in OCD Rule 118. If an alternative calculation procedure is approved the drawing will be updated.)

Radius of Exposure– Standard Calculations



Attachment 5 - Safety Equipment Location Plan

AGI Well Site
Linam Ranch Plant



LEGEND

- ● -INDICATES ANUSL 30# B&C (UNLESS OTHERWISE NOTED)
- ⊕ -ANSUL 150# WHEEL UNIT
- ● -H2S MONITOR
- ● -30 MIN. BREATHING AIR PACK
- ⊗ -CASCADE BREATHING AIR SYSTEM
- ◤ WIND SOCKS
- [W] EYE WASH STATION
- [P] PERSONNAL PROTECTION EQUIPMENT
- [S] SHOWERS
- ⊞ FIRST AID KITS
- [B] FIRE BLANKET
- FWV-XXX FIRE WATER MAIN VALVE
- ⊘FM-XXX FIRE MONITOR
- ⊠FH-XXX FIRE HYDRANT
- ⊠FHM-XXX FIRE HYDRANT w/ MONITOR

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PROFESSIONAL ENGINEER

REV.	DATE	REVISION	BY	CHK'D	ENGR.
0	03/24/09	ISSUED FOR CONSTRUCTION	MAC		RAK
1	5/18/09	ADDED ADDITIONAL PERIMITER H2S MONITORS	MAC		RAK

REV.	DATE	REVISION	BY	CHK'D	ENGR.

NOTES:

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Lakewood, CO. 80228 ZAPECS.com

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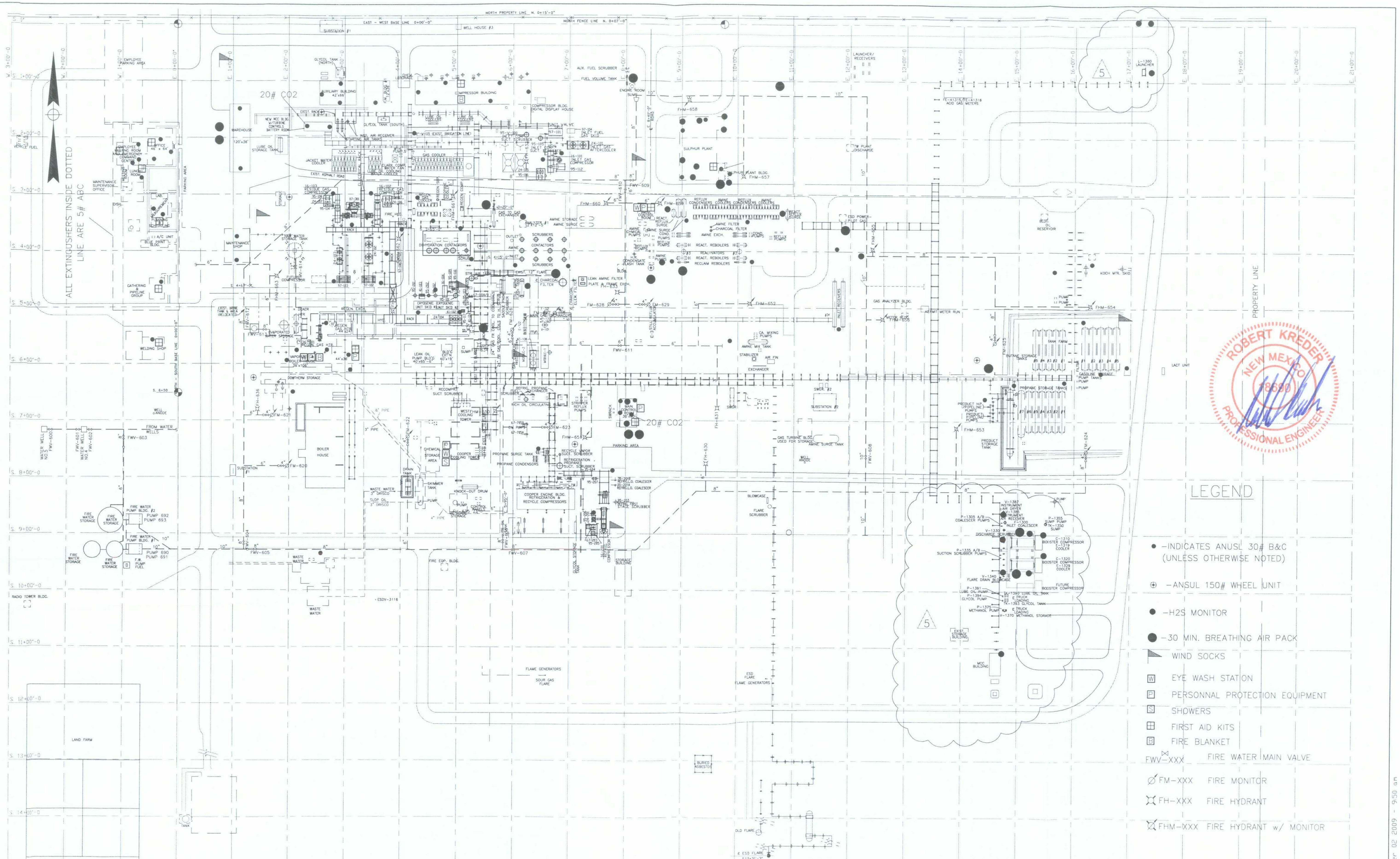
SAFETY EQUIPMENT LOCATION ACID GAS INJECTION WELL SITE

LINAM RANCH PLANT

DRAWN	MAC
DATE	01/18/08
JA NO.	
FILE NAME	M14-006
AFE NO.	
SCALE	NONE
BASE NO.	
DWG. NO.	M14-006 / 1

PLOT TIME: September 02 2009 - 9:52 am



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		

NOTES:

dcp Midstream

SAFETY EQUIPMENT
LOCATION PLAN
LINAM RANCH PLANT

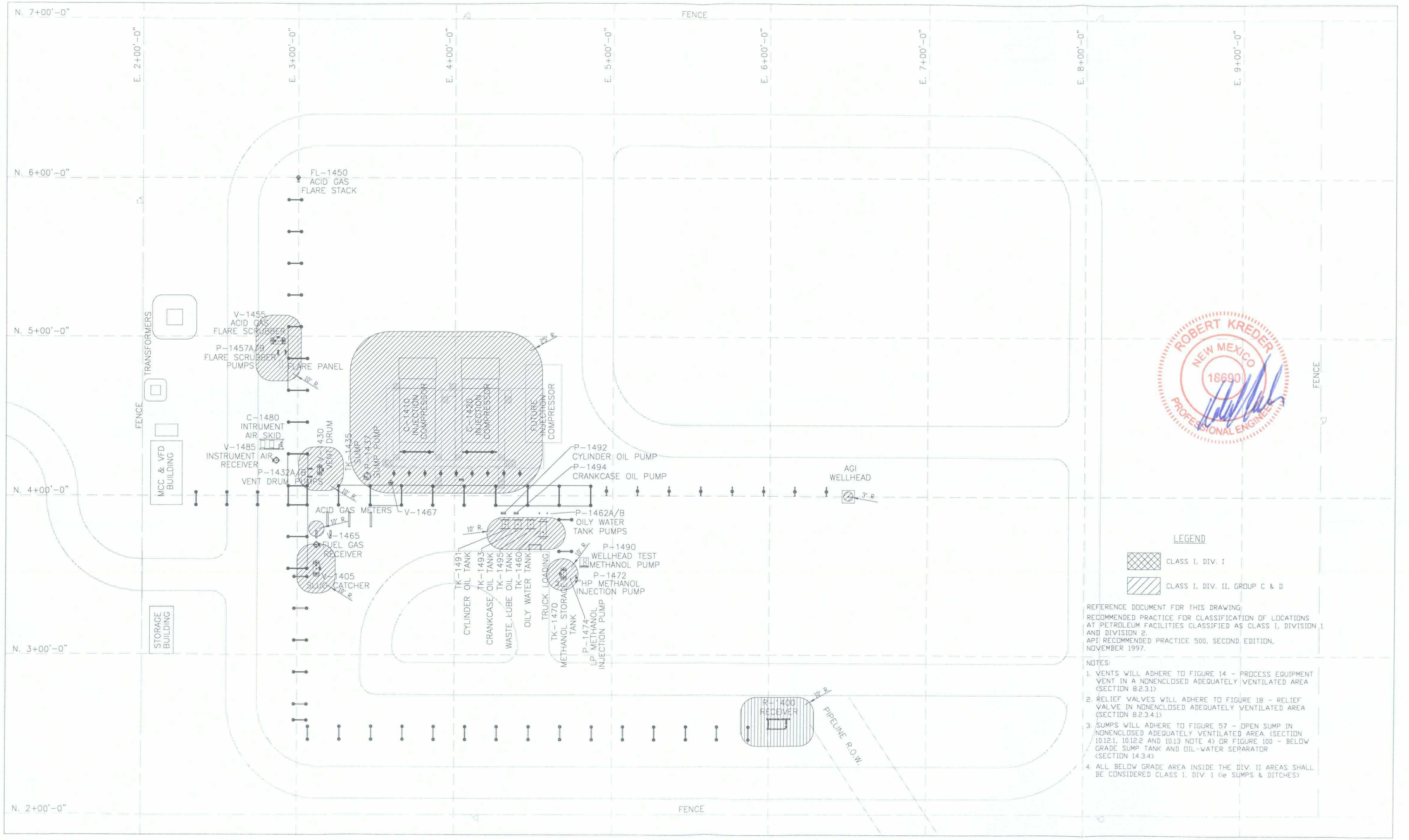
DRAWN: COLEMAN DATE: 5/14/96

JA NO. AFE NO. BASE NO. * DWG. NO. M-5
FILE NAME 07307MP002
SCALE 1"=80'
REV 5

PLOT TIME: September 02 2009 - 9:50 am

Attachment 6 - Electrical Classification Drawing

AGI Well Site
Linam Ranch Plant



ROBERT KREDER
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18690
PROFESSIONAL ENGINEER

LEGEND

CLASS I, DIV. I

CLASS I, DIV. II, GROUP C & D

REFERENCE DOCUMENT FOR THIS DRAWING:
RECOMMENDED PRACTICE FOR CLASSIFICATION OF LOCATIONS AT PETROLEUM FACILITIES CLASSIFIED AS CLASS I, DIVISION 1 AND DIVISION 2.
API RECOMMENDED PRACTICE 500, SECOND EDITION, NOVEMBER 1997.

NOTES:

1. VENTS WILL ADHERE TO FIGURE 14 - PROCESS EQUIPMENT VENT IN A NONENCLOSED ADEQUATELY VENTILATED AREA (SECTION 8.2.3.1)
2. RELIEF VALVES WILL ADHERE TO FIGURE 18 - RELIEF VALVE IN NONENCLOSED ADEQUATELY VENTILATED AREA (SECTION 8.2.3.4.1)
3. SUMPS WILL ADHERE TO FIGURE 57 - OPEN SUMP IN NONENCLOSED ADEQUATELY VENTILATED AREA (SECTION 10.12.1, 10.12.2 AND 10.13 NOTE 4) OR FIGURE 100 - BELOW GRADE SUMP TANK AND OIL-WATER SEPARATOR (SECTION 14.3.4)
4. ALL BELOW GRADE AREA INSIDE THE DIV. II AREAS SHALL BE CONSIDERED CLASS I, DIV. 1 (ie SUMPS & DITCHES)

REV.	DATE	REVISION	BY	CHK'D	ENGR.
0	03/24/09	ISSUED FOR CONSTRUCTION	MAC		RAK

NOTES:

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Lakewood, CO, 80228 ZAPECS.com

dcp Midstream

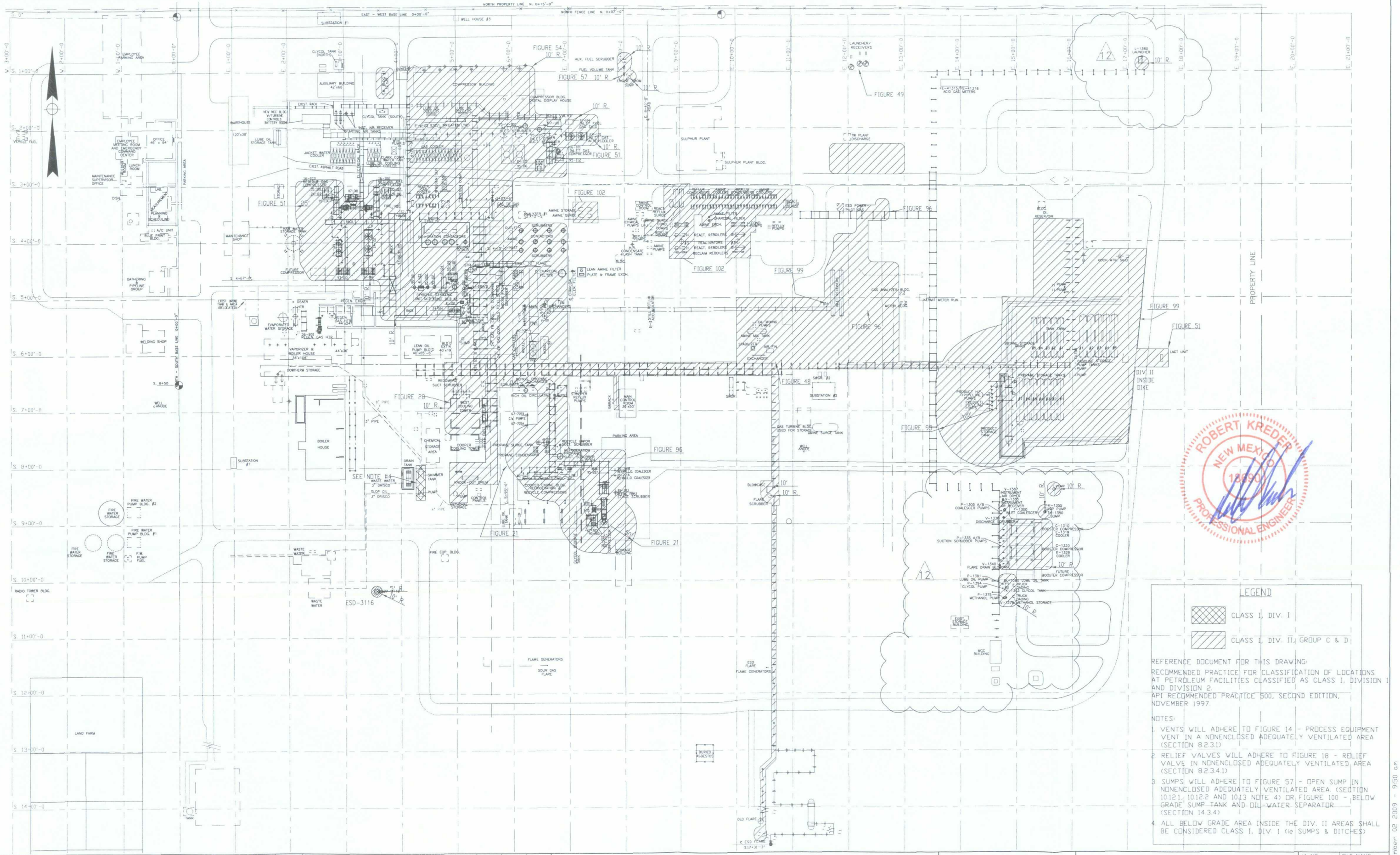
AREA CLASSIFICATION PLAN
ACID GAS INJECTION WELL SITE

LINAM RANCH PLANT

DRAWN: MAC DATE: 01/18/08

JA NO. | FILE NAME: E14-006
AFE NO. | SCALE: NONE
BASE NO.
DWG. NO. E14-006 / 0

PLOT TIME: September 02 2009 - 9:51 am



LEGEND

- CLASS I, DIV. I
- CLASS I, DIV. II, GROUP C & D

REFERENCE DOCUMENT FOR THIS DRAWING:

RECOMMENDED PRACTICE FOR CLASSIFICATION OF LOCATIONS AT PETROLEUM FACILITIES CLASSIFIED AS CLASS I, DIVISION 1 AND DIVISION 2.
API RECOMMENDED PRACTICE 500, SECOND EDITION, NOVEMBER 1997

NOTES:

1. VENTS WILL ADHERE TO FIGURE 14 - PROCESS EQUIPMENT VENT IN A NONENCLOSED ADEQUATELY VENTILATED AREA (SECTION 8.2.3.1)
2. RELIEF VALVES WILL ADHERE TO FIGURE 18 - RELIEF VALVE IN NONENCLOSED ADEQUATELY VENTILATED AREA (SECTION 8.2.3.4.1)
3. SUMPS WILL ADHERE TO FIGURE 57 - OPEN SUMP IN NONENCLOSED ADEQUATELY VENTILATED AREA (SECTION 10.12.1, 10.12.2 AND 10.13 NOTE 4) OR FIGURE 100 - BELOW GRADE SUMP TANK AND OIL-WATER SEPARATOR (SECTION 14.3.4)
4. ALL BELOW GRADE AREA INSIDE THE DIV. II AREAS SHALL BE CONSIDERED CLASS I, DIV. 1 (ie SUMPS & DITCHES)

REV.	DATE	REVISION	BY	CHK'D	ENGR.
10	9/6/07	UPDATED AREA CLASSIFICATION PER FIELD REVIE	wrt		
11	1/7/08	REVISED AREACLASSIFCATION PER MARK-UP	wrt		
12	3/13/09	ADDED AGI EQUIPMENT	MAC	DGC	
3	10/10/96	ADDED STABALIZER, EXCHANGER, FIN/FAN & LACT	JAM	DRP	
4	1/10/97	ADDED CLASS AROUND TREATING AREA	JC	REH	
5	5/14/98	ADDED ESD-3116	JC		
6	4/21/99	GENERAL REVISIONS AND UPDATE	JC		
7	9/25/99	REMOVED CHEVRON METER PRE MDC-99016	JC		
8	9/17/04	ADDED CLASS TO AREAS PUT BACK IN SERVICE	P.L.		
9	8/23/06	REVISED PER EQUIPMENT REMOVAL	wrt		

NOTES:

dcp Midstream

PLOT PLAN
AREA CLASSIFICATION
LINAM RANCH PLANT

DRAWN: G. IRVIN | DATE: 10/14/94

JA NO. 14-1597	FILE NAME 07307MP002
AFE NO. N9406	SCALE 1"=80'
BASE NO. *	
DWG. NO. E-006	12

PLOT TIME: September 02 2009 - 9:50 am

Attachment 7 - Hazardous Material Incident Notification Information Checklist

Hazardous Materials Incident Notification Information Checklist

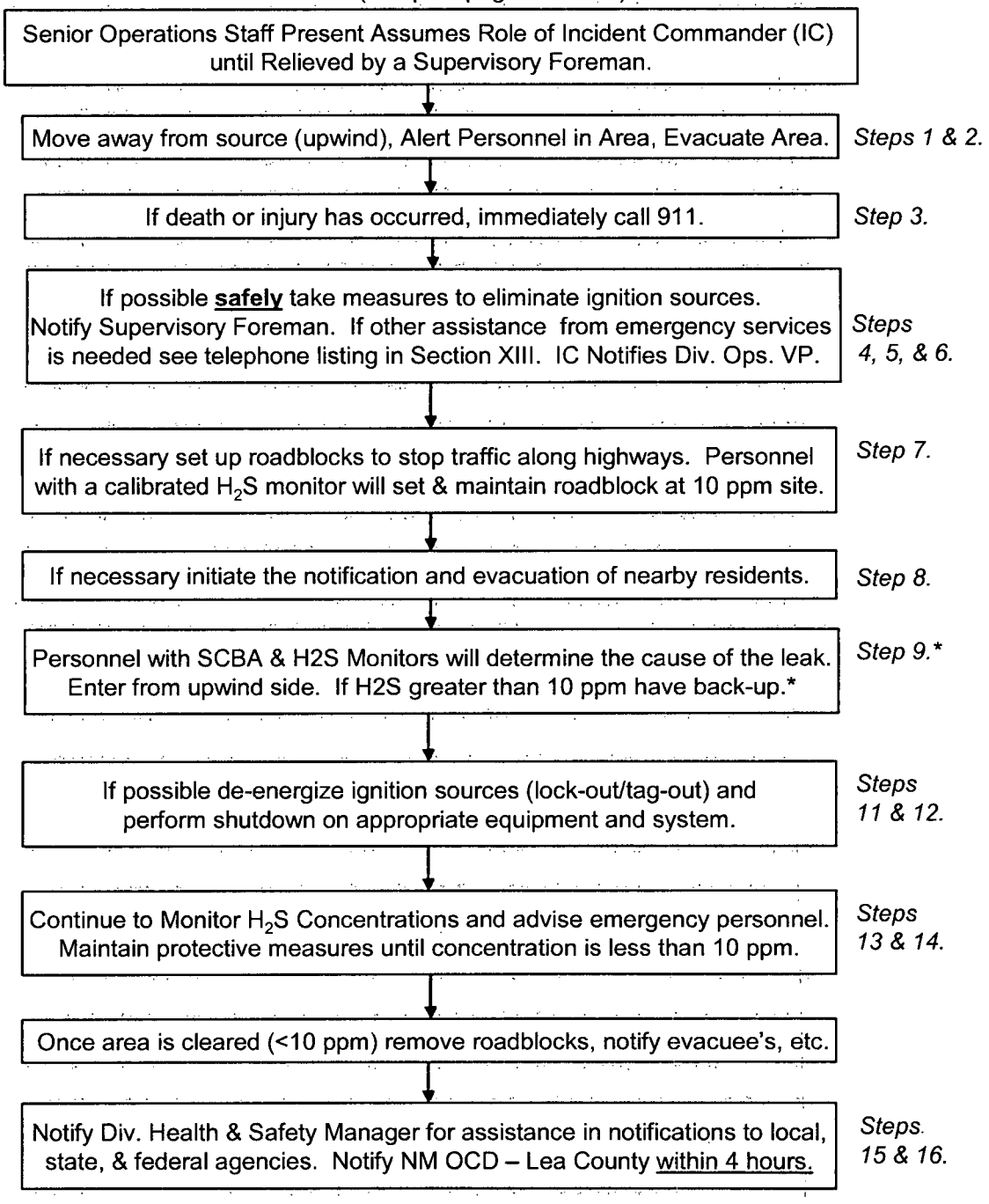
The following information should be given to dispatch. Dispatch should be instructed to give all information received to response agencies.

Notification	Time Dispatch Notified:
Caller	Caller Name: _____ Caller Location: _____ Caller Phone Number: _____
Hazardous Materials Information	Incident location _____ (Address or Nearest Milepost or Exit) Time Incident Occurred _____ Container Type _____ (Truck, train car, drum storage, Tank, pipeline, etc.) Substance _____ UN Identification Number _____ Other Identification _____ (Placards, shipping papers, etc.) Amount of material spilled/released _____ Current condition of material _____ (Flowing, on fire, vapors present, etc.)
Scene Description	Weather conditions _____ (i.e., sunny, overcast, wet, dry, etc.) Wind direction _____ Wind speed _____ Terrain _____ (i.e., valley, stream bed, depression, asphalt, etc.) Environmental Concerns _____ (Streams, sewers, etc.)
Affected Population	Number of people affected _____ Condition of people affected _____
Resources	Resources required _____ (EMS, HazMat Team, Fire Department, etc.)
Response	Response actions anticipated And/or in progress (i.e., rescue, fire suppression, containment, etc.)
Comments	_____ _____ _____ _____ _____

Attachment 8 – H_2S Contingency Plan Simplified Flowchart

Hydrogen Sulfide Contingency Plan Simplified Flowchart

(see plan pages 8 and 9)



Note, step 10 states that proper H_2S PPE, back-up, and IC authorization are required before entry.

XVIV. DISTRIBUTION LIST

NEW MEXICO OIL CONSERVATION DIVISION	1 COPY
NEW MEXICO DEPARTMENT OF PUBLIC SAFETY (Hobbs Office) STATE POLICE	1 COPY
NEW MEXICO DEPARTMENT OF PUBLIC SAFETY STATE POLICE	1 COPY
HOBBS FIRE DEPARTMENT	1 COPY
MEDICAL FACILITY (Eunice)	1 COPY
MEDICAL FACILITY (Hobbs)	1 COPY
EDDY COUNTY SHERIFF DEPARTMENT (Eunice)	1 COPY
EDDY COUNTY SHERIFF DEPARTMENT (Hobbs)	1 COPY
LOCAL EMERGENCY MANAGEMENT COMMISSIONER	1 COPY
DCP MIDSTREAM, L.P. Eunice Plant Office	1 COPY
DCP MIDSTREAM, L.P. Hobbs Office	1 COPY
DCP MIDSTREAM, L.P. Linam Ranch Gas Plant	1 COPY
DCP MIDSTREAM, L.P. Midland Office	1 COPY