

H2S - 048

**H2S
CONTINGENCY
PLAN**

2020

From: [Woodell, Rebecca F.](#)
To: [Chavez, Carl J. EMNRD](#)
Cc: [Klein, Cindy S.](#); [Wrangham, Calvin W.](#); [Hill, Terrell V.](#)
Subject: [EXT] Targa Resources Eunice Plant H2S CP
Date: Friday, May 1, 2020 4:02:02 PM
Attachments: [Copy of OCD Targa Eunice GP w AGI Well Checklist 1-6-2020.xls](#)
[Targa Eunice Plant Pipeline and AGI H2S Contingency Plan 4.2020 REVISION 8.2 .pdf](#)
Importance: High

Good afternoon Mr. Chavez,

Please find attached the revised Eunice Plant H2S CP. Also attached is the Copy of OCD Targa Eunice AGI Well Checklist with Targa's additional response following the April 2 conference call. As previously discussed with Cindy Klein, the Appendix I (AGI Well Site Evacuation Routes & Safety Equipment) is pending revision from the Targa drafting department. The drafter began experiencing program network issues, due to COVID/19 work from home restrictions. Targa IT department is attempting to resolve those issues. Targa will send the revised Appendix I as soon as it is completed.

Hope you have a nice weekend. Stay safe.

Thank You,



Rebecca Woodell - Environmental Specialist

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H₂S CONTINGENCY PLAN

Targa Eunice Gas Plant and Acid Gas Injection Wellsite

owned by
Versado Gas Processors, L.L.C.

operated by
Targa Midstream Services LLC

April 23, 2020

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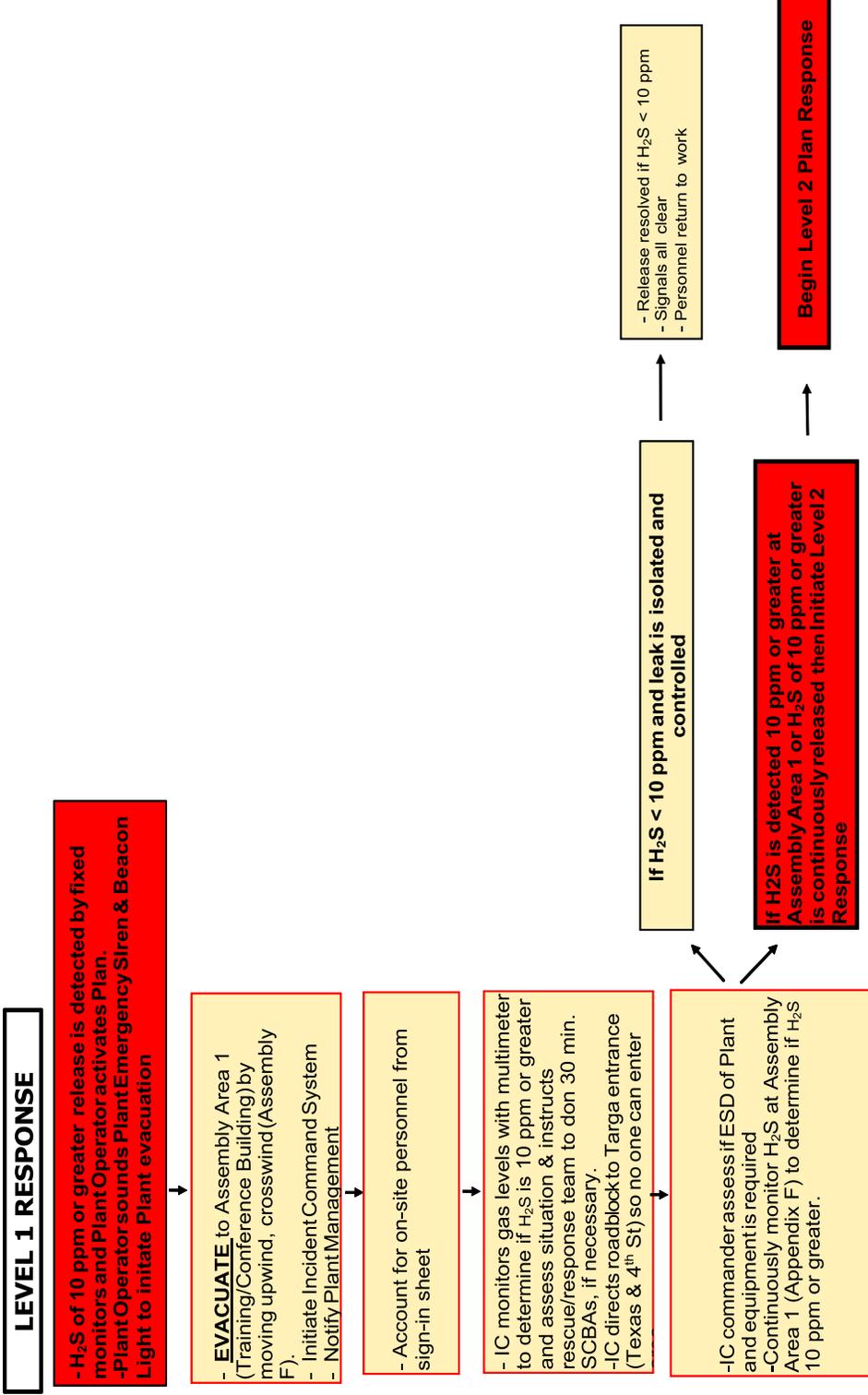
- Figure 1 Eunice Gas Plant, AGI Pipeline, and AGI Wellsite, Lea County, NM
- Figure 2 General schematic of pipeline release detection system
- Figure 3 Worst Case Scenario ROE

APPENDIX

- Appendix A Resident Phone Contact List (Residents in 500 ppm)
- Appendix B Distribution List
- Appendix C Radii of Exposure Calculation including Gas Analysis
- Appendix D Radii of Exposure Map of Plant
- Appendix E Radii of Exposure Map of AGI Well
- Appendix F AGI Well Site Relative to Eunice Plant
Emergency Assembly Areas and Roadblocks
- Appendix G Emergency Notification List
- Appendix H Targa Notification List
- Appendix I AGI Well site Evacuation Routes and Safety Equipment
- Appendix J Plant Evacuation Routes and Safety Equipment
- Appendix K C-141
- Appendix L Employee Training Documentation Form

1. OPERATOR – QUICK REFERENCE

TARGA EUNICE GAS PLANT RELEASE



TARGA EUNICE GAS PLANT RELEASE

LEVEL 2 RESPONSE

- H₂S detected at 10 ppm or greater at Assembly Area 1.
- Corrective actions at Level 1 unsuccessful
- H₂S of 10 ppm or greater release
- Emergency Plant Siren & Beacon Light continue

- Incident Commander determines if Plant and/or additional equipment should be shut-down.

- IC instructs notification and evacuation of affected public in 500 ppm ROE per Appendix A (Resident Phone List).
- Simultaneous notification is made per Appendix G (Emergency Notification List) and Appendix H (Targa Notification List).
- EVACUATE to Assembly Area 2 & Set-up roadblock (4th St. & TX Ave.) and Appendix F. Monitor for 10 ppm or greater.

- IC monitors gas levels for 10 ppm or greater, with multimeter, at Assembly Area 2 & roadblock and assess situation & instructs further evacuation, if necessary, to Assembly Area 3 (outside 100 ppm ROE) and recommend roadblock locations in Appendix F.
- Residents in 100 ppm ROE (Figures 1 and 3) and public areas that could be affected are evacuated by Eunice emergency responders' mass and reaction methods, assisted as needed by Targa personnel.

If H₂S < 10 ppm

If H₂S of 10 ppm or greater continues maintain evacuation levels until all gas is flared and system is de-pressurized.

Release resolved
- Signals all clear
- Personnel return to work
- Notify parties on Appendix A, G & H and people in 100 ppm ROE of all clear status. Re-establish traffic.

TARGA EUNICE AGI PIPELINE RELEASE

LEVEL 1 RESPONSE

- Alarm sounds in control room initiating Plan in which the:
**H₂S content alarms at 10 ppm or greater, in the annulus, between outside of 16" and inside of 22" indicates leak on 16"
**Low air pressure flow alarm indicates 22" in. diameter pipeline is compromised.



-Operator initiates pipeline ESDs (see Appendix H) which isolates the pipeline and all gas is routed to flare for safe disposal.
- Control room operator alerts any personnel at AGI wellsite of the alarm via handheld phone/radio.
-Personnel at AGI wellsite monitor H₂S levels for 10 ppm or greater and evacuate to AGI Well/Pipeline Assembly Area 1 (Appendix F).

- Operations notifies facility management (Appendix F-Emergency Notification List) with simultaneous notification of Eunice emergency responders (Appendix G).
- Operations direct field operators to monitor H₂S levels along pipeline using portable H₂S monitors and evacuate anyone as necessary along right-of-way AGI Well/Pipeline Assembly Area 2 (Loop 207 & HWY 18) and notify residents per Appendix A (Resident Notification List).



-Monitor gas levels to below 10 ppm and when all gas has dissipated:
- Signals all clear
- Personnel return to work
- Notify parties on Appendix A, G, & H of all clear status

TARGA EUNICE AGI WELLSITE RELEASE

LEVEL 1 RESPONSE

- H₂S of 10 ppm or greater detected by fixed monitors.
- AGI Wellsite Audible Alarm & Light Beacon activated onsite and control room is alerted.
- If fixed monitors detect 20 ppm or greater the station will automatically be shut-down and gas will be routed to flare for safe disposal.

- Any employees at AGI Wellsite evacuate area, crosswind or upwind, to AGI Assembly Area 1 (Appendix F).
- Notify Plant Operator of status.
- Monitor H₂S for 10 ppm or greater at AGI Assembly Area 1.

LEVEL 2 RESPONSE

- If necessary, activate the station ESD this will shut-down all equipment and automatically all gas will be routed to flare for safe disposal.
- Move to AGI Assembly Area 2 (Appendix F) enroute stop at home located south of AGI wellsite and evacuate resident (Nikki Acosta 575-390-9382).
- Establish roadblocks and monitor roadblocks and assembly areas for 10 ppm or greater (Appendix F).
- Simultaneously control room operator initiates notifications as necessary in Appendix A, G, and H.
- Residents in the 100 ppm ROE (Figures 1 and 3) and public areas that could be affected are evacuated by Eunice emergency responders' mass and reaction methods, assisted as needed by Targa personnel.

When H₂S < 10 ppm

Release resolved
Signals all clear
Personnel return to work
-Notification of all clear status (Appendix A, G, and H) and people in the 100 ppm ROE. Re-establish traffic.

Resident Contact List (also in Appendix A)

	Name	Location	Phone Number
1	Shelby Hacker	West of Plant	575-631-4208
2	Judy Landes	West of Plant	575-631-5680/575-394-3075
3	Vacant	West of Plant	
4	Marsella Werner	West of Plant	575-394-3101
5	Targa Engineering Office	West of Plant	575-394-0014
6	Targa Trailer	West of Plant	No occupant present
7	Norman Smiley (Amber)	N32° 23.762' W103° 09.038'	575-602-2813
8	Desert Oasis RV Park	North West of Plant	575-394-0100
9	Gravity Oilfield Services	North of Plant	575-394-4084
10	Donny Freudiger	Southwest of Plant	575-631-6997
11	Dorotea Reyna's	N32° 23.287' W103° 09.562'	575-394-2757
12	Anselrno Gayton	N32°23.031' W103° 09.530'	432-631-0707
13	Shena Gayton	N32°23.031' W103° 09.530'	432-631-1059
14	Paula Gayton	N32°23.031' W103° 09.530'	575-263-9058
15	Joe Ruiz	N32°22.866' W103° 09.558'	575-394-3310
16	Nici Acosta	South of Eunice Booster Station	575-390-9382

2. IMMEDIATE ACTION PLAN

Targa Plant Incident Commander is 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.

Any Targa Facility employee is authorized to activate the Plan. All employees are trained to recognize H₂S hazards and at the discretion of any employee the plan can be activated, and notifications will begin. Any employee shall activate the Plan when an uncontrolled release with a concentration greater than 10 ppm is discovered, and at a minimum any employee shall activate the Plan whenever a release may create a hydrogen sulfide concentration of more than 100 ppm in a public area, 500 ppm at a public road or 100 ppm 3000 feet from the site of the release.

The following outlines the immediate action Plan as provided in the Flow Diagrams in Section 1. When the individual hears, sees, or feels an alert as is recognized by audible, visual, or personal monitor vibration the individual is to proceed to safety as soon as possible which entails evacuation and donning 30-minute SCBA if escape is warranted. This is to be used when responding to an H₂S release occurring at the Plant, acid gas pipeline or the acid gas well. 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.

Some steps may be taken simultaneously.

- A. Request assistance, if needed.
 - 1. Move away from the source and get away from the affected area (downwind, crosswind, and out of low-lying areas).
 - 2. Don personal protective breathing equipment (30-minute SCBA) for escape.
 - 3. From the Plant area proceed to the designated Plant Emergency Assembly Area and alert supervisor by radio or phone in. Persons at the AGI wellsite and pipeline will evacuate crosswind, upwind, and outside of ROE as situation calls for and proceed to AGI Well and Pipeline Emergency Assembly Area and alert supervisor by radio or phone in. See Appendix F for location of Assembly Areas.
 - 4. Assist personnel in distress as directed by Incident Command with proper PPE, i.e., 30-minute SCBA unit.
 - 5. Evacuate as directed by Incident Command at Assembly Area 1, 2, or 3 depending on the "Level Response" outline beginning on Section 1 Flow Diagrams
 - 6. Account for on-site personnel using site sign-in log sheet.

- B. After a 30-minute SCBA is put on and Incident Command has designated, the emergency responder will take immediate measures to control the presence of or potential H₂S discharge and to eliminate possible ignition sources. Emergency shutdown procedures should be initiated as deemed necessary to correct or control the specific situation.

- C. After evacuation has occurred, the public will be alerted as directed by the Level Responses and directed by Incident Command (directly or through appropriate government agencies). Initiate evacuation of those within the exposure area. See Appendix A for phone contact list for locations in the 500 ppm Radius of Exposure (ROE) and alert the public that maybe affected that are in the 100 ppm ROE either directly or through appropriate government agencies by calling 911. See figure 1 and 3 for the 100 ppm locations. Eunice emergency responders will initiate mass notification and reactionary measures to alert the public.
- D. Contact the Area Manager or first available person on the call list. Notify them of the circumstances and whether immediate assistance is needed. The Area Manager should notify (or arrange for notification of) other supervisors and other appropriate personnel (including public officials) on the Appendix G and H call lists, as necessary.
- E. Cordon off the exposure area to prevent entry, make recommendations to public officials regarding blocking unauthorized access to the unsafe area, and assist as appropriate (Appendix F). Make recommendations to public officials regarding evacuating the public and assist as appropriate (Appendix G).
- F. Notify, as required, state and local officials and the National Response Center to comply with release reporting requirements. See Appendix G.
- G. First Aid Kits are in the Plant Office building, Control Room, MCC building at AGI Well site, and in Targa Field Operator vehicles. Field Operator vehicles will be used for roadblocks (Appendix F). H2S monitors will be brought from the control room by the operators and from the field office by the field operators to any roadblocks or Assembly Areas being used. Monitoring will occur continuously for 10 ppm or greater at these sites to ensure no H2S is present.
- H. Monitor the ambient air in the area of exposure for 10 ppm or greater (after following abatement measures) to determine when it is safe for re-entry. Ensure all fixed monitors are clear and not alarming before entering these areas.

3. SCOPE

The Eunice Gas Plant is a natural gas processing plant which processes gas that contains hydrogen sulfide and/or sulfur dioxide. In addition, the Acid Gas Injection well and connecting pipeline convey hydrogen sulfide and carbon dioxide. This Hydrogen Sulfide Contingency Plan (Plan) has been developed to serve as a guidance document to protect the welfare of individuals and the environment in the event of a hazardous hydrogen sulfide release. The Plan satisfies and conforms to promulgated New Mexico Administrative Code rules and industry standards of facility handling of hydrogen sulfide:

- New Mexico Oil Conservation Division Rule 11 (NMAC, 2008);
- American Petroleum Institute's "Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide," Recommended Practice 55 (API, 2007).

Specifically, the Plan details, site-specific hydrogen sulfide release 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.

Targa Eunice Gas Plant, the connecting pipeline to the AGI wellsite, and AGI wellsite have a series of control points allowing for shut down and isolation of gas streams and acid injection to mitigate gas release situations. Alarms will be activated at 10 ppm. Should it be necessary to shut in portions or all of the Plant, gathering system, or well site, Emergency Shut Down (ESD) valves can be activated by operations from the control room which will shut down the process and route gas to flare systems for combustion. In addition, the AGI well is shut in when emergency conditions dictate. These ESD valve locations are shown on Appendix I and J for the plant, pipeline, and well site.

3.1 PLANT LOCATION

The Plant is in Eunice, Lea County, New Mexico and encompasses 20+ acres (Figure 1). It is owned by Versado Gas Processors L.L.C. and operated by Targa Midstream Services Limited Partnership:

1. **Plant location is Section 3, Township 22S, Range 37E in Eunice, Lea County, New Mexico.**
2. **Plant coordinates are Latitude: 32.425264°N, Longitude: -103.147499° W.**

3. **Plant physical address is ¾ miles southeast of Eunice, New Mexico 88231.**
4. **Plant mailing address is P. O. Box 1909, Eunice, New Mexico 88231.**
5. **To reach the Plant from Eunice, NM, from the intersection of Main Street and Texas Avenue (New Mexico Highway 176), travel east on Highway 176 (approximately 0.6 miles) to the intersection of US Hwy 176 and County Road 18 (Middle Plant Lane) in Eunice, New Mexico. Turn right onto County Road 18 and travel south approximately 0.6 mile to the entrance to the Eunice Gas Plant.**

3.2 ACID GAS INJECTION PIPELINE AND WELL LOCATION

The Eunice Acid Gas Injection line is in Lea County, New Mexico. The acid gas line encompasses approximately a 5-mile-long corridor of privately owned land. A 100-foot-wide easement for line installation has been established. The acid gas injection line is owned by Versado Gas Processors L.L.C. and operated by Targa Midstream Services LLC.

The acid gas injection pipeline is located in the Sections 3, 10, 15, 22 and 27, Township 22 South, Range 37 East, Lea County, New Mexico. The acid gas injection well is located 1,200 feet from the west line and 2,580 feet from the south line, Unit L of Section 27, Township 22 south, Range 37 east, NMPM, Lea County, New Mexico.

The location of the plant, AGI pipeline, and AGI well site is illustrated on Figure 1.

3.3 DESCRIPTION OF PLANT OPERATIONS

1. The Plant operations include gas processing, conditioning, and compression, as well as flow lines and storage tanks. The Plant gathers and processes produced natural gas from Lea County, 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; and dehydrated to remove the water content. The processed natural gas and recovered gas liquids are shipped to various customers.
2. Because the natural gas that is gathered at the Plant contains hydrogen sulfide, it must be treated or processed to remove these and other impurities. The carbon dioxide and hydrogen sulfide (H₂S) stream that is removed from the natural gas in the amine treating process is compressed up to 50 psi and is sent via a high density 16" polyethylene which is inserted into a 22" poly line (Figure 2). The gas travels from the Eunice Plant through the pipeline to the acid gas injection well. The raw field inlet gas enters the Eunice Plant at a flow rate of approximately 100 mmcf/d and flows into the AGI pipeline from the Plant at a volume of up to 5 mmcf/d.
3. The Plant has installed this acid gas injection (AGI) well to accommodate disposal of the acid gas stream generated by existing operations, therefore permanently shutting down the Sulfur Recovery Unit and its permitted air emissions. The operation generates up to 5 mmcf/d of acid gas for disposal, which consists of approximately 17.5% H₂S and 82% carbon dioxide (obtained from process knowledge of continuous gas analysis and flow measurements). The operations of this wellsite are provided below in Section 3.4 Description of Acid Gas Wellsite Operations.
4. Control air activated ESD valves control gas streams from two source points (total of two ESD valves exist for the Eunice plant (see Appendix J). One (1) ESD valve is located on the southwest side of the plant which will shut-off gas from the west. North and east gas lines are both shut-off by one (1) ESD to the southeast of the plant. The shut-off is initiated depending on process conditions. Gas will be routed to the flare to burn any gas thus reducing toxic emissions. These valves can be automatically opened or closed by the Plant Control Room.
5. The acid gas flare system located at the Eunice Plant is specifically designed for acid gas service. This flare stack was modeled and designed for proper SO₂ dispersion based on Facility H₂S volumes. The flare stack is equipped with a thermocouple that will alarm in the Eunice Plant Control Room if the flare pilot would go out, signaling non-combustion of gas. In the case that the pilot temperature drops below 500 F, the flare pilot system will automatically try to reignite the pilot with a flame front generator to minimize any non-combusted acid gas. This thermocouple and alarm system is set up in the Facility maintenance tracking system for periodic checks to determine and document proper operation. The presence of the flare pilot flame is monitored continually by this system and the Plant Operators.

6. Signs are present at the Eunice Plant which warn of hydrogen sulfide gas stating “poison gas” and complies with current ANSI standard Z535.1-2002 for safety color coding.
7. Wind direction indicators known as windsocks are located at the Plant site so that one or more are always visible from all principal working areas (Appendix J).

3.4 DESCRIPTION OF ACID GAS WELLSITE OPERATIONS FROM EUNICE PLANT

1. The acid gas stream is received at the well site (located at the South Eunice Compressor Station approximately five miles south of the Plant in Figure 1) where it mixed with water and is further compressed to 1,300 psi for injection or according to OCD order. This is accomplished by using an electric driven, reciprocating compressor.
2. This water is transported from the Plant to the AGI compressor site via a poly pipeline which is in the same ditch directly above the outer 22” AG line.
3. Emergency Shutdown Valves are located at the inlet of the Pipeline from the Eunice Plant and another one at the compressor and injection well end and can be remotely operated from the Eunice Plant Control Room in case of emergency (Appendix I). There are also automatic activated valves at the AGI Wellsite to move any gas from the pipeline to a Flare for safe removal in an emergency when the ESD valves are closed.
4. The acid gas compressor area is equipped with a fixed H₂S detector system which alarms on site and in the Eunice Plant Control Room which is occupied 24 hours a day.
5. The AGI pipeline and Eunice Plant gathering system is made up of underground piping. The ROW, road crossings, and public areas have warning signs containing the words “poison gas” and “H₂S” to warn the public that a potential danger exists.
6. The compressor/injection area is protected from public access with chain link fencing.
7. Wind direction indicators known as windsocks are located at the compressor/injection site so that one or more are always visible from all principal working areas (Appendix I).
8. The pipeline is monitored for a release by the following two methods:
 - Hydrogen sulfide detectors measuring gas concentration within the pipeline from the Eunice Plant to the Compressor.
 - Pressure changes in the pipeline

The following schematic displays a general version of release detection of the pipeline system:

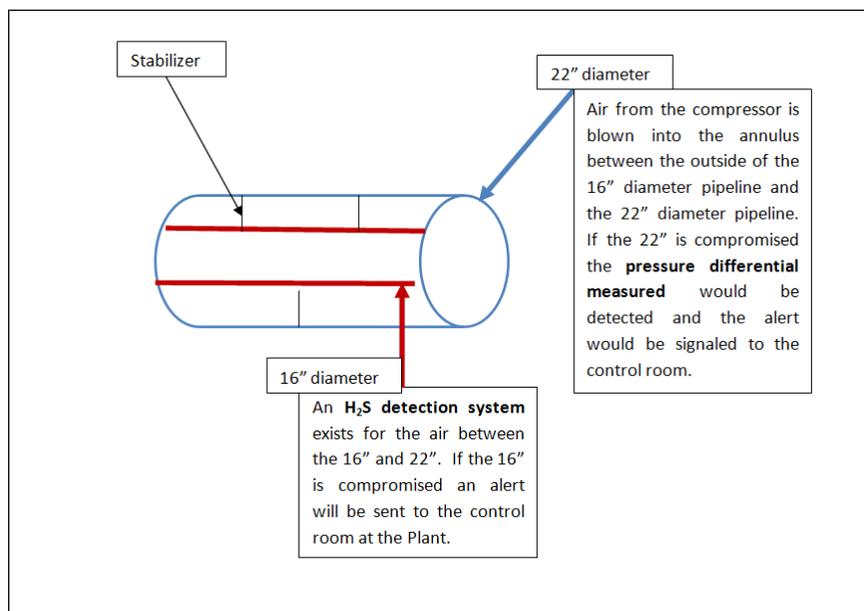


Figure 2: General schematic of pipeline release detection system

9. The acid gas is injected into the San Andres Formation at a depth of 4,250 feet to 4,850 feet below the surface per OCD order. The wellbore is constructed with three casing strings, all with cement circulated to the surface. The well and associated equipment is constructed per NACE Standard MR0175. The acid gas well is permitted under Division Order No. R-12809 and Administrative Order SWD-1611. The AGI well API number is 30-02-521497, Latitude: 32.36270, Longitude: -103.15546. Sign at the well head reads: Targa South CS SWD-1 Unit L, Sec 27, T 22S, R 37E Lea County New Mexico.
10. The well site has a Subsurface Safety Shut-down Valve located approximately 250 feet below the ground surface and is actuated automatically when pressure is detected below 300 psi or higher than 2,000 psi. This valve shuts off any flow from the AGI wellsite to prevent backflow to the subsurface.
11. The wellsite, normally unmanned, is fully automated and controlled by the Eunice Plant. Targa personnel inspect the site daily. A camera is onsite with visual display of the compressor area linked directly to the control room for security and safety purposes. The control room is manned 24 hours per day.

Multiple control points exist to prevent a hazardous release of hydrogen sulfide. Concentrations of hydrogen sulfide and pressures within the system are constantly monitored via hydrogen sulfide detectors and pressure gauges to ensure proper operational conditions and maintain the safety of the welfare of personnel, public, and the environment. All Targa employees and Targa subcontractors are required to have hydrogen sulfide monitors on their person.

4 RADII OF EXPOSURE (ROE)

For the existing operations, the Radius of Exposure for both 500-ppm and 100-ppm of H₂S gas was determined using the Pasquill-Gifford derived equation, as defined by NMAC, which uses the maximum daily rate of the gaseous mixture into the Plant and into the AGI wellsite:

The gas flow rates, and gas chemical analysis used to calculate the ROE is discussed in greater detail in **Appendix C - ROE Calculation including Gas Analysis.**

Eunice Plant, AGI Pipeline, and Wellsite-

500 ppm ROE – public road	3,198 feet
100 ppm ROE – public area	6,998 feet

5 TRAINING/DRILLS/EDUCATION

5.1 TRAINING

Targa recognizes that the most critical portion of this plan is Emergency Procedures. To ensure the most effective implementation of these procedures, pre-emergency measures shall be completed to attain a state of preparedness. These actions are as follows:

- An annual mock emergency drill is held annually in which Eunice emergency responders are invited as well as the public
- Every employee is to be completely familiar with the contents and location of the contingency plan.
- Surveillance and preventative maintenance to minimize the possibility of an accidental release of gas.
- Training and drills will be conducted as further described below.
- All emergency breathing equipment is maintained and ready for use.
- This Plan is made available to appropriate public response officials and shall be reviewed and discussed thoroughly with the City of Eunice emergency response officials.
- Targa will use brochures, public notices, or other means, as deemed appropriate and practical, to alert and educate any persons who reside within the potential areas of exposure.

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 H₂S 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 Targa Safety Standards Manual.

Respirator Training and Mask Fit Testing - All Plant personnel receive annual training for proper selection and operation of respirators per OSHA regulations and standards.

Hydrogen Sulfide and Sulfur Dioxide Training – All Plant personnel receive annual refresher training on hydrogen sulfide and sulfur dioxide, which is conducted by the Targa Training Group. If an individual is unable to attend, they may be required to attend a third-party training session. All contract employees and visitors 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.

5.2 CHARACTERISTICS OF H₂S, SO₂ AND CARBON DIOXIDE

5.2.1 Hydrogen Sulfide (H₂S)

Eunice Plant-

The proposed inlet gas streams into the Plant will contain approximately 6,528 ppm (or 0.65 mole percent) of hydrogen sulfide. (Appendix C). The gas flow rate for the inlet to the plant is 110 mmcf/d (based upon process knowledge as measured by total flow instrumentation set at continuous monitoring).

Pipeline to AGI Wellsite and Wellsite-

The acid gas in the pipeline from the Eunice Plant will have a hydrogen sulfide concentration equal to 17.5% and a carbon dioxide content equal to 82%. The hydrogen sulfide flow rate utilized for the Radius of Exposure calculation for the acid gas through the pipeline and well is 175,378 ppm (17.5%). The corresponding flow rate is equal to 5 mmcf/d (based upon process knowledge as measured by total flow instrumentation with continuous monitoring) see Appendix C for gas analysis documentation.

Hydrogen sulfide is a colorless, toxic and flammable gas, and 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 & Characteristics	
CAS No.	7783-06-4
Molecular Formula	H ₂ S
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		Physical Effect
ppm	%	
1	.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 & 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

5.2.2 Sulfur Dioxide (SO₂)

Sulfur dioxide is produced as a by-product of H₂S 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 during maintenance operations.

It is colorless, transparent, and is non-flammable, with a pungent odor associated with burning sulfur.

Sulfur dioxide is heavier than air but will 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 & Characteristics	
CAS No.	7446-09-5
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	49.1 psia
Auto Ignition Temperature	N/A
Lower Flammability Limit	N/A
Upper Flammability Limit	N/A
Stability	Stable
Corrosivity	Could form an acid rain in aqueous solutions

Physical Effects of Sulfur Dioxide	
Concentration	Effect
1 ppm	Pungent odor, may cause respiratory changes
2 ppm	Permissible exposure limit; Safe for an 8 hour exposure
3-5 ppm	Pungent odor; normally a person can detect 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 (IDLH)
150 ppm	So irritating that it can only be endured for a few minutes
500 ppm	Causes a sense of suffocation, even with first breath
1,000 ppm	Death may result unless rescued promptly.

5.2.3 Carbon Dioxide

The current inlet gas streams to the Plant contain approximately 3.3% carbon dioxide and the acid gas stream to the acid gas injection well contains approximately 82% of carbon dioxide.

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

Carbon Dioxide Properties & 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	Concentration	Effect
1.0 %	10,000 ppm	Breathing rate increases slightly
2.0 %	20,000 ppm	Breathing rate increases to 50% above normal level. Prolonged exposure can cause headache, tiredness
3.0 %	30,000 ppm	Breathing rate increases to twice normal rate and becomes labored. Weak narcotic effect. Impaired hearing, headache, increased blood pressure and pulse rate
4 – 5 %	40,000 – 50,000 ppm	Breathing increases to approximately four times normal rate, symptoms of intoxication become evident, and slight choking may be felt
5 – 10 %	50,000 – 100,000	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 %	100,000 – 1,000,000 ppm	Unconsciousness occurs more rapidly above 10% level. Prolonged exposure to high concentrations may eventually result in death from asphyxiation

Fire Extinguishers - All Plant personnel are trained annually on fire extinguisher selection and use.

Hazard Communication - All Plant personnel are trained annually on Hazard Communication and SARA Title III Right-to-Know information. The annual training includes, at a minimum, a review of material safety data sheets (MSDS) for those materials that are present at the Plant and labeling.

Personal Protective Equipment (PPE) - All Plant personnel are trained annually on the Targa 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. Each Targa employee and subcontractor must have proper PPE which is provided; emergency safety equipment is located at the Plant and AGI Wellsite.

5.3 RESPONSIBILITY FOR CONFORMANCE WITH THE H₂S 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 H₂S Plan) as well as the following documents:

- Targa Midstream Safety & Health Manual.
- Targa Midstream Eunice Plant Emergency Response, Groundwater Discharge Plan and Oil Spill Contingency Plan; and
- Targa Midstream Environmental Policies and Programs.

5.4 REVISIONS TO THE PLAN

The H₂S Plan will be reviewed annually and revised 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, specifically those areas within the radii-of-exposure. If any revisions are made to the plan redistribute the revised plan per Appendix B.

5.5 AVAILABILITY OF THE H₂S PLAN

The H₂S 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 Plant in the Area Manager's office, control room, all Plant Supervisors, and at the AGI wellsite (MCC Building). See Appendix B for the H₂S Distribution List, which lists all the additional entities that have been provided a copy of the H₂S Plan.

5.6 CONTENT OF THE PLAN

At a minimum, the H₂S Plan will contain information regarding:

1. The emergency procedures to be followed in the event of an H₂S or SO₂ release that may pose a threat to the Plant, Pipeline, AGI compressor site, public or public areas, and public roads.
2. The characteristics of H₂S and SO₂.
3. A facility description, map and/or drawings; and
4. Information regarding training and drills to be conducted related to this Plan.

5.7 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 H₂S Plan and all personnel have been evacuated out of the affected area, the Area Manager, or his designee, will be the On-Scene Incident Commander (IC in this Plan). Upon notification of an emergency the Area Manager or his relief will serve as the Field Incident Commander (FIC). Under certain conditions, the New

Mexico State Police responding to the emergency may elect to assume the position of FIC or they may establish a Unified Command of which the Targa Area Manager may be a key member. The responsibility of the FIC is to ensure control of the emergency incident. The IC will contact and coordinate with Targa's management in corporate office.

The Area Manager or his designee shall determine:

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

If an emergency occurs, the Area Manager, or his designee, shall be notified first. The Area Manager, or his designee, shall notify Targa's Office in Midland, Texas. If any person in this chain of command is unavailable, the Targa employee shall elevate the communication to the next level (Appendix H).

5.8 EMERGENCY RESPONSE

This section explains the procedures and decision to be used in the event of an H₂S 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.

5.8.1 Objective

All Area employees shall be prepared to respond to an H₂S or SO₂ emergency at the Plant, AGI Pipeline, and AGI Well site. Emergency response actions may be taken for a variety of situations that may occur. The Plan is activated in based on the concentration of H₂S that has been released. The hydrogen sulfide concentration of 10 ppm or greater alerts any Targa employee via their personal monitor as well as Plant or AGI Well site H₂S fixed monitors/detectors. Ten ppm or greater activates the Plan Level 1 response and the situation is assessed immediately by the hydrogen sulfide concentration reported to the control room.

- Plant, AGI Pipeline, and AGI Well site - Emergency alarm sounded and/or Light Beacons are activated for H₂S at 10 ppm or greater,
- Plan activation in 100 ppm in any public area, or
- Plan activation in 500 ppm at any public road, or
- Plan activation when a 100 ppm concentration of H₂S exceeds 3,000 feet from the site of the release.

Definitions:

19.15.11.7.I NMAC "Public area" means a building or structure that is not associated with the well, facility or operation for which the radius of exposure is being calculated and that is used as a dwelling, office, place of business, church, school, hospital or government building, or a portion of a park, city, town, village or designated school bus stop or other similar area where members of the public may reasonably be expected to be present.

19.15.11.7.I NMAC "Public road" means a federal, state, municipal or county road or highway.

As soon as the Plan has been activated based on the criteria above, the Area Manager, or his designee, shall be notified. In the absence of the Area Manager or his relief the Targa employee (first responder) at the site shall assume the role of Incident Commander. It is the responsibility of the Incident Commander to ensure control of the emergency response management system and if necessary, to coordinate these efforts with any state or local emergency plans.

5.8.2 Response Levels

There are two response levels for the Plant, one for the Pipeline, and two for the AGI Well site described in the Flow Diagrams provided at the beginning of the Plan (Section 1). First and foremost, any individual encountering a situation where their personal hydrogen sulfide alarm is sounding or hears the Plant Siren or sees the Light Beacon must evacuate the affected area immediately. The individual must move crosswind, upwind, and out of low-lying areas to safety per evacuation route arrows shown on Appendix I and J. Once safety is ensured the Levels 1 and 2 discussed in the Flow Diagrams (section 1) should be followed which entail alerting the supervisor of your current situation and whereabouts and pertinent information regarding the release area. This allows the supervisor to account for you and the other individuals who are evacuating and assembling to Assembly Area 1 (Appendix F).

In summary, the Levels provide for immediate action to be taken in an organized fashion in the event of a release of H₂S at a harmful concentration and are conducted to mitigate negative impact to the welfare of individuals and the environment.

5.8.3 Evacuation and Emergency Assembly Areas

Evacuation to the assembly point, Assembly Area 1 (Appendix F), by Plant personnel, subcontractors, and any visitors begins when the emergency alarm is activated. IC determines if any rescue is needed and directs emergency responders to don 30-minute SCBA and respond.

Emergency services (911) will be contacted if there are injuries or as otherwise deemed necessary. The operators will then, wearing the 30-minute SCBA, investigate the cause of the release as deemed by IC. At the sound of the alarm and/or light beacon, all other personnel in the Plant are to stop work, check the prevailing wind direction and immediately proceed along designated evacuation routes and/or upwind to the pre-designated Emergency Assembly Area 1 (Training/Conference Building) as shown in Appendix F. Incident commander will then determine if the situation necessitates Plant personnel moving to Assembly Area 2 and Assembly Area 3 and establish their respective roadblocks (Appendix F).

The AGI Pipeline and AGI wellsite are considered unmanned. The AGI wellsite is inspected daily by personnel and as such anyone in the vicinity of the wellsite has a personal hydrogen sulfide monitor and will be alerted by the hydrogen sulfide beacon and horn from the six (6) hydrogen sulfide detectors on-site. The individual should immediately evacuate crosswind, or upwind and out of any low-lying areas to safety to the designated Assembly Areas and establish their respective roadblocks (Appendix F). Thirty-minute SCBA units, as shown in Appendix I, are present at the well site if needed for escape. The control room at the Eunice Plant is immediately notified of the release and initiates the Level 1 Response. Report to the operations control room to be accounted for from the mandatory check-in list and provide necessary site information by phone or radio. A video camera is also at the AGI wellsite which is monitored 24 hours per day for security and safety. The individual at the AGI wellsite should proceed to the designated assembly area (Appendix F) and check-in. If no report to check-in occurs from the individual, the Incident Commander initiates rescue to the well site by qualified emergency responders outfitted in proper PPE to include the 30-minute SCBA.

**EUNICE PLANT - Emergency Assembly Area 1
- Eunice Plant Training/Conference Building-
(Appendix F)**

**EUNICE PLANT – Emergency Assembly Area 2
4th St. Cattlegaurd
(Appendix F)**

**EUNICE PLANT – Emergency Assembly Area 3
-State HWY 176 & State HWY 18
(Appendix F)**

**AGI PIPELINE (unmanned) – AGI Pipeline/Wellsite Emergency Assembly Area 1
South Gate of AGI Wellsite
(Appendix F)**

**AGI PIPELINE (unmanned) – AGI Pipeline/Wellsite Emergency Assembly Area 2
South of 207 & HWY 18 intersection
(Appendix F)**

**AGI Wellsite (unmanned) – AGI Pipeline/Wellsite Emergency Assembly Area 1
South Gate of AGI Wellsite
(Appendix F)**

**AGI Wellsite (unmanned) – AGI Pipeline/Wellsite Emergency Assembly Area 2
South of 207 & HWY 18 intersection
(Appendix F)**

Roll call shall be conducted at the Emergency Assembly Area to assure all personnel have evacuated safely. This facility requires everyone to check in before entering the Plant or to the AGI Wellsite; thus, the check-in sheet will be used at the Emergency Assembly Areas to make a full accounting of all personnel and contractors. Targa employees not at the Plant at the AGI wellsite or enroute to the location will radio or phone in to operations as they will be evacuating the site in a crosswind and upwind direction out of low-lying areas going to the Assembly Areas (Appendix F). No one can enter the Targa Plant, AGI Pipeline, or AGI Well site areas without Targa approval to ensure the safety of the individual.

5.9 EMERGENCY RESPONSE DRILLS

The Plant will conduct, at least, a tabletop drill and training annually. Multiple drills during the year may be scheduled at the discretion of the Area Manager or as part of the Emergency Response Agencies. Emergency Drills will consist of the following:

The annual drill will exercise this Plan. All Eunice residents are notified annually via a mail-out advising them on the hazards of a pipeline leak and response instructions. The mail-out will contain information regarding hydrogen sulfide safety and response and proper protective measures to be taken in the event of a release. The drills will also include briefing of public officials and interested residents in the ROE 100 and ROE 500 ppm on issues such as evacuation or shelter-in-place plans.

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

- Description or scope of the drill, including date/time
- Attendees and Participants to the drill.
- Summary of activities, responses
- Post drill de-brief and reviews.

A. Request Assistance if Needed

Any employee who finds himself in an emergency involving the escape of hydrogen sulfide gas that would pose a hazard to the public shall notify the Area Manager, or his designated alternate, by the fastest means. The employee will advise the Area Manager, or alternate, of the location and nature of the emergency and the assistance needed. He will also state the actions taken and those he will be taking while waiting for assistance. The recommended sequence of actions is move away from source, don PPE, alert others, assist the distressed, evacuate, and account for personnel. The Area Manager is directly responsible for requesting the assistance needed. He will also proceed with the appropriate notifications. Please refer to Appendix G and H of this Plan for a list of emergency telephone numbers.

B. Stop the Escape of Hydrogen Sulfide

Activating the ESD valves to stop the escape of hydrogen sulfide is of the utmost importance.

C. Alert the Public and Evacuate Those Within the Exposure Area

Incident Command will direct the alerting of all persons who are within the exposure area. See Appendix A for phone contact list for locations in the 500 ppm Radius of Exposure (ROE) and alert the public that maybe affected that are in the 100 ppm ROE either directly or through appropriate government agencies by calling 911. See figure 1 and 3 for the 100 ppm locations. Eunice emergency responders will initiate mass notification and reactionary measures to alert the public. Refer to the map and list of ROEs in Appendix D and E. In the event a leak causes a potentially hazardous concentration public, notification must be made immediately by the employee who discovers (or arrives first at the leak site) and judges the situation serious enough to require immediate evacuation (10 ppm or greater). This is achieved by alerting control room at the Plant which initiates Incident Command and the Level Responses (beginning on Section 1). The recommended sequence of actions is move away from source, don PPE, alert others, assist the distressed, evacuate, and account for personnel.

If evacuation is deemed prudent, advise persons, and/or assist them to leave the area without delay by the fastest, safest route out of the exposure area. In populated areas such as the City of Eunice, evacuations will be conducted by city officials with the aid of Targa employees, if requested. The City of Eunice emergency responders are provided with the hydrogen sulfide safety plan. They will utilize the Plan to assist in their response: the Radius of Exposure is provided as well as assembly areas are provided to assist in emergency response evacuations.

REFER TO FLOW DIAGRAMS FOR LEVEL RESPONSES (Section 1)

- First, evacuation should occur at the hydrogen sulfide release area crosswind or upwind and out of low-lying areas with subsequent evacuation to the Assembly Area 1 for the Plant. Migration to Assembly Area 2 and 3 and their associated roadblocks will be initiated if the Level Response warrants (Appendix F). Next, evacuate those within the potential exposure area, giving priority to the downwind position as the Level Response dictates.
- Any individuals at the AGI Wellsite or in the vicinity of the AGI Pipeline should evacuate crosswind or upwind and out of low-lying areas to Assembly Areas 1 or 2 and establish the associated roadblocks (Appendix F). The individual would phone in or radio in their situation. Proceeding to the Plant Assembly Areas is not recommended as the Assembly Areas for the Plant would be in the upwind direction. The safety of the individual is of the utmost importance and priority should be with evacuating the site first and then contacting the supervisor of Incident Command response to include initiating “Level Responses”.
- Monitor ambient hydrogen sulfide concentrations at Assembly Areas, roadblocks. If 10 ppm or greater move to next Assembly Area.
- Always wear a 30-minute SCBA in any escape situation.

D. Contact the Area Manager

The Targa employee (first responder) responding to or receiving notification of an emergency shall immediately evacuate and alert supervisor/operations of situation and current status of gas release and follow instructions for response.

E. Cordon off the Exposure Area to Prevent Entry and/or Make Roadblocks and Evacuation Recommendations

Place roadblocks outside the area of exposure on all routes to prevent entry into the area. The Targa Eunice Plant will be road blocked at Texas Avenue & 4th Street to prevent entry as the condition warrants based on the response level. Recommended roadblock locations for Targa and law enforcement personnel to prevent entry as provided in Appendix F. The persons manning the roadblocks must be equipped with a supplied air protective breathing apparatus, hydrogen sulfide measuring devices, and two-way radios or cell phones. This equipment is contained in the Field Operator vehicles. Roadblocks should be placed a safe distance away from the potential exposure area and should be monitored for Hydrogen Sulfide to ensure none is present. Roadblocks can consist of a vehicle blocking the path with hazard signals, emergency responders motioning to stop, orange cones, emergency tape, or any other equipment device which blockades the area in a manner sufficient of notifying an individual to not pass.

Based on all information available and the calculated potential exposure information listed in Appendix C, D, and E, public officials are notified of the strategic placing of barricades, for evacuating the public. Priority should be given to those areas in the 500 ppm radius of exposure, then the 100 ppm radius of exposure, with consideration given to the wind direction. See figure 1 and 3 for the 100 ppm locations. Proper caution should be used for shifting changes in wind direction.

F. Complete Notifications as Required

Incident Commander will initiate notification of Affected Residents, Emergency Responders, Targa Management, and Government Agencies (Appendix A, G, and H) and residents in 100 ppm ROE figure 1 and 3. The IC their designee shall contact OCD no later than 4 hours after plan activation (the first detection of 10 ppm or greater) at the Plant, AGI Pipeline, and/or the AGI Well site. The Eunice Area Manager or his designee shall submit a full report of the incident to the division on form C-141 (Appendix K) no later than 15 days following the release.

G. Monitor for Safe Re-entry

As soon as the complete and permanent stoppage of the release is confirmed by verification that the fixed monitors and alarms have ceased alerting/sounding at the release site begins monitoring evacuated areas for hydrogen sulfide and combustible gas concentrations of less than 10 ppm (with multimeter). Allow time for residual H₂S to leave the area. Monitor wind direction. Monitor safely (having a 30-minute SCBA if situation dictates) the ambient air in the area of exposure only after following abatement measures, to determine when it is safe for re-entry. Re-entry is established when hydrogen sulfide concentrations are below 10 ppm and are confirmed to remain at this level without fluctuation to a level above 10 ppm. This is denoted by multimeter measurements and no alarms going off which would indicate a 10 ppm concentration.

Return of the Situation to Normal

No re-entry will be allowed until ambient conditions have been assessed and verified that levels are less than 10 ppm. Communications for re-entry should be coordinated through the Area Manager assuming the role of Field Incident Commander (FIC). When total absence of hydrogen sulfide and combustible gas is confirmed throughout the evacuated area, notify the sheriff's office so that they may be informed of the situation. Advise all parties previously notified that the emergency has ended.

5.9.1 Emergency Shutdown

The Plant, acid gas pipeline and acid gas well have extensive Emergency Shut Down (ESD) designed to isolate gas and AGI fluid streams, and systems will be depressurized by routing gas to flares. These systems can be automatically initiated by plant operator in the control room or by remote ESD stations located in the plant and AGI well site. These stations are shown on Appendix I and Appendix J to show ESD valve locations.

5.9.2 Post-Emergency Actions

In the event this plan is activated, the following post-emergency actions shall be taken in an effort to reduce the possibility of a recurrence of the type of problem that required its activation and to assure that any future activation will be as effective as possible:

- Clean up, recharge, restock, repair, and replace emergency equipment, as necessary, and return it to its original location.
- Critique all actions and procedures, providing additional training to employees if need is indicated. Modify contingency plan as provided in the NMAC rulings if there is any change in plant operations which require a new ROE to be established or if the Plan is modified in any way. The plan will be redistributed to those persons/entities provided in the "Distribution List" of Appendix B.
- Review the cause of the emergency and modify operating maintenance and other surveillance procedures, if needed.
- Ensure all agency notifications have been completed and follow-up with any written notification requirements.
- Ensure all previously notified or evacuated persons have been advised that the emergency has ended.

Notification and Reports

The Plant has various notification and reporting obligations. Some are related to its state air quality permit that is overseen by New Mexico Environmental Department (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 New Mexico Oil Conservation Division (NMOCD) will be notified as soon as possible but no later than 4 hours following a release of H₂S 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 (Appendix K).

Affected residents will be notified via the phone contact list in Appendix A for locations in the 500 ppm Radius of Exposure (ROE) and alert the public that maybe effected that are located in the 100 ppm ROE either directly or through appropriate government agencies by calling 911. See figure 1 and 3 for the 100 ppm locations. See figure 1 and 3 for the 100 ppm locations. Eunice emergency responders will initiate mass notification and reactionary measures to alert the public.

Once the Area Manager is contacted, he or his designee is to notify the appropriate corporate management, EHS personnel, Plant emergency response personnel, and advise them of the existing emergency. Incident Command or designee will then conduct required reporting based on the situation (Appendix A, G, H and figure 1 and 3 for the 100 ppm locations).

6 PUBLIC AWARENESS AND COMMUNICATION

Public awareness and communication is a primary function of the H₂S Plan. The Company 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 lists in Appendix A, G, and I. The Level Responses indicate when certain entities are to be contacted in event of activation of this Plan.

6.1 MEDIA

At no time shall any representative from the media be allowed any closer to the Plant, acid gas pipeline, or acid gas well than the designated safe (by monitoring) Assembly Areas 2 or 3. If possible, assemble all Media in a group in a safe area away from the emergency so Corporate Communications (Houston) can issue a statement.

All media inquiries should be directed to Corporate Communications in Houston. The FIC or his designee will provide Corporate Communications with periodic updates and will take their direction about any onsite communication with the media.

6.2 PUBLIC AREAS, NEARBY BUSINESSES, AND RESIDENTS

The contact information for local and state agencies and contractors is contained in Appendix G. All entities within the ROE will be contacted with the phone list in Appendix A for locations in the 500 ppm Radius of Exposure (ROE) and alert the public that maybe effected that are located in the 100 ppm ROE either directly or through appropriate government agencies by calling 911. See figure 1 and 3 for the 100 ppm locations. Eunice emergency responders will initiate mass notification and reactionary measures to alert the public.

- The nature and extent of the release/emergency at the Plant, acid gas pipeline or acid gas well and recommendations for protective actions, such as evacuation or shelter-in-place.
- Any other event specific information that is necessary to protect the public; and
- 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. A safe return would be directed by the Incident Commander based on alarms ceasing alerting and on ambient air conditions of less than 10 ppm at release site.

6.3 PUBLIC ROADS

Depending on the level of response, roadblocks will be established pursuant to Section 1 Flow Charts and Appendix F. Public HWY 18 and Loop 207 are within the 500 ppm radius of exposure. Highway 176 is within the 100 ppm. See figure 1 and 3 for the 100 ppm locations. 19.15.11.7.I NMAC "Public road" means a federal, state, municipal or county road or highway.

6.4 BUSINESSES OR OTHER PUBLIC AREAS

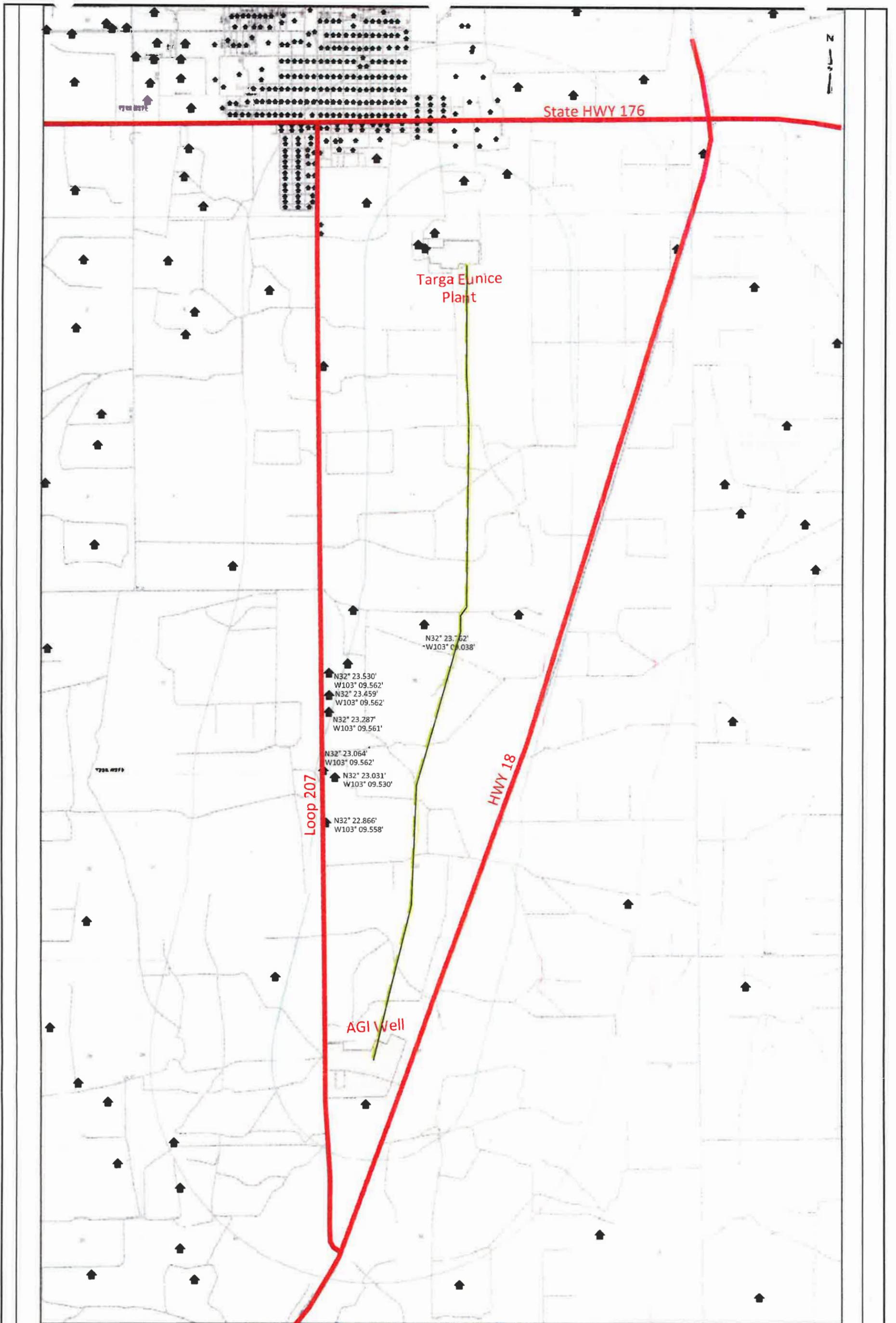
Due to the overlapping nature of the radius of exposures for the plant, pipeline and acid gas well, businesses, residents and, public areas will be notified by visit, telephone contact, or in conjunction with local emergency responder mass notification and reaction measures. All entities within the ROE's will be contacted with the phone list in Appendix A for locations in the 500 ppm Radius of Exposure (ROE) and alert the public that maybe effected that are located in the 100 ppm ROE either directly or through appropriate government agencies by calling 911. See figure 1 and 3 for the 100 ppm locations. Eunice emergency responders will initiate mass notification and reactionary measures to alert the public. 19.15.11.7.I NMAC "Public area" means a building or structure that is not associated with the well, facility or operation for which the radius of exposure is being calculated and that is used as a dwelling, office, place of business, church, school, hospital or government building, or a portion of a park, city, town, village or designated school bus stop or other similar area where members of the public may reasonably be expected to be present.

7 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. Signs are located at the Plant and acid gas well gate entrances indicating that all visitors are to sign in at the sign in building located West of Plant office.
- E. 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.
- F. Roadblocks will occur as outlined in the Response Level detail for the Plant, road crossing, pipeline, or acid gas well sites.

7.1 SIGNS & MARKERS

The Plant, acid gas pipeline and acid gas well have numerous warning signs indicating the presence of H₂S/Poisonous Gas and high pressure gas (which comply with ANSI standard Z525.1-2002) at the entrance to the Plant, along the pipeline right away, and acid gas compressor and well site. Emergency response phone numbers are posted at the entrance to the Plant and acid gas well. Acid gas pipeline markers also include the facility emergency phone number.



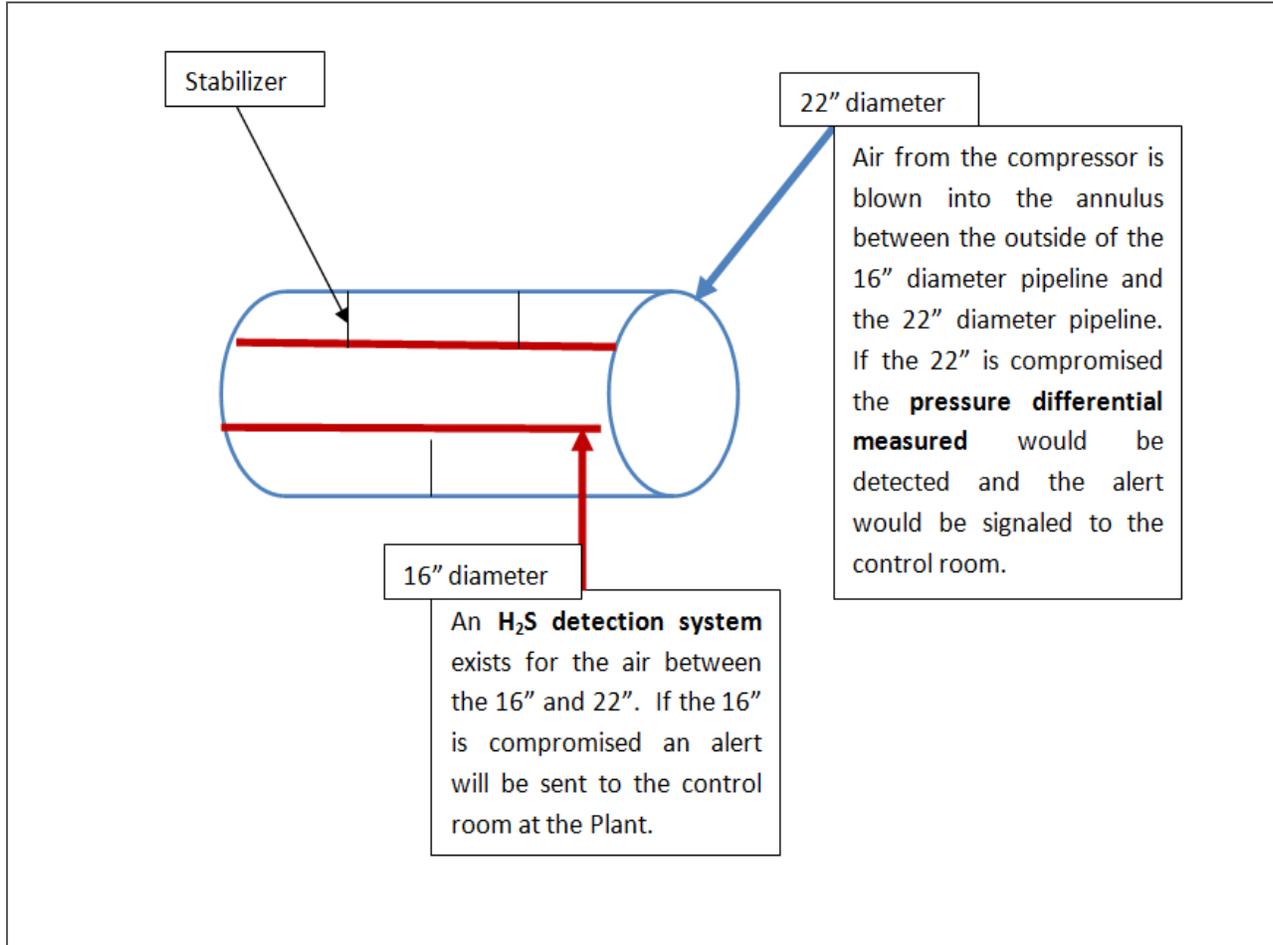
 - Approximate Pipe Line Route
 - Public Road

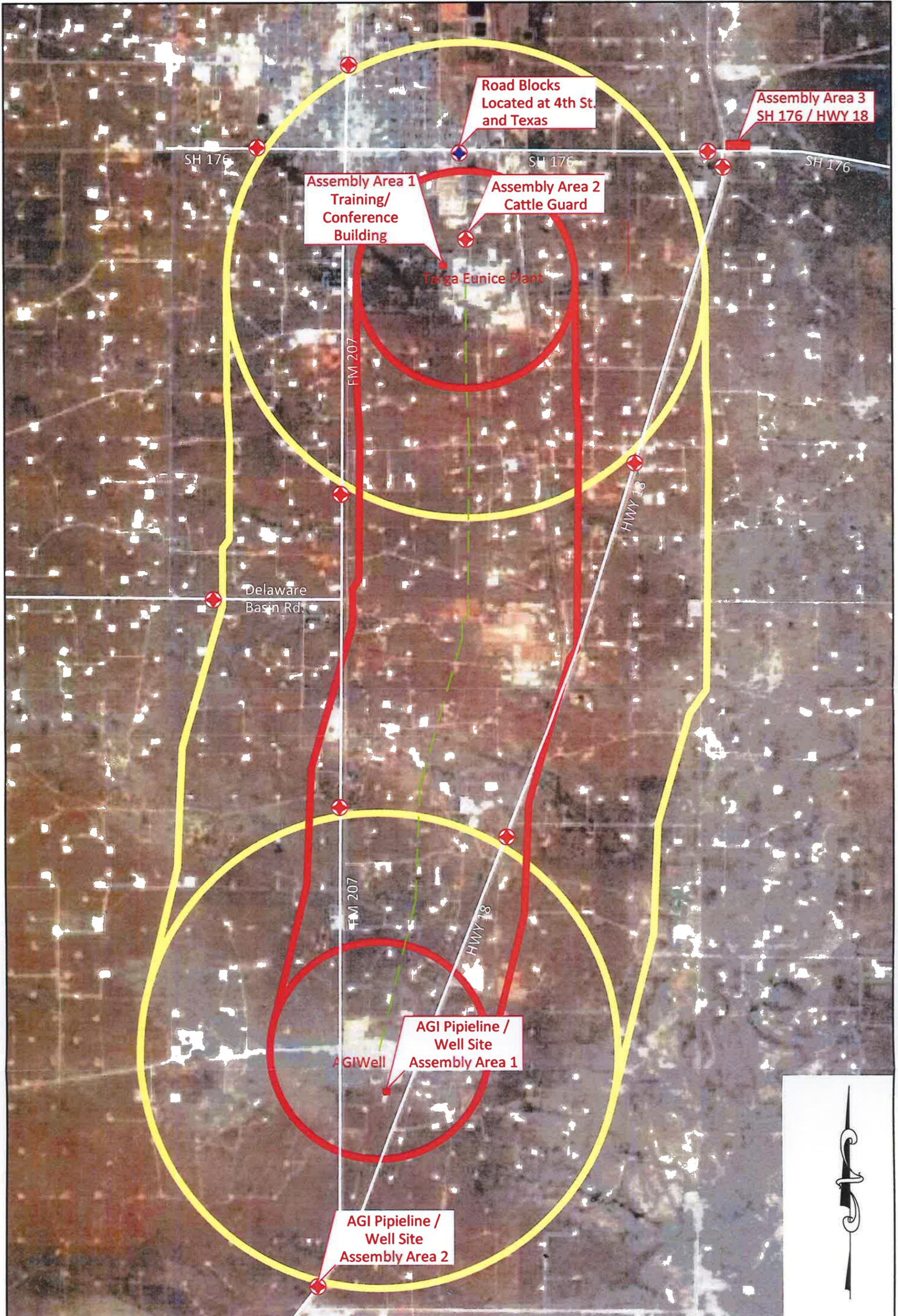
 - Residence (Approximate Location)

Targa Midstream Services, L.P.
Eunice Plant and AGI Well
Lea County, New Mexico



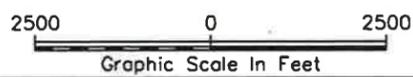
Figure 2: General schematic of pipeline release detection system





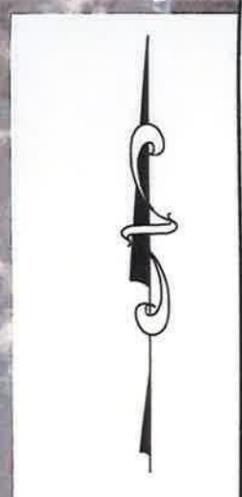
- - 500 ppm ROE - 3198 Feet
- - 100 ppm ROE - 6998 Feet
- - Approximate Pipe Line Route
- ◆ - Recommended Emergency Responder Road Block
- ◆ - Targa Emergency Responder Road Block

AGI Well Location: Latitude: 32.36270 Longitude: -103.15546
 Targa South CS SWD-1 Unit L, Sec 27, T 22S, R 37E



Targa Midstream Services, L.P.
 Eunice Plant and AGI Well
 Lea County, New Mexico

Larson &
Associates, Inc.
 Environmental Consultants



Appendix A

**EMERGENCY CALL LIST
Targa Eunice Gas Plant to AGI Wellsite
Residents within the 500 ppm ROE
(All points referenced from Eunice Plant)**

Resident Contact List (also in Appendix A)

	Name	Location	Phone Number
1	Shelby Hacker	West of Plant	575-631-4208
2	Judy Landes	West of Plant	575-631-5680/575-394-3075
3	Steve Brannon	West of Plant	575-394-1766
4	Harry Werner	West of Plant	575-394-3101
5	Targa Engineering Office	West of Plant	575-394-0014
6	Targa Trailer	West of Plant	No occupant present
7	Norman Smiley (Amber)	N32° 23.762' W103° 09.038'	575-602-2813
8	Desert Oasis RV Park	North West of Plant	575-394-0100
9	Gravity Oilfield Services	North of Plant	575-394-4084
10	Donny Freudiger	Southwest of Plant	575-631-6997
11	Dorotea Reyna's	N32° 23.287' W103° 09.562'	575-394-2757
12	Anselrno Gayton	N32°23.031' W103° 09.530'	432-631-0707
13	Shena Gayton	N32°23.031' W103° 09.530'	432-631-1059
14	Paula Gayton	N32°23.031' W103° 09.530'	575-263-9058
15	Joe Ruiz	N32°22.866' W103° 09.558'	575-394-3310
16	Nici Acosta	South of Eunice South Compressor Station	575-390-9382

New Mexico Oil & Gas Conservation Division – Santa Fe, New Mexico

New Mexico Oil & Gas Conservation Division – Hobbs, New Mexico

New Mexico Department of Public Safety (State Office)

New Mexico Department of Homeland Security and Emergency Management

Eunice Fire Department

Lea County Local Emergency Planning Committee

Lea County Sherriff Department

Eunice Police Department

Eunice Plant Supervisors & Manager

Targa Eunice Plant Control Room

Targa Eunice AGI Wellsite MCC Building

Targa Midstream Office (Midland, TX)

The formulas for calculating the ROE's for the Eunice Plant, the AGI Pipeline, and the AGI Wellsite were calculated in accordance with the rulings as specified by the New Mexico Administrative code Pasquill-Gifford Equation:

500-ppm RADIUS OF EXPOSURE CALCULATION

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

100-ppm RADIUS OF EXPOSURE CALCULATION

$$X = [(1.589)(\text{hydrogen sulfide conc.})(Q)^{0.6258}]$$

Where:

X=Radius of exposure in feet

Hydrogen Sulfide Concentration = 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)

- 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.

- Eunice Plant-

The volume used for the ROE calculation is 110 mmcf/d as the inlet to the Plant with a hydrogen sulfide concentration of 6.528 ppm:

Using flow rate Q= 110 mmcf/d and

H₂S concentration = 6,528 ppm

500 ppm ROE – public road	2,822 feet
100 ppm ROE – public area	6,175 feet

- Eunice Plant to AGI Wellsite –

After the installation of the AGI well, the Company is using for contingency planning purposes an "escape rate" equal to the anticipated (maximum) inlet gas volume of 5,000 MCFD. The assumed 5,000 MCFD inlet gas volume has been selected as the "escape rate" because it is the highest anticipated inlet volume that the Plant would handle under its proposed operations and is considered will remain effective as long as the processed volume and H₂S content equate to the same ROE. The hydrogen sulfide concentration used was

17.5 mole percent. Therefore, 175,378 or 17.5 mole percent has been used in the worst case scenario for the expanded operations with the AGI well for contingency planning purposes.

Using flow rate $Q = 5$ mmcf/d and

H_2S concentration = 175,358 ppm

500 ppm ROE – public road	3,198 feet
100 ppm – public area	6,998 feet

MOBILE ANALYTICAL LABS, INC.

P.O. BOX 69210
 ODESSA, TEXAS 79769

GAS EXTENDED ANALYSIS

7/21/2017

LAB # 41501

TARGA RESOURCES
 EUNICE
 MIDDLE PLANT
 INLET GAS

	MOL %	GPM
HYDROGEN SULFIDE	0.4416	0.000
NITROGEN	1.9800	0.000
METHANE	73.5404	0.000
CARBON DIOXIDE	2.5850	0.000
ETHANE	10.6931	2.855
PROPANE	5.8167	1.600
ISO-BUTANE	0.7472	0.244
N-BUTANE	1.9820	0.624
ISO-PENTANE	0.5273	0.193
N-PENTANE	0.5920	0.214
NEOHEXANE	0.0062	0.003
CYCLOPENTANE	0.0582	0.024
2-METHYLPENTANE	0.1432	0.059
3-METHYLPENTANE	0.0893	0.036
N-HEXANE	0.1895	0.078
METHYLCYCLOPENTANE	0.0986	0.035
BENZENE	0.0510	0.014
CYCLOHEXANE	0.0827	0.028
2-METHYLHEXANE	0.0308	0.014
3-METHYLHEXANE	0.0448	0.021
DIMETHYLCYCLOPENTANES	0.0616	0.025
N-HEPTANE	0.0567	0.026
METHYLCYCLOHEXANE	0.0662	0.027
TRIMETHYLCYCLOPENTANES	0.0060	0.002
TOLUENE	0.0327	0.011
2-METHYLHEPTANE	0.0231	0.012
3-METHYLHEPTANE	0.0059	0.003
DIMETHYLCYCLOHEXANES	0.0116	0.005
N-OCTANE	0.0085	0.004
ETHYL BENZENE	0.0031	0.001
M&P-XYLENES	0.0049	0.002
O-XYLENE	0.0008	0.000
C9 NAPHTHENES	0.0065	0.004
C9 PARAFFINS	0.0083	0.005
N-NONANE	0.0014	0.001
N-DECANE	0.0004	0.000
UNDECANE PLUS	0.0027	0.002
TOTALS	100.0000	6.172

SPECIFIC GRAVITY	0.790
GROSS DRY BTU/CU.FT.	1269.6
GROSS WET BTU/CU.FT.	1247.9
TOTAL MOL. WT.	22.807
MOL. WT. C6+	90.675
SP. GRAVITY C6+	3.541
MOL. WT. C7+	102.582
SP. GRAVITY C7+	4.305

BASIS: 14.65 PSIA @ 60 °F

NOTES:
 SAMPLED 07/19/17 BY: SR
 240 PSIG @ 86 °F
 H2S = 4,416 PPM
 CYLINDER NO. 116
 SPOT

DISTRIBUTION:
 MR. JEFF LAMBERT

MOBILE ANALYTICAL LABS, INC.

P.O. BOX 69210
ODESSA, TEXAS 79769

GAS EXTENDED ANALYSIS

7/21/2017

LAB # 41500

TARGA RESOURCES
EUNICE
MIDDLE PLANT ACID GAS

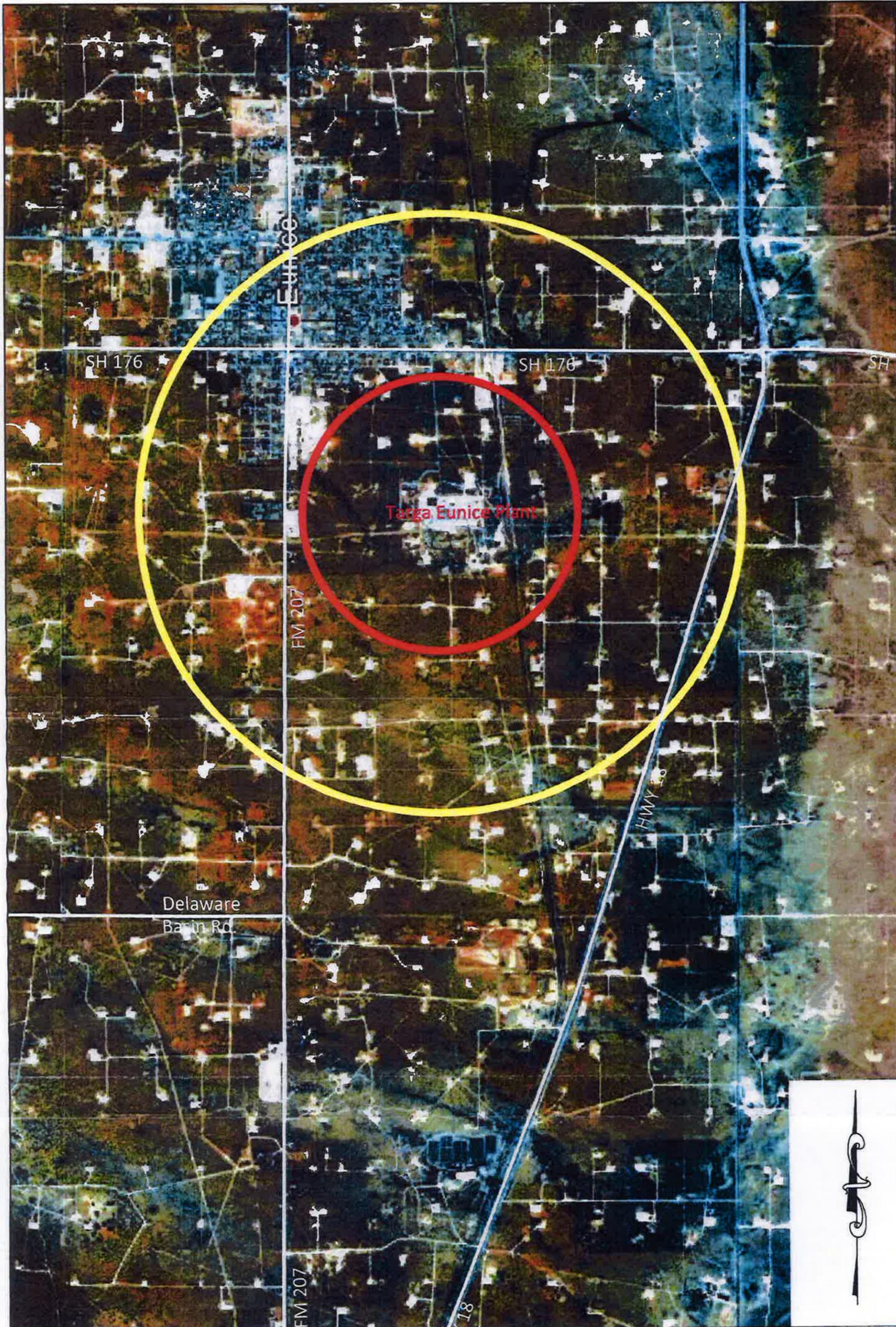
	MOL %	GPM
HYDROGEN SULFIDE	17.3637	0.000
NITROGEN	0.0223	0.000
METHANE	0.2298	0.000
CARBON DIOXIDE	82.1289	0.000
ETHANE	0.0388	0.010
PROPANE	0.0331	0.009
ISO-BUTANE	0.0041	0.001
N-BUTANE	0.0174	0.005
ISO-PENTANE	0.0051	0.002
N-PENTANE	0.0064	0.002
NEOHEXANE	0.0001	0.000
CYCLOPENTANE	0.0025	0.001
2-METHYLPENTANE	0.0020	0.001
3-METHYLPENTANE	0.0016	0.001
N-HEXANE	0.0035	0.001
METHYLCYCLOPENTANE	0.0049	0.002
BENZENE	0.0540	0.015
CYCLOHEXANE	0.0068	0.002
2-METHYLHEXANE	0.0009	0.000
3-METHYLHEXANE	0.0017	0.001
DIMETHYLCYCLOPENTANES	0.0032	0.001
N-HEPTANE	0.0023	0.001
METHYLCYCLOHEXANE	0.0055	0.002
TRIMETHYLCYCLOPENTANES	0.0004	0.000
TOLUENE	0.0364	0.012
2-METHYLHEPTANE	0.0019	0.001
3-METHYLHEPTANE	0.0007	0.000
DIMETHYLCYCLOHEXANES	0.0020	0.001
N-OCTANE	0.0010	0.001
ETHYL BENZENE	0.0046	0.002
M&P-XYLENES	0.0058	0.002
O-XYLENE	0.0022	0.001
C9 NAPHTHENES	0.0013	0.001
C9 PARAFFINS	0.0015	0.001
N-NONANE	0.0003	0.000
N-DECANE	0.0000	0.000
UNDECANE PLUS	0.0033	0.002
TOTALS	100.0000	0.081

SPECIFIC GRAVITY	1.468
GROSS DRY BTU/CU.FT.	122.8
GROSS WET BTU/CU.FT.	120.7
TOTAL MOL. WT.	42.288
MOL. WT. C6+	90.869
SP. GRAVITY C6+	3.632
MOL. WT. C7+	101.974
SP. GRAVITY C7+	4.364

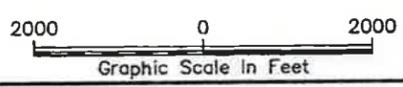
NOTES:
SAMPLED 07/19/17 BY: SR
7 PSIG @ 93 °F
H2S = 173,637 PPM
CYLINDER NO. 682
SPOT

DISTRIBUTION:
MR. JEFF LAMBERT

BASIS: 14.65 PSIA @ 60 °F

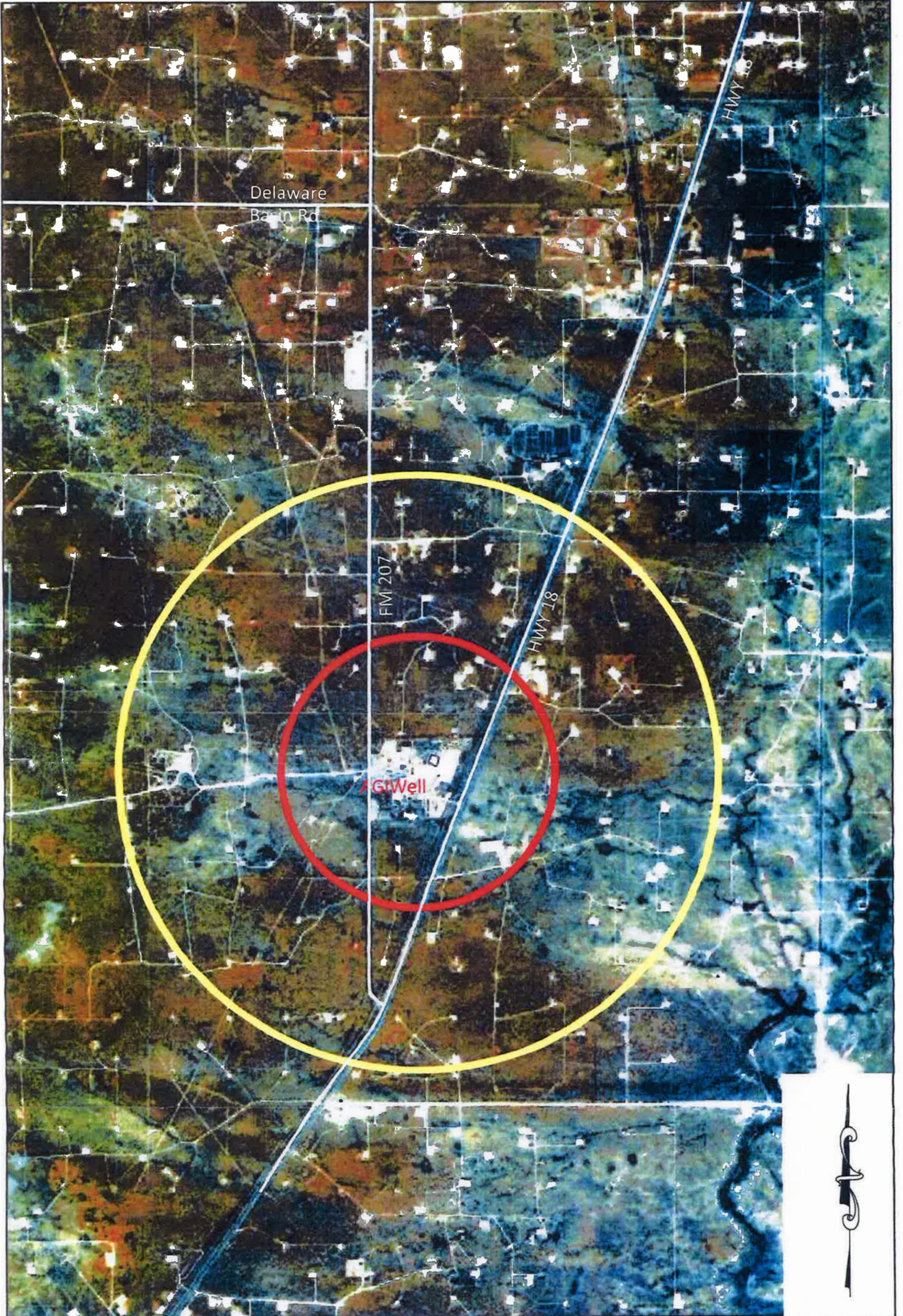


— 500 ppm ROE - 3198 Feet
— 100 ppm ROE - 6998 Feet



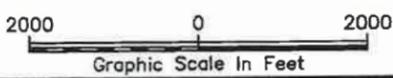
Targa Midstream Services, L.P.
Eunice Plant and AGI Well
Lea County, New Mexico

Larson & Associates, Inc.
Environmental Consultants



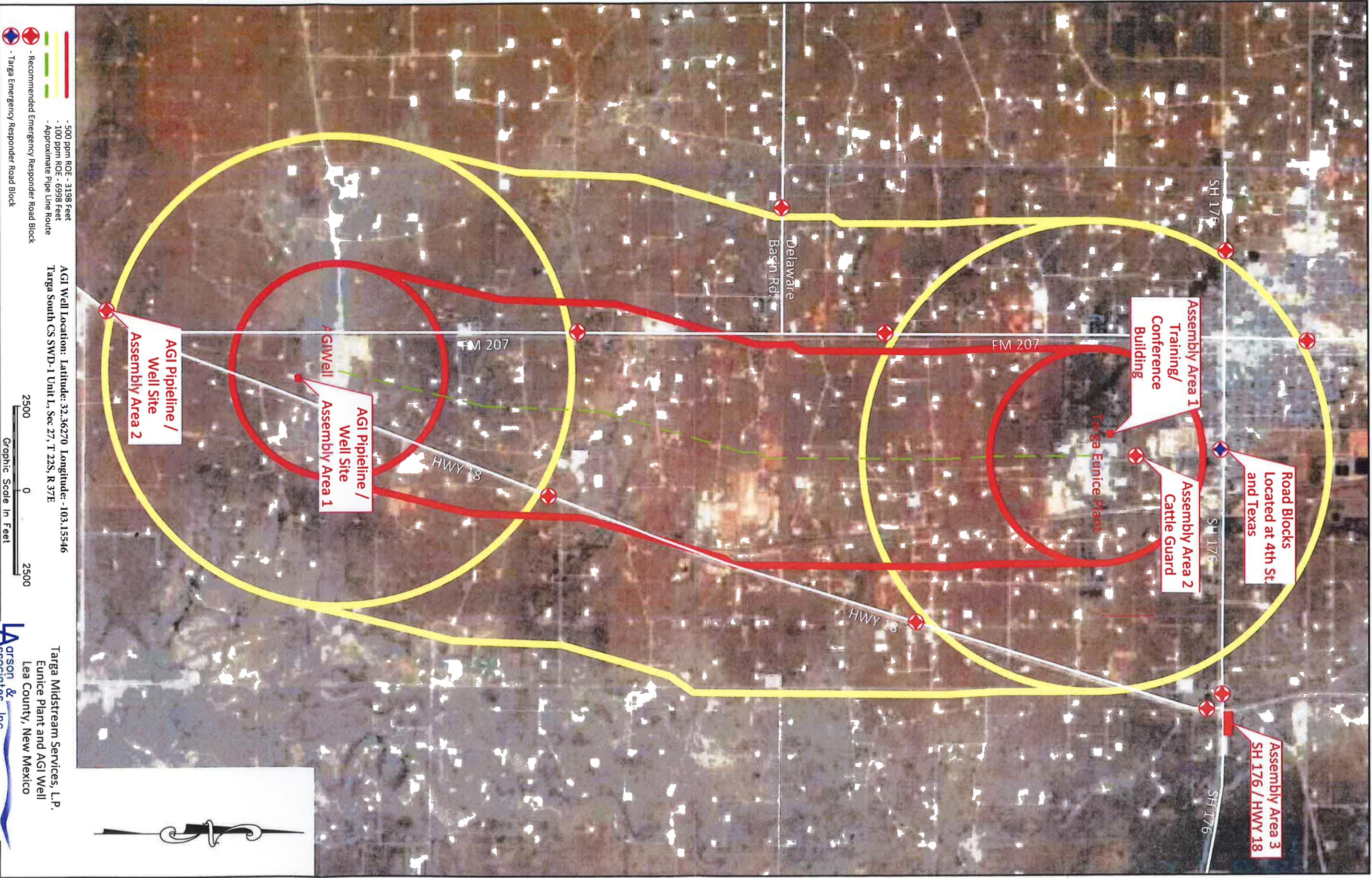
— - 500 ppm ROE - 3198 Feet
— - 100 ppm ROE - 6998 Feet
AGI Well Location: Latitude 32.362.70 Longitude -103.15546

API # 30-02-521497 Targa South CS SWD-1, Unit L, Sec 27, T22S, R 37E Lea County NM



Targa Midstream Services, L.P.
Eunice Plant and AGI Well
Lea County, New Mexico

Larson &
Associates, Inc.
Environmental Consultants



Assembly Area 1
Training/
Conference
Building

Assembly Area 2
Cattle Guard

Assembly Area 3
SH 176 / HWY 18

Road Blocks
Located at 4th St
and Texas

Targa Eunice Plant

AGI Well
AGI Pipeline /
Well Site
Assembly Area 1

AGI Pipeline /
Well Site
Assembly Area 2

AGI Well Location: Latitude: 32.36270 Longitude: -103.15546
Targa South CS SWD-1 Unit L, Sec 27, T 22S, R 37E

- - 500 ppm ROE - 3198 Feet
- - 100 ppm ROE - 6998 Feet
- - Approximate Pipe Line Route
- ◊ - Recommended Emergency Responder Road Block
- ◊ - Targa Emergency Responder Road Block



Targa Midstream Services, L.P.
Eunice Plant and AGI Well
Lea County, New Mexico

Arson & Associates, Inc.
Environmental Consultants

LOCAL AGENCIES FOR LEA COUNTYCall 911

NM State Police	575-392-5588
Eunice – Police	575-394-2112
Eunice – Fire Dept.	575-394-3258
Hobbs – Sheriff	575-396-3611
Hobbs – Police	575-397-9265
Hobbs - Fire Dept.	575-397-9265
Hobbs – Ambulance	575-397-9265
Lovington – Sheriff	575-396-3611
Lovington – Police	575-396-2811
Lovington – Fire Dept.	575-396-2359
Lovington – Ambulance	575-396-2811

STATE AGENCIES

Oil Conservation Division, Santa Fe	505-476-3440
Oil Conservation Division – District Office, Hobbs	575-393-6161
Environmental Department – Air Quality Bureau, Santa Fe	505-827-1494

FEDERAL AGENCY

U. S. EPA – Region VI Office, Dallas, TX	800-887-6063
National Response Center	800-424-8202
New Mexico Public Regulation Commission Office Of Public Safety (Pipeline Release)	505-476-0253/505-946-8314

Additional Response Resources:**ELECTRIC SERVICE COMPANIES**

Xcel – Customer Service	800-895-4999 (24 hour)
Dixie Electric	575-393-4466

WATER SERVICE AND VACUUM TRUCKS

Gravity Oil Services	575-394-4084 (24 hour)
Gandy Corporation – Lovington, NM	575-396-4948 (24 hour)
Key Energy Services – Hobbs, NM	575-394-4994 (24 hour)
Pate Trucking – Hobbs, NM	575-397-6264 (24 hour)

ROUSTABOUT CREWS

Gandy Corporation – Lovington, NM	575-396-4968 (24 hour)
NMR – Eunice, NM	575-394-0144 (24 hour)
KC Welding – Hobbs, NM	575-441-0936 (24 hour)

DIRT WORK EQUIPMENT

NMR – Eunice	575-394-0144 (24 hour)
EDW Construction – Hobbs, NM	575-391-7814 (24 hour)
EKB Welding – Monument, NM	575-361-7078 (24 hour)
Ferguson Construction – Lovington, NM	575-396-3689 (24 hour)
Gandy Corporation – Lovington, NM	575-396-4948 (24 hour)

WELDERS

NMR – Eunice, NM	575-394-0144 (24 hour)
KC Welding – Hobbs, NM	575-441-0936 (24 hour)
EKB Welding – Monument, NM	575-361-7078 (24 hour)

SAFETY EQUIPMENT

Legacy Safety LLC – Hobbs, NM	575-393-7233
DXP – Hobbs, NM	575-393-9188

TARGA NOTIFICATION LIST (also in Appendix H)
COMPANY PERSONNEL

Call the following persons in the order listed until one is notified of the emergency:

1. Area Management

Chris Price, Eunice Area Manager
Office 575-394-2534, ext. 226
Mobile 575-602-6005

Alternate:
Zac Mason, Eunice Operations Supervisor
Office 575-394-2534, .229
Mobile 575-441-4686

Alternate:
Raul Gibson, Eunice Field Supervisor
Office 575-394-2516, ext. 327
Mobile 432-308-9208

Alternate:
Lorenzo Vargas, Eunice Maintenance Supervisor
Office 575-394-2534, Ext. 225
Mobile 575-631-1011

2. Environmental Personnel

Rebecca Woodell, Environmental Specialist
Office 575-394-2534, ext. 239
Home 575-394-2280
Mobile 575-631-7085

Cindy Klein, Environmental Supervisor
Office 575-396-3221, ext. 238
Home 575-398-6670
Mobile 575-631-7093

John Wilder, Environmental Manager
Office 432-685-7602
Mobile 432-425-6233

Cal Wrangham, Environmental Support
Mobile 432-425-7072

3. Region Management

Jimmy Oxford, Sr VP Operations

Office 940-220-2493

Mobile 940-577-1061

4. Field Operators

Eunice Area

Joe Sims 575-602-0065

Ricky Zeigler 575-602-0252

Call company support personnel in Houston, TX, as needed:

ES&H Vice President

Jessica Keiser

Office 713-584-1084

Mobile 713-818-8209

Corporate Security

Weldon Green 713-584-1301

Cell Phone 281-802-5351

LAW ENFORCEMENT AND EMERGENCY SERVICES

STATE POLICE New Mexico 575-392-5588

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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 Department

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

Surface Owner: State Federal Tribal Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

<input type="checkbox"/> The source of the release has been stopped. <input type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.
Printed Name: _____ Title: _____ Signature: _____ Date: _____ email: _____ Telephone: _____
<u>OCD Only</u> Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

<p><u>Characterization Report Checklist:</u> <i>Each of the following items must be included in the report.</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. <input type="checkbox"/> Field data <input type="checkbox"/> Data table of soil contaminant concentration data <input type="checkbox"/> Depth to water determination <input type="checkbox"/> Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release <input type="checkbox"/> Boring or excavation logs <input type="checkbox"/> Photographs including date and GIS information <input type="checkbox"/> Topographic/Aerial maps <input type="checkbox"/> Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- Detailed description of proposed remediation technique
- Scaled sitemap with GPS coordinates showing delineation points
- Estimated volume of material to be remediated
- Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- Extents of contamination must be fully delineated.
- Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

- Approved
 Approved with Attached Conditions of Approval
 Denied
 Deferral Approved

Signature: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

TRAINING DOCUMENTATION FORM

COURSE TITLE _____ VIDEO _____ DATE _____

CLASS LENGTH (HRS) _____ CLASS LOCATION _____ TRAINERS _____

VENDOR TRAINING: COMPANY _____ ADDRESS _____ PHONE NO. _____

Grade Pass/Fail	Signature	Print Name	Social Security No. <i>(Last 4 Numbers)</i>	Job Title	Location
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
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