GW - __025__

H2S CONTINGENCY PLAN

Chavez, Carl J, EMNRD

From: Wrangham, Calvin W. <CalvinWrangham@targaresources.com>
Sent: Wednesday, October 02, 2013 8:24 AM
To: VonGonten, Glenn, EMNRD; Chavez, Carl J, EMNRD
Cc: Klein, Cindy D.
Subject: Emailing: RE%20Targa%20Monument%20CP%20Body

Carl, based on the attachment you sent Cindy you requested our OCD approval for the Targa Monument Plant Plan. It is below.

From: Jones, Brad A., EMNRD [brad.a.jones@state.nm.us]
Sent: Wednesday, November 02, 2011 5:36 PM
To: Wrangham, Calvin W.
Cc: Gonzales, Elidio L, EMNRD; VonGonten, Glenn, EMNRD; Bailey, Jami, EMNRD
Subject: RE: Targa Monument CP Body

The Oil Conservation Division has completed the review of the Targa Monument Gas Plant/AGI Well site Hydrogen Sulfide (H2S) Contingency Plan (with the associated flow charts, figures, and appendices), dated November 2, 2011, and has determined it to be adequate. Targa Midstream Services, LLC has submitted a H2S contingency plan that demonstrates compliance with the applicable provisions of 19.15.11 NMAC. Targa Midstream Services, LLC shall implement the H2S Contingency Plan immediately and provide copies of the plan to the appropriate parties identified on the distribution list provided in Appendix B. Pursuant to Paragraph D of 19.15.11.9 NMAC, please submit an electronic copy (CD) and a hardcopy to the Santa Fe Environmental Bureau and to the appropriate OCD District office.

Thank you for your cooperation in resolving the H2S contingency plan. The OCD appreciates all of the time and effort of you and your staff in making the appropriate revisions to the plan. If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or brad.a.jones@state.nm.us.

Brad A. Jones
Environmental Engineer
Environmental Bureau
NM Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505
E-mail: brad.a.jones@state.nm.us
Office: (505) 476-3487
Fax: (505) 476-3462

From: Wrangham, Calvin W. [mailto:CalvinWrangham@targaresources.com]
Sent: Wednesday, November 02, 2011 3:43 PM
To: Jones, Brad A., EMNRD
Subject: Targa Monument CP Body

Cal Wrangham
Targa Resources
ES&H Manager
6 Desta Dr. Suite 3300
Midland, TX. 79705
(432) 688-0542

H_2S CONTINGENCY PLAN

Targa Monument Gas Plant and Acid Gas Injection Wellsite

owned by

Versado Gas Processors, L.L.C.

operated by

Targa Midstream Services LLC

November 2, 2011

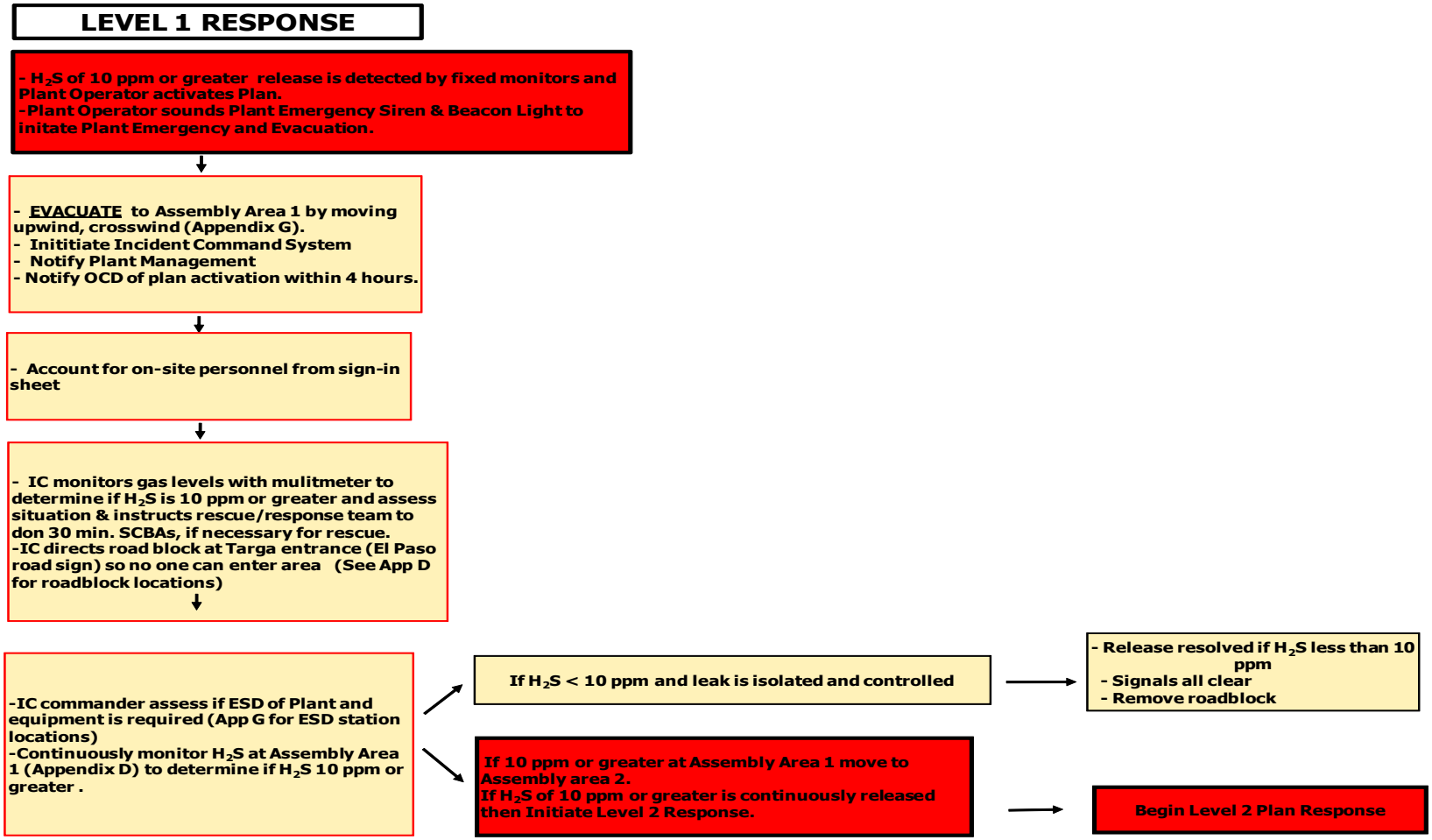
Table of Contents

LIST OF FIGURES

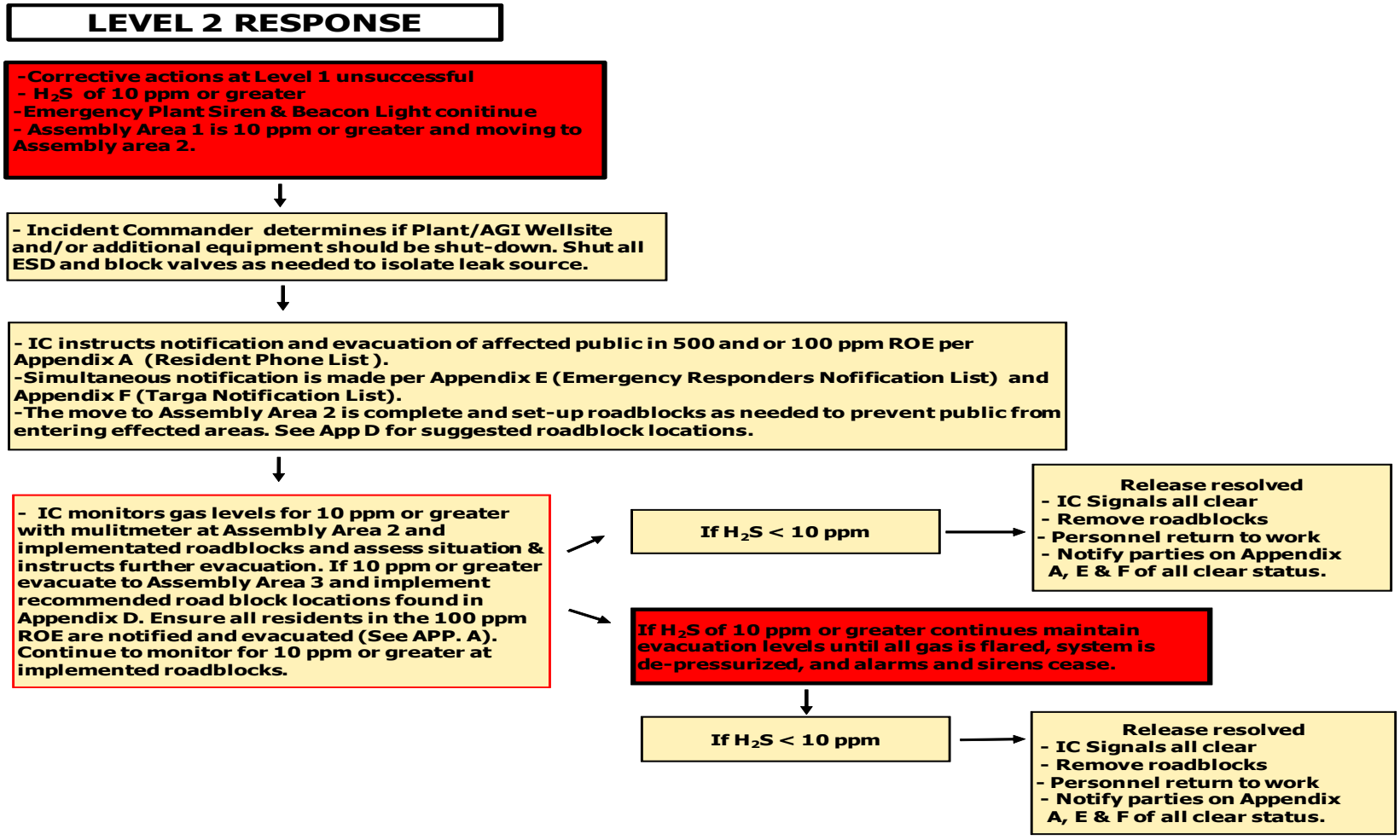
APPENDIX

1. OPERATOR – QUICK REFERENCE

TARGA MONUMENT GAS PLANT/AGI WELLSITE RELEASE



TARGA MONUMENT GAS PLANT/AGI WELLSITE RELEASE



AGENCY/EMERGENCY RESPONDERS NOTIFICATION LIST (also in Appendix E)

Call 911

State Police	**575-392-5588**
Monument Fire Dept.	**575-397-4166/575-393-4339**
Hobbs - Sheriff	**575-396-3611**
Hobbs – Police	575-397-9265
Hobbs – Fire Dept.	575-397-9265
Hobbs – Ambulance	575-397-9265
Eunice – Police	575-394-2112
Eunice – Fire Dept.	575-394-3258
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

TARGA MONUMENT NOTIFICATION LIST (also in Appendix F)
COMPANY PERSONNEL

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

1. Area Management

Monument Plant

Todd Young, Monument Plant Area Manager
Office: (575) 393-2823, ext. 234
Home: (432) 523-3770
Mobile: (575) 441-1645

Alternate:
Joe Gray, Monument Plant Operation Supervisor
Office: (575) 383-2823, ext. 229
Home: (575) 392-7058
Mobile: (575) 631-7069

Alternate:
Randy Duncan, Monument Field and Maintenance Supervisor
Office: (575) 383-2823, ext. 235
Home: (575) 396-3744
Mobile: (575) 631-7065

Alternate:
Tim Jordan, Saunders Plant Area Manager (Lovington, NM)
Office: (575) 396-3221 ext. 31
Home: (575) 396-0189
Mobile: (575) 631-7091

Alternate:
Bill Little, Eunice Plant Area Manger (Eunice, NM)
Office: (575) 394-2534, Ext. 226
Home: (575) 396-2997
Mobile: (575) 631-7099

2. ES&H Group

Cal Wrangham, ES&H Manager
Office: 432-688-0542 Midland, TX
Home: 432-697-6580 Midland, TX
Mobile: 432-425-7072

Cindy Klein, ES&H Compliance Specialist
Office: 575-396-3221, ext. 38
Home: 575-398-6670
Mobile: 575-631-7093

Rebecca Woodell, ES&H Compliance Specialist
Office: 575-394-2534, ext. 239
Home: 575-394-2280
Mobile: 575-631-7085

3. Region Manager

Clark White, Permian Basin Region Manager
Office: 713-584-1525 Houston, TX

4. Field Operators

Rick Carpenter
Mobile: (575) 631-7079
Home: (575) 396-3426

Sammy Hodges
Mobile: (575) 631-7058
Home: (575) 394-3203

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

Assistant V-P ES&H
Jessica Keiser
Office: 713-584-1084
Cell Phone: 713-263-4537

Corporate Security
Weldon Green
Office: 713-584-1301
Cell Phone: 281-802-5351

EMERGENCY NOTIFICATION LIST
Targa Monument Gas Plant / AGI Wellsite
Parties within the 100 and 500 ppm ROE

Parties located within the 500 ppm radius of exposure area			
	Name	**Location**	**Phone Number**
1.	Mr. Robert Byrd	19 Poodle Lane, Monument NM. Southeast of Plant.	(575) 390-1941
2.	El Paso Compressor Station	Station property connects with Plant property on southeast corner of Monument Plant.	(575) 394-4417

Parties located within the 100 ppm radius of exposure area			
	Name	**Location**	**Phone Number**
1.	Mr. James R. Byrd	15 Joanne Lane, Monument, NM. South of Plant. From the intersection of Hwy 322 and Maddox Rd go 1.9 miles south on Maddox RD to Byrd Lane, then west 0.4 miles to Joanne Lane, turn south 0.1 miles to residence.	(575) 397-6283
2.	Mr. Mike Myers	11908 Hwy 322, Monument, NM. Northeast of Plant on Hwy 322.	(575) 441-1866
3.	Apache Office	17 Hess Lane, Monument NM. Northeast of Plant on Hwy 322.	(575) 393-2144

2. IMMEDIATE ACTION PLAN

Targa Monument Plant Incident Commander (IC) 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.

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. 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.
   - **EVACUATE** - move away from the source and get away from the affected area (upwind and out of low-lying areas).
   - Don personal protective breathing equipment (30-minute SCBA) for escape.
   - From any location in the facility proceed to the designated Emergency Assembly Area and notify supervisor or incident commander you are accounted for. See Appendix D for locations of Assembly Areas.
   - Assist personnel in distress as directed by the Incident Commander with proper PPE, i.e., 30-minute SCBA unit.
   - Accounting for on-site personnel will be directed by the Incident Commander using the sign-in log at Assembly Area 1, 2, and 3 depending on the "Level Response" outline beginning on Section 1 Flow Diagrams. The sign-in log is brought to the initial Assembly Area by the office personnel as they proceed to that area.

B. After an Incident Commander is designated, at the IC's direction, the emergency responder will don a 30-minute SCBA and take immediate measures to control the presence of or potential H_2S discharge and to eliminate possible ignition sources. Emergency shutdown procedures should be initiated as deemed necessary to correct or control the specific situation.

C. The Incident Commander is responsible for all notifications including government agencies and the effected public per the appropriate response level (Section 1). The IC may designate another Targa employee to make these notifications to initiate the evacuation of those within the exposure area. See Appendix A for phone and address contact list for locations in the 100 and 500 ppm Radius of Exposure (ROE). These parties will be notified by telephone or visit if no telephone contact was accomplished as directed by the IC.

D. The IC will contact the Area Manager or first available person on the Appendix F Targa Monument notification list. Notify them of the circumstances and whether or not immediate assistance is needed. The Area Manager should notify (or arrange for notification of) other supervisors and other appropriate personnel on the Appendix F call list, 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 D).

F. IC or designee will notify, as required, state and local officials and the National Response Center to comply with release reporting requirements. See Appendix E.

G. First Aid Kits are located in the Assembly Area 1 (Break Room), Plant Office building, Control Room, MCC building at AGI Well site, and in Targa Field Operator vehicles (See Appendix G). Field Operator vehicles will be used for roadblocks. H_2S 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 at these sites to ensure H_2S is less than 10 ppm.

H. If alarms and beacons have ceased, 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.

I. Return the situation to normal. Normal conditions are those in which the ambient air quality is below 10 ppm of hydrogen sulfide and sustained without fluctuation to higher levels and the alarms and sirens have ceased. The IC will determine when safe entry conditions are reached for re-entry into the area.

3. EMERGENCY RESPONSE

This section explains the procedures and decision 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.

3.1 Objective

All Area employees shall be prepared to respond to an H_2S or SO_2 emergency at the facility. Emergency response actions may be taken for a variety of situations that may occur. The Plan is activated in based on the concentration of H_2S that has been released. The hydrogen sulfide concentration of 10 ppm or greater alerts any Targa employee via their personal monitor as well as H_2S 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 Wellsite - Emergency alarm sounded and/or Light Beacons are activated for H_2S 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 H_2S 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.J 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 their designee, shall be notified. In the absence of the Area Manager or their 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.

3.2 Response Levels

There are two response levels for the facility described in the Flow Diagrams provided at the beginning of the Plan (Section 1). Any individual encountering a situation where their personal H_2S monitors are alarming or hears the Plant Siren or sees the Light Beacon must evacuate the affected area immediately. The individual must move upwind and out of low lying areas to safety per evacuation route arrows shown on Appendix G to the appropriate Assembly Area as directed by the Incident Commander. See Appendix D. 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 whom are evacuating and assembling to Assembly Area 1 (Plant Break Room, Appendix D or G).

In summary, the Levels provide for immediate action to be taken in an organized fashion in the event of a release of H_2S at a level of 10 ppm or greater and are conducted to mitigate negative impact to the welfare of individuals and the environment.

3.3 Evacuation and Emergency Assembly Areas

When the emergency alarm or siren is activated all Targa personnel, contractors, and any visitors in the facility are to stop work, check the prevailing wind direction by looking at the nearest wind sock and immediately proceed along designated evacuation routes (Appendix G) and/or upwind to the pre-designated Emergency Assembly Area 1 as shown in Appendix D. Monitoring at Assembly Area 1 will be conducted to determine if it is safe to remain (10 ppm or less) or if the concentration of H_2S is increasing at the plant requiring movement to Assembly Area 2 or Assembly Area 3. All personnel will check in at the Assembly Area and be accounted for using the daily sign-in log. The sign-in log is brought to the Assembly Area by the office personnel as they proceed to that area. The Incident Commander then determines if any personnel are not accounted for and if immediate rescue is needed and directs any rescue personnel to don 30-minute SCBA's and respond. Emergency services (911) will be contacted if there are injuries or as otherwise deemed necessary. The IC will direct operations to don 30-minute SCBA's and investigate the cause of the release. The recommended sequence of actions is: move away from source, don PPE, alert others, assist the distressed, evacuate to designated Assembly Area, monitor for H_2S (10ppm or greater), and account for personnel.

MONUMENT PLANT/AGI Wellsite - Emergency Assembly Area 1
-Plant Break Room-
(Appendix D)

MONUMENT PLANT/AGI Wellsite – Emergency Assembly Area 2
Apache Office
(Appendix D)

MONUMENT PLANT/AGI Wellsite – Emergency Assembly Area 3
Monument Cafe
(Appendix D)

3.4 Emergency Shut-down

The Plant has emergency shutdown stations (ESD's) designed to isolate gas, and systems to depressurize by routing gas to flares. Note: Burning the H_2S in the flare will generate SO_2 so monitor for both H2S and SO_2 to determine if it is safe to return. These ESD's can be activated by plant operator in the control room or by remote ESD Stations located in the facility (See Appendix G). Inlet gas could be shut in from entering the plant at the inlet scrubbers by manually blocking the scrubber valves. This action would be implemented by the Incident Commander as warranted in an emergency. The inlet gas would then be automatically routed to a plant flare for safe disposal. There are two ESD valves located at the suction and discharge of the AG compressor. These valves can be automatically activated from the control room or locally. These valves and the ESD Stations are depicted on Appendix G. All H_2S alarms are activated at 10 ppm.

3.5 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:

- Ensure all previously notified or evacuated persons have been advised that the emergency condition has ended.

- Ensure all agency notifications have been completed and follow-up with any written notification requirements.

- Clean up, recharge, restock, repair, and replace emergency equipment, as necessary, and return it to its original location.

- Review the cause of the emergency and modify operating maintenance and other surveillance procedures, if needed.

- Critique all actions and procedures, providing additional training to employees if need is indicated. Modify the contingency plan as provided in the NMAC rulings if there is any change in plant operations which require a new ROE to be established, changes to the plant facilities, training requirements, contact information, equipment lists, assembly area or roadblocks, and the public areas including roads, businesses, or residents. The plan will be redistributed to those persons/entities provided in the "Distribution List" of Appendix B.

3.6 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 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 H_2S requiring activation of this Plan which is detection of 10 ppm or greater H_2S. 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 H).

Affected parties are located in areas that may be exposed to levels of 10 ppm or greater H2S and they will be notified via the phone and address contact list in Appendix A. These locations are illustrated in 100 and 500 ppm Radius of Exposure (ROE) areas (Appendix D). These parties will be notified by telephone or visit if no telephone contact was accomplished as directed by the IC. The IC is responsible to make these notifications or designate someone to make them.

The Incident Commander or their designee will conduct required notifications based on the situation (Appendix A, E, and F). After the Area Manager or their designee is contacted, they will notify the appropriate Targa Corporate Management, EHS personnel, Plant emergency response personnel, and advise them of the existing emergency condition of 10 ppm or greater.

3.7 Response Details

Plan activation (10 ppm or greater).
Any employee who finds her or himself in an emergency situation involving the escape of hydrogen sulfide gas of 10 ppm or greater shall notify the Control Room Operator by the fastest means. The Control Room Operator becomes the Incident Commander until relieved by someone else, which may be an Area Manager, Plant Supervisor, or Public Official.

The IC will refer to flow diagram for Level Responses (Section 1). The Incident Commander is responsible to direct the alerting of all persons who are within the exposure areas which are areas of 10 ppm or greater. See Appendix A for phone and address contact list for locations in the 100 and 500 ppm Radius of Exposure (ROE). See Appendix D for the 100 and 500 ppm ROE locations. The IC will also contact and advise the Area Manager, or alternate, of the location and nature of the emergency and if assistance is needed (Appendix F). The Area Manager or their designee will assist in requesting additional assistance if necessary (Appendix F).

The recommended sequence of actions is: move away from source, don PPE, alert others, assist the distressed, evacuate to designated Assembly Area and monitor for H_2S (10ppm or greater), and account for personnel.

Stop the Escape of Hydrogen Sulfide
After the plan is activated so all personnel are evacuated and accounted for, the IC should take the necessary steps to stop the escape of hydrogen sulfide by activating the block valves and ESD shutdown stations that are accessible using SCBA's and other proper protective equipment as necessary.

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 Monument Plant will be road blocked at the cattle guard to prevent entry as the condition warrants based on the Level 1 response (Section 1). Recommended roadblock locations for Targa and law enforcement personnel to prevent entry are provided in Appendix D. As the IC assigns personnel to set-up roadblocks he or she will give the assigned persons their phone or radio contact information so they can communicate with the IC. The persons manning the roadblocks must be equipped with hydrogen sulfide measuring devices and two-way radios or cell phones to be able to communicate with the IC. Roadblocks should be placed a safe distance away from the potential exposure area and should be monitored for Hydrogen Sulfide to ensure levels are less than 10 ppm. 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. Monitor for H_2S at roadblocks and if levels are 10 ppm or greater notify IC and relocate to next Roadblock (Appendix D) and update the Incident Commander.

Based on all information available and the calculated potential exposure information listed in Appendix C and D, public officials are notified of the suggested locations of roadblocks to keep the public from entering a potentially hazardous area. Proper caution should be used for shifting changes in wind direction. Refer to Appendix D.

Complete Notifications as Required

Incident Commander will initiate notification of Affected Residents or Parties, Businesses, Emergency Responders, Targa Management, and Government Agencies (Appendix A, E, and F). The IC or their designee shall contact OCD no later than 4 hours after plan activation (the first detection of 10 ppm or greater) at the facility. The Area Manager or their designee shall submit a full report of the incident to the division on form C-141 (Appendix H) no later than 15 days following the release.

Monitor for Safe Re-entry

Ensure complete and permanent stoppage of the release is supported by verification that the fixed monitors and alarms have ceased alerting/sounding at the release site. Allow time for residual H_2S to leave the area and at the direction of the IC begin monitoring evacuated areas for hydrogen sulfide and combustible gas concentrations of less than 10 ppm (with multimeter). Monitor wind direction by using the nearest wind sock. Monitor safely using 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. Note: Burning the H_2S in the flare will generate SO_2 so if flaring monitor for both H_2S and SO_2 to determine if it is safe to return.

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 will be coordinated through the Incident Commander (IC). When total absence of hydrogen sulfide and combustible gas is confirmed throughout the evacuated area, notify any public official or emergency responders participating so that they may be informed of the situation. Advise all parties previously notified that the emergency has ended. Remove any roadblocks that were set up.

4. SCOPE

The Monument 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 pipe 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.

4.1 PLANT LOCATION

The Plant is located approximately 2.6 miles southeast of Monument, New Mexico. It is owned by Versado Gas Processors L.L.C. and operated by Targa Midstream Services LLC:

- Plant location in Unit N (SE/4, SW/4), Section 36, Township 19 South, Range 36 East, Lea County, New Mexico.

- Plant coordinates are Latitude: 32° 36' 37.79" N, Longitude: 103° 18' 37.98" W.

- Plant physical address is 1300 E. Hwy 158, Monument, New Mexico.

- Plant mailing address is P. O. Box 67, Monument, New Mexico 88265.

- To reach the Plant from Monument, NM:

    a. From the intersection of Hwy 322/Hwy 8, head west approximately 1.9 miles.
    b. Turn south onto Hwy 322 and proceed 0.7 miles.
    c. Continue traveling west on Hwy 322 and proceed approximately 0.5 miles.

d. Continue traveling south on Hwy 322 to the plant location.

4.2 ACID GAS INJECTION WELL LOCATION

The Monument Acid Gas Injection Well is located within the Monument Plant.

The location of the Plant is illustrated herein on Figure 1 - Topography Map. *Note: The AGI Wellsite is within the Plant.*

Figure 1: Monument Gas Plant and AGI Wellsite, Lea County, New Mexico

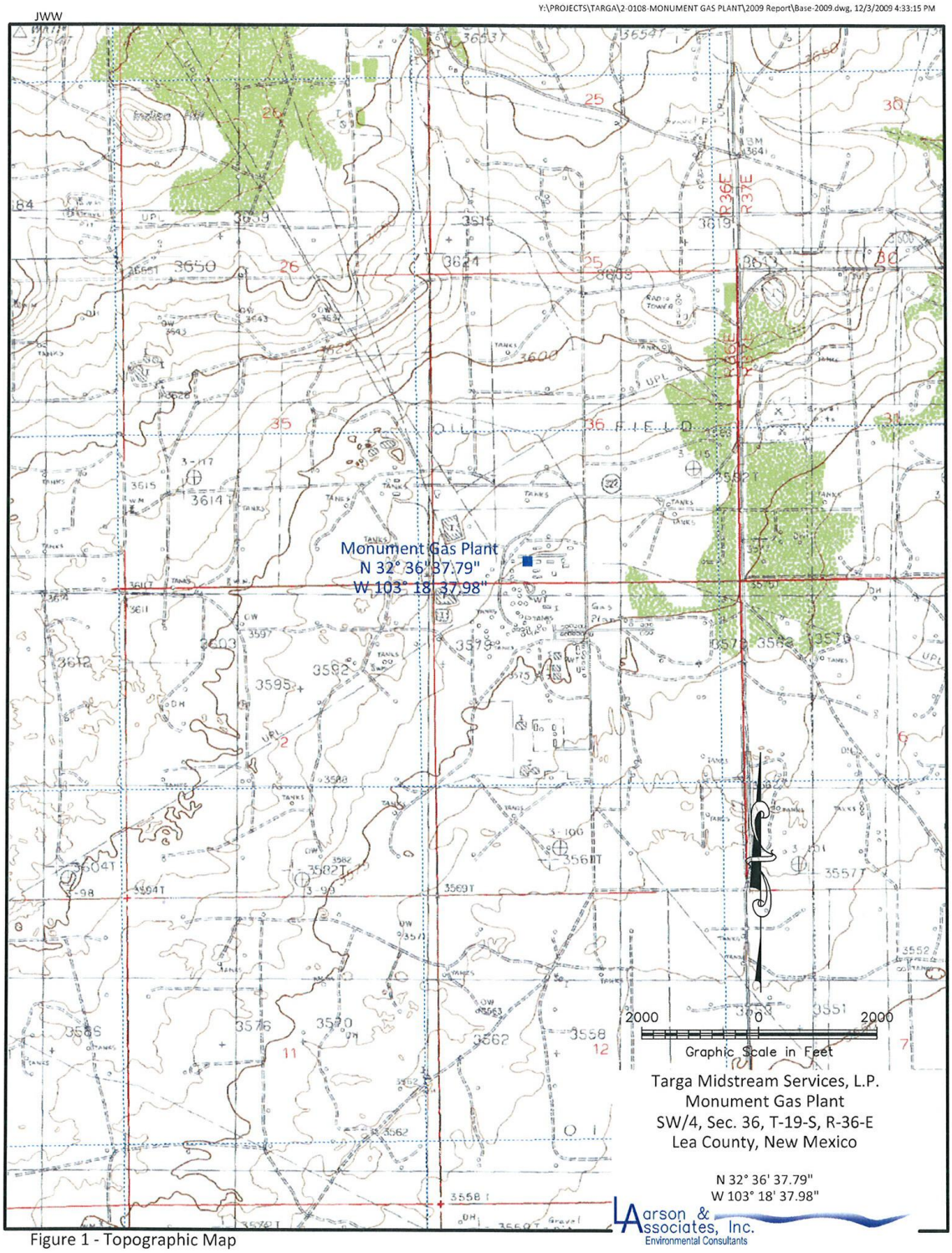


Figure 1 - Topographic Map

4.3 DESCRIPTION OF PLANT OPERATIONS AND PROCESSES

The Plant operations include gas processing, and compression, as well as gathering lines and storage tanks. The Plant gathers and processes produced natural gas from the surrounding area. 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.

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 (H_2S) stream that is removed from the natural gas in the amine treating process is routed (directed) to the acid gas compressor where it is combined with plant waste water and injected into the AGI well. This waste water is made up of cooling tower blowdown water and produced water that comes in with the inlet gas. The raw field inlet gas enters the Monument Plant at a flow rate not to exceed 90 mmcfd and flows into the AGI well from the Plant at a volume of up to 3.4 mmcfd.

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 3.4 mmcf/d of acid gas for disposal, the total gases are anticipated to range from 2.7 mmcf/d (21% H_2S and 69% CO_2) to 3.4 mmcf/d (28% H_2S and 62% CO_2). *Note: Information was obtained via 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.

Signs are present at the Monument Plant which warn of hydrogen sulfide gas stating “poison gas” and complies with current ANSI standard Z535.1-2002 for safety color coding.

Wind direction indicators known as wind socks are located at the Plant site so that one or more are visible from all principal working areas at all times (Appendix G).

4.4 DESCRIPTION OF ACID GAS WELLSITE OPERATIONS

The acid gas stream is received at the well where it mixed with water and is further compressed to approximately 1,600 psi for injection or according to OCD order. This is accomplished by using an electric driven, reciprocating compressor.

The plant waste water is pumped from a storage tank to the AGI well head where it is injected with the acid gas. This storage tank, as well as any other waste water storage tanks in the facility that could contain H_2S, will have the stairs or ladder leading to the top of the tank chained or marked to restrict entry, including a warning sign (NMAC 19.15.11.12.E).

The acid gas compressor area is equipped with a fixed H_2S detector system (See Appendix G for locations) which alarm at 10 ppm or greater on site and in the Monument Plant Control Room

which is occupied 24 hours a day. These same detectors activate ESD isolation valves that are located on the suction discharge lines on the compressor at the 20 ppm level. These ESD isolation valves can also be remotely operated from the Monument Plant Control Room in the event of an emergency (Appendix G). If the ESD isolation valves are activated the acid gas compressor automatically shuts down and any gas goes to the acid gas flare for safe removal and disposal. Note: Burning the H_2S in the flare will generate SO_2 so if flaring monitor for both H_2S and SO_2 to determine if area is safe.

- The compressor/injection area is protected from public access with chain link fencing.

- Wind direction indicators known as wind socks are located at the compressor/injection site so that one or more are visible from all principal working areas at all times (Appendix G).

- The acid gas is injected into the Devonian and Fusselman Formation at a depth of 8,350 feet to 9,200 feet below the surface per OCD order. The wellbore is constructed with three casing strings, all with cement circulated to the surface. The acid gas well is permitted under Division Order No. 13052 and Administrative Order SWD 561 and 561-A.

- 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 SS valve shuts off any flow from the AGI well to prevent backflow from the injection formation to the surface in the event of a catastrophic failure of the well/wellhead.

- The wellsite is fully automated and controlled by the Monument Plant Operations. Targa personnel inspect the site daily. Video surveillance of the area is 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.

4.5 FUNCTION OF SIGN-IN LOG SHEET

- In order to have an accurate listing of all Targa personnel, contractors, and vendors on-site a daily sign-in log sheet located in the Plant Office is used. The sign-in log sheet includes at a minimum the person's name, the company name, the time of arrival, and the time of departure.

- Signs are located at the Plant and acid gas well gate entrances indicating that all visitors are to sign in on the daily sign-in log sheet located in at the Plant office.

- Anytime the Plan is activated (10 ppm or greater) this sign-in log sheet will be used by the IC to account for all people that maybe in the facility. This accounting for on-site personnel will be directed by the Incident Commander using the daily sign-in log at Assembly Area 1, 2, and 3 depending on the "Level Response" outline beginning on Section 1 Flow Diagrams. The sign-in log is brought to the initial Assembly Area by the office personnel as they proceed to that area.

4.6 SIGNS & MARKERS

The facility entrances and storage tanks that contain H_2S within the facility have warning signs indicating the presence of H_2S/Poisonous Gas and high pressure gas (which comply with ANSI standard Z525.1-2002) Emergency phone numbers are posted at the entrance to the Plant.

5. RADII OF EXPOSURE (ROE)

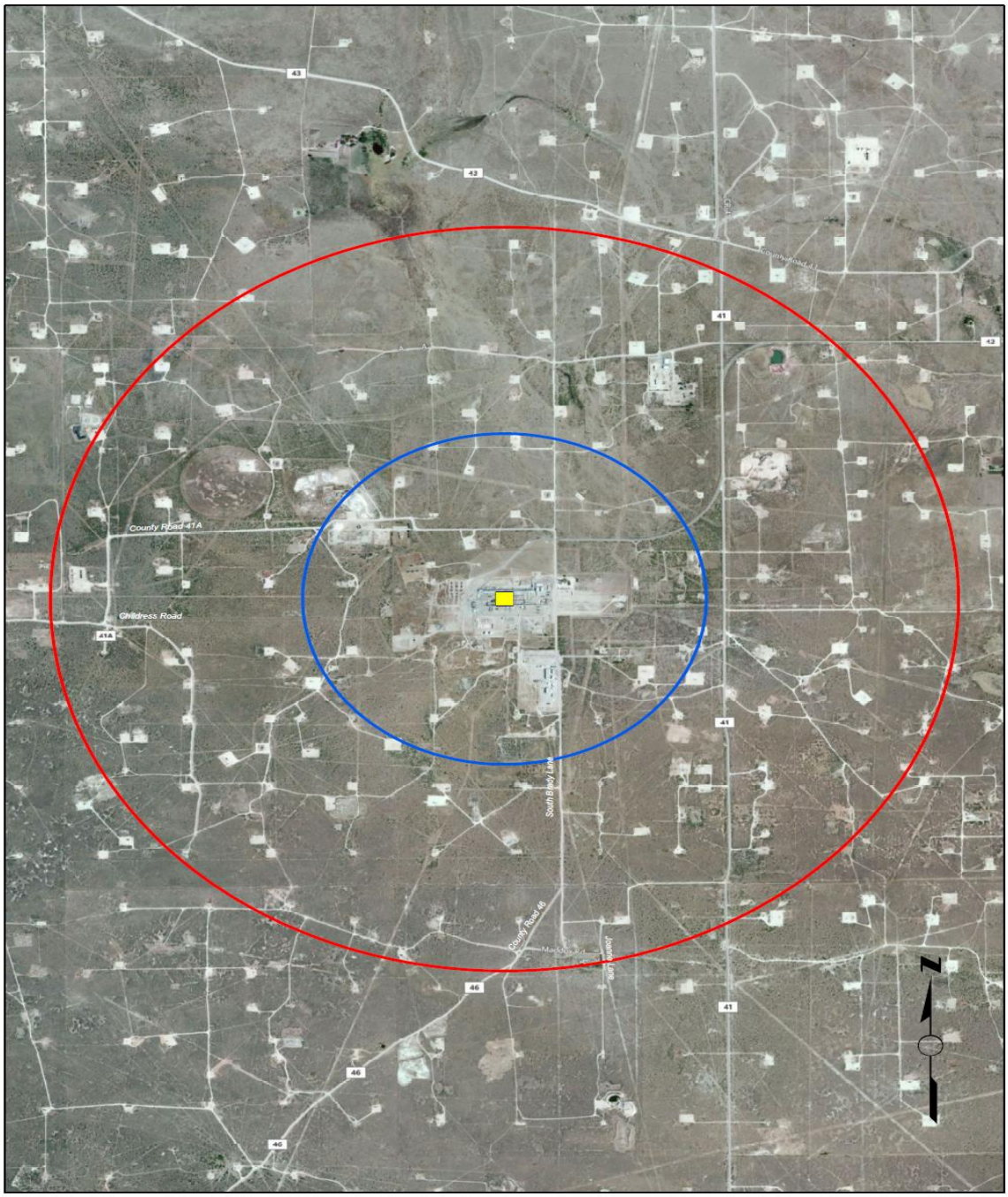
For the existing operations, the Radius of Exposure for both 500-ppm and 100-ppm of H_2S gas was determined using the Pasquill-Gifford derived equation, as defined by NMAC, which uses the maximum daily rate of the gaseous mixture into the Plant and into the AGI wellsite:

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.**

Monument Plant and AGI Wellsite-

500 ppm ROE – public road	**3,324 feet**
100 ppm ROE – public area	**7,274 feet**

Figure 2 – Worst Case Scenario ROE



Legend

MONUMENT GAS PLANT
500 ppm ROE = 3324 feet
100 ppm ROE = 7274 feet

0 700 1,400 2,800
Graphic Scale in Feet

Targa Midstream Services, L.P.
Monument Gas Plant
Lea County, New Mexico

N 32 36' 37.79"
W 103 18' 37.98"

LA arson & Associates, Inc.
Environmental Consultants

6. TRAINING/DRILLS/EDUCATION

6.1 TRAINING

A critical portion of this plan is the emergency procedures and preparedness. To ensure the most effective implementation of these procedures, pre-emergency measures are taken to maintain a state of preparedness. These actions are as follows:

- As part of training an annual mock emergency drill is held annually in which Monument emergency responders, public officials, and the parties identified in the 100 and 500 ppm ROE's (Appendix A and E). These drills will include a briefing on issues such as evacuation or shelter in place plans and training of the residents on the proper protective measures to be taken in the event of a release.

- 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 SCBA's are maintained and ready for use.

- This Plan is made available to appropriate public response officials and shall be reviewed and discussed thoroughly with the Monument area emergency response officials.

- Targa will use brochures, public notices, or other means, as deemed appropriate and practical, to alert, educate and train the public officials and the parties within the 100 and 500 ppm ROE's (Appendix A and E). These training brochures are mailed to the parties located within the 100 and 500 ROE's and public officials annually advising them on the hazards of a H_2S release, response instructions including evacuation or shelter in place information on closing all windows and shutting off furnace and air conditioning systems/swamp coolers that may draw air into a dwelling, and information on hydrogen sulfide characteristics. These parties are identified in Appendix A.

All training records for the Plant are maintained at the Plant. Training is documented on training forms as in Appendix I. 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 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.

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 task.

6.2 EMERGENCY RESPONSE DRILLS

A critical portion of this plan is the emergency procedures and preparedness. To ensure the most effective implementation of these procedures, pre-emergency measures are taken to maintain a state of preparedness. The Plant conducts emergency drills. Multiple drills during the year may be scheduled at the discretion of the Area Manager or Public Emergency Response Agencies.

These emergency drills are designed to exercise this Plan. Area Public Emergency Response Agencies and the affected Monument area residents (Appendix A) are notified and invited to participate in the drills. The drills will also include briefing of public officials on Monument facility operations.

Drill training will be documented per a documentation form as in Appendix I 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 and time;
- Attendees and Participant to the drill;
- Summary of activities and responses; and

- Post drill de-briefs and reviews to determine effectiveness and follow up to correct any deficiencies and/or ways to improve the response procedures.

- Surveillance and preventative maintenance to minimize the possibility of an accidental release of gas.

6.3 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:

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

6.4 REVISIONS TO THE PLAN

The H_2S 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.

6.5 AVALABILITY 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 Plant in the Area Manager's office, Assembly Area 1 (Break Room), Control Room, all Plant Supervisors, and Field Operator vehicles. See Appendix B for the H_2S Distribution List, which lists all the additional entities that have been provided a copy of the H_2S Plan.

6.6 EMERGENCY RESPONSE ORGANIZATION

The Plant uses the Incident Command System (ICS) for emergency response. The ICS structure used is based on the National Incident Management System (NIMS), 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 (10 ppm or greater) The Plant Operator will be the On-Scene Incident Commander (IC). Under certain conditions, the New Mexico State Police responding to the emergency may elect to assume the

position of IC or they may establish a Unified Command of which the Targa employees may be key members. The responsibility of the IC is to ensure control of the emergency incident.

6.7 CHARACTERISTICS OF H_2S, SO_2 AND CARBON DIOXIDE

6.7.1 Hydrogen Sulfide (H_2S)

Monument Plant

The proposed inlet gas streams into the Plant will contain approximately 7,587 ppm (or 0.75 mole percent) of hydrogen sulfide based on data generated from the sampling of the inlet gas on July 1, 2011 (Appendix C). The gas flow rate for the inlet to the plant is 90 mmcfd (based upon process knowledge as measured by total flow instrumentation set at continuous monitoring).

AGI Compressor and Well Area

The acid gas being injected will have a hydrogen sulfide concentration equal to 27.6% and a carbon dioxide content equal to 71.9%, from sampling obtained April 1, 2011. The hydrogen sulfide flow rate utilized for the Radius of Exposure calculation for the acid gas to the well is 276,000 ppm (27.6%). The corresponding flow rate is equal to approximately 3.4 mmcfd (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_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		**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

6.7.2 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 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.

6.7.3 Carbon Dioxide

The current inlet gas streams to the Plant contain approximately 1.7% carbon dioxide based on an inlet sample collected on July 1, 2011. The acid gas stream to the acid gas injection well contains approximately 71.9% of carbon dioxide as sample on April 1, 2011.

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

7. PUBLIC AWARENESS AND COMMUNICATION

Public awareness and communication is a primary function of the H_2S 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 A, E, and F. The Level Responses indicate when certain entities are to be contacted in event of activation of this Plan.

7.1 MEDIA

At no time shall any representative from the media be allowed any closer to the facility 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 IC or their designee will provide Corporate Communications with periodic updates and will take their direction with regard to any onsite communication with the media.

7.2 PUBLIC AREAS, BUSINESSES, AND RESIDENTS

Public areas, businesses, and parties will be notified by telephone or visit if no telephone contact was accomplished. All effected entities (100 ppm or 500 ppm or both) within the ROE's will be contacted with the phone and address list in Appendix A. The contact information for local and state agencies is contained in Appendix E. The IC is responsible for all required notifications.

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.

Contact notification will include:

- The nature and extent of the release/emergency at the facility and recommendations for protective actions, such as evacuation or shelter-in-place;

- Any other event specific information that is necessary to protect the public; 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 after alarms and warning beacons have ceased and on ambient air condition sampling of less than 10 ppm.

7.3 PUBLIC ROADS

Depending on the level of response, roadblocks will be established pursuant to Section 1 Flow Charts and Appendix D locations.

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

EMERGENCY NOTIFICATION LIST

Targa Monument Gas Plant / AGI Wellsite

Parties within the 100 and 500 ppm ROE

Parties located within the 500 ppm radius of exposure area			
	Name	**Location**	**Phone Number**
1.	Mr. Robert Byrd	19 Poodle Lane, Monument NM. Southeast of Plant.	(575) 390-1941
2.	El Paso Compressor Station	Station property connects with Plant property on southeast corner of Monument Plant.	(575) 394-4417

Parties located within the 100 ppm radius of exposure area			
	Name	**Location**	**Phone Number**
1.	Mr. James R. Byrd	15 Joanne Lane, Monument, NM. South of Plant. From the intersection of Hwy 322 and Maddox Rd go 1.9 miles south on Maddox RD to Byrd Lane, then west 0.4 miles to Joanne Lane, turn south 0.1 miles to residence.	(575) 397-6283
2.	Mr. Mike Myers	11908 Hwy 322, Monument, NM. Northeast of Plant on Hwy 322.	(575) 441-1866
3.	Apache Office	17 Hess Lane, Monument NM. Northeast of Plant on Hwy 322.	(575) 393-2144

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

Monument Volunteer Fire Department

Lea County Local Emergency Planning Committee

Lea County Sherriff Department

Monument Gas Plant Manager and Supervisors

Targa Monument Plant Control Room, Assembly Area 1, Field Operator Vehicles

Targa Midstream Office (Midland, TX)

The formulas for calculating the ROEs for the Monument Plant/AGI Wellsite were calculated in accordance with the rulings as specified by the New Mexico Adminstrative Code Pasquill-Gifford Equation:

500-ppm RADIUS OF EXPOSURE CACULATION

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

100-ppm RADIUS OF EXPOSURE CACULATION

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

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.
    - *Monument Plant*-
      The volume used for the ROE calculation is 90 mmcfd as the inlet to the Plant with a hydrogen sulfide concentration of 7587 ppm:

      Using flow rate Q = 90 mmcfd and
      H_2S concentration = 7,587ppm

500 ppm ROE – public road	**2,734 feet**
100 ppm ROE – public area	**5,984 feet**

    - *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 3,380 MCFD. The assumed 3,380 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 worst case interpretation of the volume of gas. It should be noted that the plan will remain effective as long as the processed volume and H_2S content equate to the same ROE. The hydrogen sulfide concentration used was 27.6 mole percent. Therefore, 276,000 ppm or 27.6 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 = 3 mmcfd and
H_2S concentration = 276,000 ppm

500 ppm ROE – public road	**3,324 feet**
100 ppm ROE – public area	**7,274 feet**

TARGA

Targa Midstream Services, L.P.
PO Box 67
Monument, NM 88265

Sample ID: STA118100071;Monument Plant Use Only
Lease: 2nd Stage Gas To Amine Contactor
Location:
ID: Plant 118 at ,New Mexico
Sample Type: Spot

Sample Ran Date: 7/7/2011
Effective Date: 7/1/2011

Fractional Gas Analysis
at 14.65 and 60° F

Compound	Mol. %	GPM	Sp. Gr.
Carbon Dioxde:	1.7734		0.0270
Nitrogen:	1.9686		0.0190
Hydrogen Sulfide:	0.7587		0.0089
Methane:	78.0796		0.4325
Ethane:	8.1690	2.1723	0.0848
Propane:	4.6896	1.2846	0.0714
Iso-Butane:	0.7254	0.2360	0.0146
N-Butane:	1.8330	0.5746	0.0368
Iso-Pentane:	0.5795	0.2107	0.0144
N-Pentane:	0.5738	0.2068	0.0143
Hexane Plus:	0.8494	0.3473	0.0253
	100.0000	5.0324	0.7490

Specific Gravity
Field Gravity 0.749
Real, dry: 0.7515
Real, wet: 0.7469

Molecular Weight 21.692

B.T.U./CU. Foot (H2S Free)
Real - Dry Basis 1,222
Real - Wet Basis: 1,201

Pentane Plus
GPM: 0.7648

H2S PPM 7,587

Compressibility Factor
Z dry: 0.9964
Z wet: 0.9959

Pressure 230 psig.
Temperature 97 F.

Sampled and Analyzed by: Bruce Stingley
Comments: Notes:

RunID: C:\Monthly Samples\Sau000458.htm

TARGA

Targa Midstream Services, L.P.
PO Box 67
Monument, NM 88265

COPY

Sample ID: STA118100006;TARGA MIDSTREAM SERVICES L.P.
Lease: TREATER ACID GAS
Location:
ID: Plant 118 at ,New Mexico
Sample Type: Spot

Sample Ran Date: 4/11/2011
Effective Date: 4/1/2011

Fractional Gas Analysis
at 14.65 and 60° F

Compound	Mol. %	GPM	Sp. Gr.
Carbon Dioxde:	71.9430		1.0933
Nitrogen:	0.0280		0.0003
Hydrogen Sulfide:	27.6000		0.3248
Methane:	0.2780		0.0015
Ethane:	0.1510	0.0402	0.0016
Propane:	0.0000	0.0000	0.0000
Iso-Butane:	0.0000	0.0000	0.0000
N-Butane:	0.0000	0.0000	0.0000
Iso-Pentane:	0.0000	0.0000	0.0000
N-Pentane:	0.0000	0.0000	0.0000
Hexane Plus:	0.0000	0.0000	0.0000
	100.0000	0.0402	1.4215

Specific Gravity
Field Gravity 1.430
Real, dry: 1.4299
Real, wet: 1.4076

Molecular Weight 41.166

B.T.U./CU. Foot (H2S Free)
Real - Dry Basis 5
Real - Wet Basis: 5

Pentane Plus
GPM: 0.0000

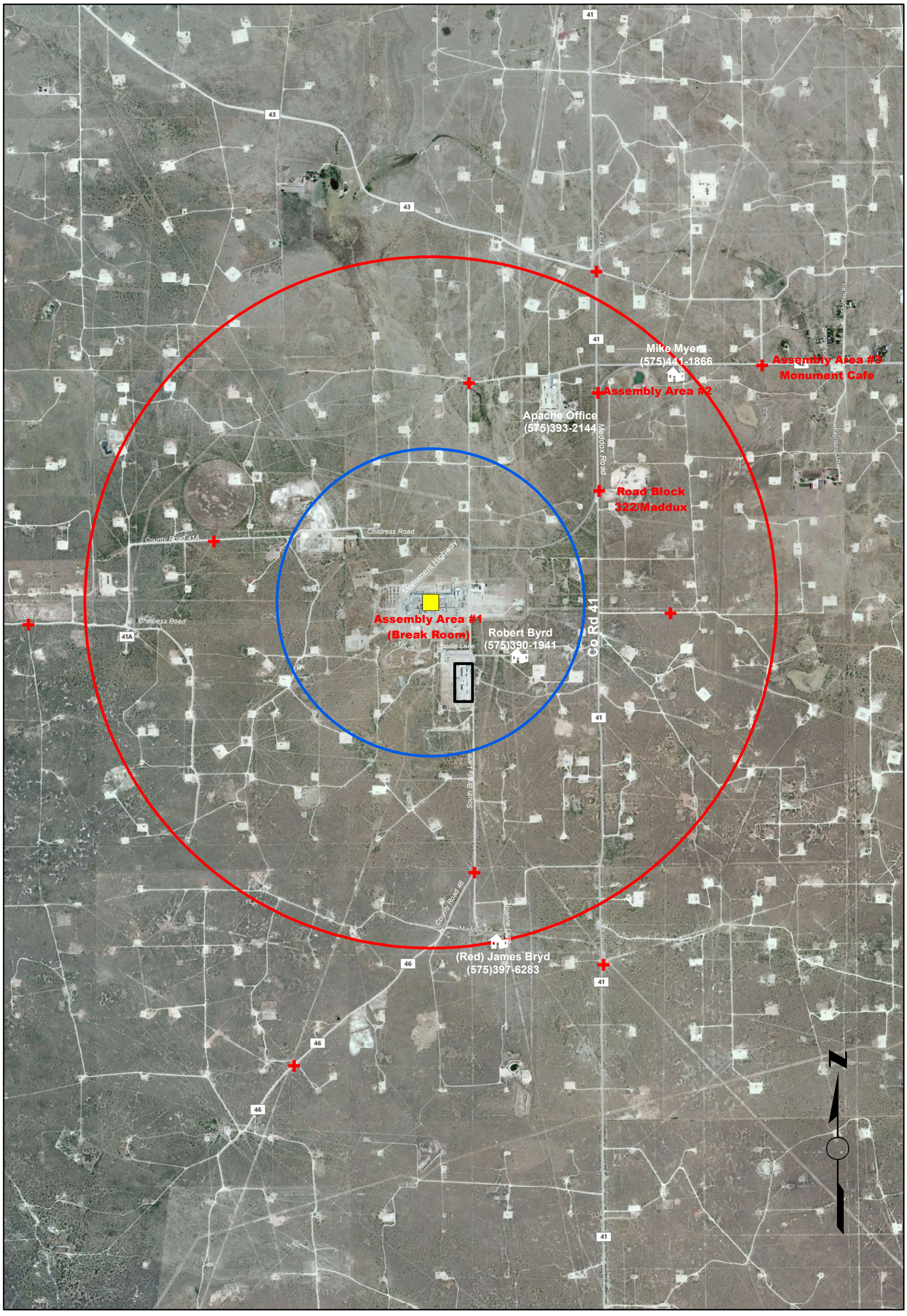
H2S PPM 276,000

Compressibility Factor
Z dry: 0.9937
Z wet: 0.9932

Pressure 5 psig.
Temperature 104 F.

Sampled and Analyzed by: Bruce Stingley
Comments: Analysis by Laboratory Services, Hobbs.

RunID: LabSvcs



Legend

- Resident
- Monument Gas Plant
- El Paso Station
- 500 ppm ROE = 3324 Feet
- 100 ppm ROE = 7274 Feet
- \+ Emergency Assembly Areas & Recommended Road Block Locations

0 1,000 2,000 4,000 6,000

Graphic Scale in Feet

Targa Midstream Services, L.P.
Monument Gas Plant
Lea County, New Mexico

N 32 36' 37.79"
W 103 18' 37.98"

Larson & Associates, Inc.
Environmental Consultants

APPENDIX E

AGENCY/EMERGENCY RESPONDERS and CONTRACTOR SUPPORT NOTIFICATION LIST

Call 911

State Police	**575-392-5588**
Monument Fire Dept.	575-397-4166/575-393-4339
Hobbs - Sheriff	575-396-3611
Hobbs – Police	575-397-9265
Hobbs – Fire Dept.	575-397-9265
Hobbs – Ambulance	575-397-9265
Eunice – Police	575-394-2112
Eunice – Fire Dept.	575-394-3258
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

CONTRACTOR SUPPORT

ELECTRIC SERVICE COMPANIES

Excel Energy - Customer Service	800-895-4999 24 hour
Kay and Company	806-592-3513

WATER SERVICE AND VACUUM TRUCKS

Chaparrel Services – Eunice, NM	575-394-2545 24 hour
Danny's Hot Oil	575-398-3490
Gandy Corporation – Lovington, NM	575-396-4948 24 hour
Key Energy Services – Hobbs , NM	575-397-4994 24 hour

ROUSTABOUT CREWS

Flint Energy Services – Odessa, TX	432-332-0687 24 hour
Gandy Corporation – Lovington, NM	575-396-4948 24 hour
B & H Construction - Eunice, NM	575-934-2588 24 hour

DIRT WORK EQUIPMENT

B & H Construction – Eunice, NM	575-394-2588 24 hour
EDW Construction – Hobbs, NM	575-391-7814 24 hour
EKB Welding – Monument, NM	575-361-7078 24 hour
Ferguson Construction – Lovington	575-396-3689 24 hour
Gandy Corporation – Lovington, NM	575-396-4948 24 hour

WELDERS

EKB Welding – Monument, NM	575-361-7078 24 hour
Flint Energy Services – Odessa, TX	432-332-0687 24 hour
B & H Construction – Eunice, NM	575-394-2588 24 hour

SAFETY EQUIPMENT

Total Safety Equip. – Hobbs, NM	575-392-2973 24 hour

APPENDIX F

TARGA PERSONNEL NOTIFICATION LIST

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

Area Management

Monument Plant

Todd Young, Monument Plant Area Manager
Office: (575) 393-2823, ext. 234
Home: (432) 523-3770
Mobile: (575) 441-1645

Alternate:
Joe Gray, Monument Plant Operation Supervisor
Office: (575) 383-2823, ext. 229
Home: (575) 392-7058
Mobile: (575) 631-7069

Alternate:
Randy Duncan, Monument Field and Maintenance Supervisor
Office: (575) 383-2823, ext. 235
Home: (575) 396-3744
Mobile: (575) 631-7065

Alternate:
Tim Jordan, Saunders Plant Area Manager (Lovington, NM)
Office: (575) 396-3221 ext. 31
Home: (575) 396-0189
Mobile: (575) 631-7091

Alternate:
Bill Little, Eunice Plant Area Manger (Eunice, NM)
Office: (575) 394-2534, Ext. 226
Home: (575) 396-2997
Mobile: (575) 631-7099

ES&H Group

Cal Wrangham, ES&H Manager
Office: 432-688-0542 Midland, TX
Home: 432-697-6580 Midland, TX
Mobile: 432-425-7072

Cindy Klein, ES&H Compliance Specialist
Office: 575-396-3221, ext. 38
Home: 575-398-6670
Mobile: 575-631-7093

Rebecca Woodell, ES&H Compliance Specialist
Office: 575-394-2534, ext. 239
Home: 575-394-2280
Mobile: 575-631-7085

Region Manager

Clark White, Vice President and Permian Basin Region Manager
Office: 713-584-1525 Houston, TX

Field Operators

Rick Carpenter
Mobile: (575) 631-7079
Home: (575) 396-3426

Sammy Hodges
Mobile: (575) 631-7058
Home: (575) 394-3203

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

Assistant Vice President- ES&H
Jessica Keiser
Office: 713-584-1084
Cell Phone: 713-263-4537

Corporate Security
Weldon Green
Office: 713-584-1301
Cell Phone: 281-802-5351

N.2+00'-0"

N.1+00'-0"

S.0+00'-0"

S.1+00'-0"

S.2+00'-0"

S.3+00'-0"

S.4+00'-0"

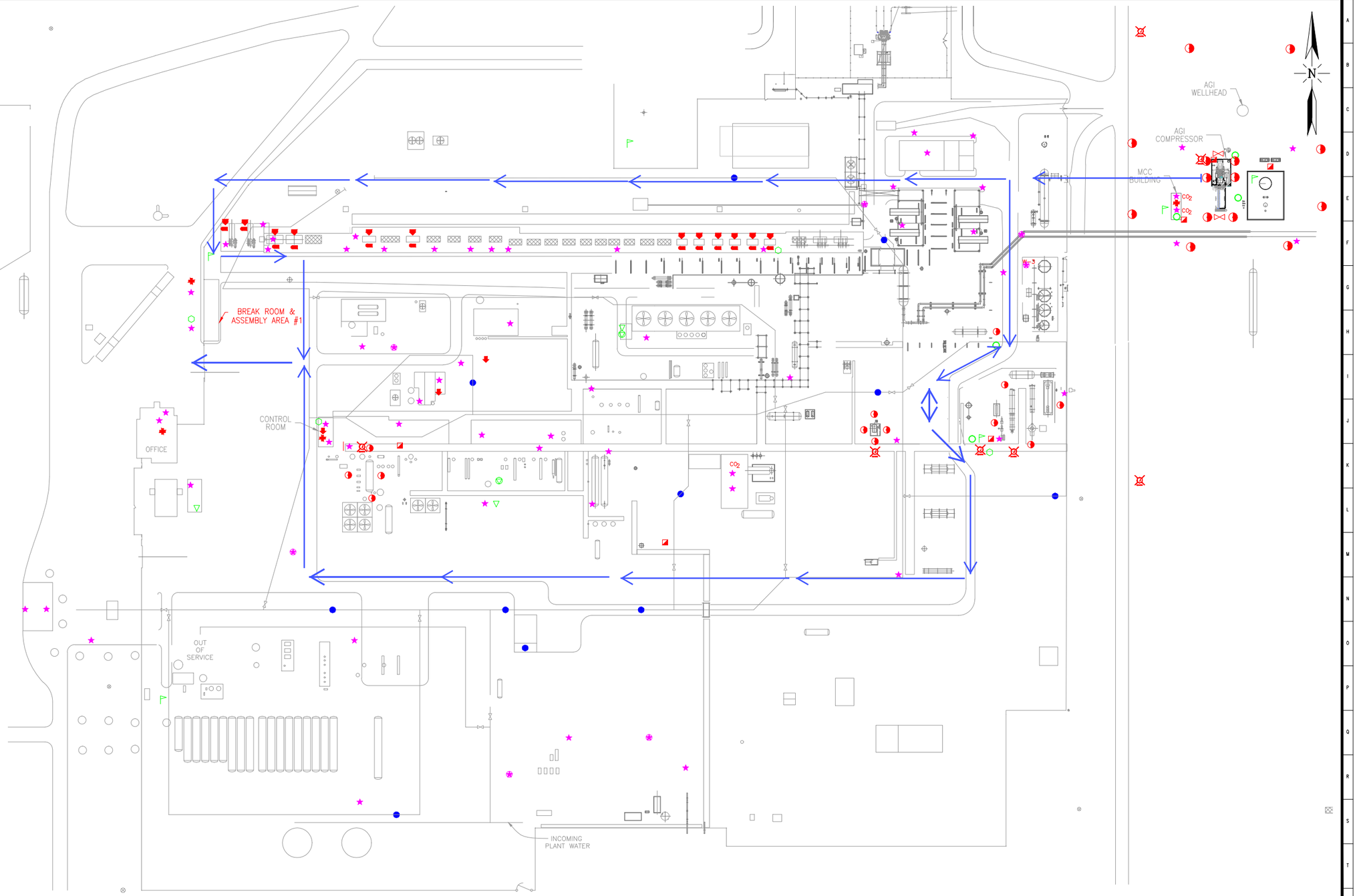
S.5+00'-0"

S.6+00'-0"

S.7+00'-0"

S.8+00'-0"

S.9+00'-0"



- AGI COMP. ESD VALVE
- BURN KIT
- BURN SHEET
- EMERGENCY SIREN
- ESD STATION
- EYE WASH
- FIRE BLANKET
- FIRE EXTINGUISHER
- FIRE PUMP
- FIRST AID KIT
- H_2S DETECTOR
- HYDROCARBON DETECTOR
- LIGHT BEACON
- OPTICAL FIRE DETECTOR
- SCBA – 30 MINUTE
- SHOWER / EYEWASH
- SMOKE DETECTOR
- WHEEL UNIT FIRE EXT.
- WIND SOCK

PLOT DATE: 9/28/11

ALL EMERGENCY CALLS
911 OPERATOR WILL PLACE CALL

AMBULANCE – 393-8251
HOSPITAL – 392-6581
FIRE DEPT – 393-2105
STATE POLICE – 393-3244

REFERENCE DWGS.	REV	DESCRIPTION	DWN	CHKD	DATE
	0	CREATED FOR H2S CONTINGENCY PLAN	TRA		9/28/11

PREPARED BY: TARGA TECHNICAL SERVICES

PROJECT NUMBER:

SCALE:	1"= 60'-0"
DWN BY:	PAC
CHKD BY:	JCS
FINAL CK:	
ENGR.:	
APPRV:	
APPRV:	
DATE	1/7/98

PLANT NAME
MONUMENT GAS PLANT
LEA COUNTY, NM

TARGA

DRAWING NUMBER
118-100-E1A

CAD FILE NAME
MN100E1A

REVISION
0

H2S CONTINGENCY PLOT PLAN AND SAFETY EQUIPMENT DIAGRAM

G:\CAD\MONUMENT\P_PLAN\MN100E1A.dwg

(TRA 9/28/11)

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

Chavez, Carl J, EMNRD

From: Wrangham, Calvin W. [CalvinWrangham@targaresources.com]
Sent: Thursday, March 31, 2011 12:32 PM
To: Chavez, Carl J, EMNRD; Hudson, Matt
Cc: VonGonten, Glenn, EMNRD; Lowe, Leonard, EMNRD; Griswold, Jim, EMNRD
Subject: RE: GW-003 and GW-004 H2S CPs

Carl,
Targa is the operator of the Targa Eunice Plant (GW-005), Eunice North Compressor Station (GW-345), and South Eunice Compressor Station (GW-344). As you stated below these facilities are covered in an already submitted H2S CP.

The original GW Discharge plans for North CS (GW-004) and South CS (GW-003) were retained by Chevron to cover the environmental projects occurring at those two sites. New DP numbers were issued to Targa for the current operations, North CS (GW-345 and for South CS GW-344).
As stated above the current operations at these facilities concerning H2S CP are covered by Targa's Plan referring to GW-005, GW-344 and 345.

Targa is in the process of adding a acid gas injection well at the Monument Plant (GW-025) and are in the process of renewing the H2S CP for that facility to cover the existing and new processes. The Buckeye Compressor Station (GW-029) is part of the Monument Plant gathering system so that facility will be included in the Monument H2S CP.

Targa also operates The Saunders Plant (GW-026) and are in the process of renewing the H2S CP for that facility. The Vada Compressor Station (GW-027) is part of the Saunders Plant gathering system so that facility will be included in the Saunders H2S CP.

Hope this helps clarify the plans and facilities covered.

Thanks, Cal.

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Thursday, March 31, 2011 12:08 PM
To: Hudson, Matt
Cc: Wrangham, Calvin W.; VonGonten, Glenn, EMNRD; Lowe, Leonard, EMNRD; Griswold, Jim, EMNRD
Subject: GW-003 and GW-004 H2S CPs

Matt:

Good morning. Subsequent to our meeting with Chevron USA, Inc. (Chevron) this morning regarding the above subject facilities, please find attached the letters that were mailed to you, but as you indicated, Chevron deals with just the environmental aspects of the facilities and Targa is the operator who would be responsible for any H2S CP. In addition, as we discussed, Targa has already submitted an H2S CP for the GW-005 Middle GP, which will cover all of the above subject facilities including possibly GWs-29 344 of Targa.

Please respond to this e-mail with any clarifications of Chevron's involvement with the H2S CP aspects at the facilities mentioned above. Please contact me if you have questions. Thank you.

Xc: OCD Online "GWs 3, 4, 29 and 344" at "H2S Contingency Plan" Thumbnail

Carl J. Chavez, CHMM

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

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. Cindy Klein
ES&H Specialist
Targa Midstream Services, L.P.
6 Desta Drive Suite 3300
Midland, TX 79705

Dear Ms. Klein:

Re: Dynegy Monument Gas Plant (GW-25) 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 Targa Midstream Services, L.P. does **not** 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* Targa Midstream Services, L.P.).

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