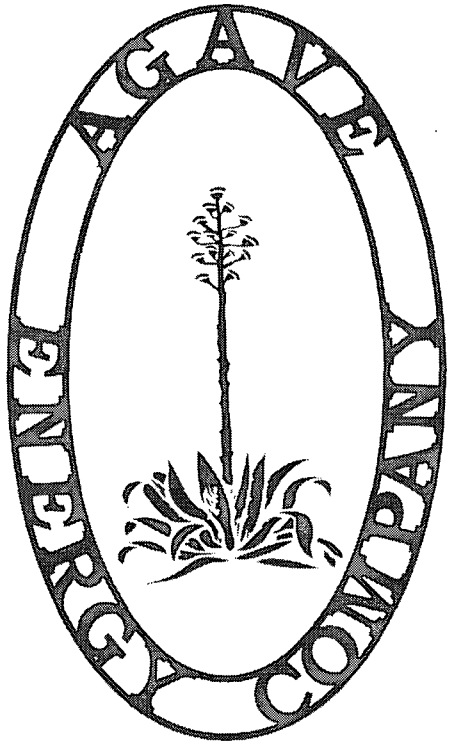


**Site Work Plan:**

# Palo Duro Gas Plant

## Sec 35 T23S R27E

## Eddy County, New Mexico

## March 25, 2015

## 1.0 Introduction

This work plan for the Palo Duro Gas Plant has been developed to facilitate the remediation activities at the location. This plan is based on initial reporting, visual observation, as well as regulations and guidelines of the NMOCD.

## 2.0 Background

Agave Energy Company (Agave) is the operator of the Palo Duro Gas Plant. On the morning of March 18, 2015 a possible release of diluted amine and used amine was discovered at the facility. Upon further investigation it was determined that the cause of the release was a sump used to collect the skid drains at the location. The sump is designed to gather any rain water collected in the station skids, which is then pumped to the waste water tank. The amine skid can at times, contain new and used amine. This amine would be sent to the sump when the skid is washed, or during after precipitation events. This amine would possibly contain a small amount of hydrocarbons.

Based on initial observations, it appears that in the past precipitation has resulted in the sump overflowing, releasing the diluted amine onto the ground. The pad at the location is comprised of hard packed clay and caliche. Initial digging at the site indicates that this has prevented any contamination from infiltrating vertically, rather spreading out horizontally. Contamination will be deepest immediately surrounding the sump, and shallower moving away from it.

Recent rainfalls have caused the contamination to come back up through the top gravel, and pool in several low spots around the sump. These discolored spots are what indicated that there had been an issue.

At this point we believe the total amount of amine released was minimal, well below five barrels. There would have only been a small amount of amine on the skid itself, being the results filter changes and similar work. This would have been diluted if the skid was washed, and accumulated any precipitation. As such, the fluid that would have been released when the sump overflowed would have contained very minute concentrations of hydrocarbons, if any at all.

## 3.0 Recommended Remedial Action Levels

Based on the *Guidelines for Remediation of Leaks, Spills and Releases* (NMOCD, August 13, 1993), the site ranking criteria are as follows.

| | |
|---|---|
| Depth to groundwater >100' (per NMOSE) | 0 |

| | |
|---|---|
| Not in a wellhead protection area | 0 |
| Distance to surface water body >1000' | 0 |
| **Total Ranking Score =** | **0** |

For sites with a Total Ranking Score of 0-9, the Recommended Remedial Action Levels (RRAL) are:

| | |
|---|---|
| Benzene | 10 ppm |
| BTEX | 50 ppm |
| TPH | 5000 ppm |

## 4.0 Remedial Action Plan

Agave has proposed and will implement the following actions for this site.

1. Agave will collect soil samples in an attempt to characterize the area of contamination.
2. Agave will excavate all soil confirmed to contain hydrocarbons above the RRAL.
    a. All excavated material that exceeds RRAL will be disposed of at an OCD approved disposal facility.
3. After excavation, Agave will resample the area until the RRAL are met.
4. After confirmation that the contaminated material has been removed, the excavation will be refilled.
5. Agave is looking at engineering options to eliminate the sump from use to prevent the possibility of future overflows.

If you have any questions regarding this site work plan, please do not hesitate to call me at (575) 513-8988, or email at KEgan@yatespetroleum.com.

Respectfully,

Kerry Egan

Engineering Technician