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State of New Mexico

Form C-144
June 24, 2008

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 87401

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

Energy Minerals and Natural Resources
Department

Oil Conservation Division

1220 South St. Francis Dr.

Santa Fe, NM 87505

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action: ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
☒ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

Operator: Melrose Operation Company OGRID #: 184860
Address: 40 Box 953, Midland Tx 79702
Facility or well name: Valmet Field Yates Sand Unit well # 232
API Number: 30-025-37506 38711 OCD Permit Number: P1-DD200
U/L or Qtr/Qtr A Section 23 Township 22S Range 35E County: Lea
Center of Proposed Design: Latitude N 32.38094 Longitude W 105.33353 NAD: ☒ 1927 ☐ 1983
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC

Temporary: ☒ Drilling ☐ Workover

☐ Permanent ☐ Emergency ☐ Cavitation ☐ Steel Pit

☒ Lined ☐ Unlined

Liner type: Thickness 20 mil ☐ LLDPE ☒ HDPE ☐ PVC

☐ Other ☒ String-Reinforced

Seams: ☒ Welded ☐ Factory ☐ Other

Volume: 2900 bbl Dimensions: L 100 x W 40 x D 20

☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC

☐ Drying Pad ☐ Tanks ☐ Haul-off Bins ☐ Other

☐ Lined ☐ Unlined

Liner type: Thickness _____ mil ☐ LLDPE ☐ HDPE ☐ PVC

☐ Other

Seams: ☐ Welded ☐ Factory ☐ Other

Volume: _____ bbl _____ yd³

Dimensions: Length _____ x Width _____

☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC

Volume: _____ bbl

Type of fluid: _____

Tank Construction material: _____

☐ Secondary containment with leak detection

☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off

☐ Visible sidewalls and liner

☐ Visible sidewalls only

☐ Other

Liner type: Thickness _____ mil ☐ HDPE ☐ PVC

☐ Other

Fencing: Subsection D of 19.15.17.11 NMAC

☐ Chain link, six feet in height, two strands of barbed wire at top

☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet

Netting: Subsection E of 19.15.17.11 NMAC

☐ Screen ☐ Netting ☐ Other

☐ Monthly inspections

Signs: Subsection C of 19.15.17.11 NMAC

☐ 12"x24", 2' lettering, providing Operator's name, site location, and emergency telephone numbers

☐ Signed in compliance with 19.15.3.103 NMAC

☐ **Alternative Method:**

Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

Administrative Approvals and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☐ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☒ No

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☒ No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to temporary, emergency, or cavitation pits and below-grade tanks)

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☒ No
☒ NA

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits)

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☒ No
☒ NA

Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

☐ Yes ☒ No

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

☐ Yes ☒ No

Within 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☒ No

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☒ No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☒ No

Within a 100-year floodplain.

- FEMA map

☐ Yes ☒ No

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Geologic and Hydrogeologic Data (required for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations (required for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H₂S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

Proposed Closure: 19.15.17.13 NMAC

- Type: ☒ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ Permanent Pit ☐ Below-grade Tank ☐ Closed-loop System ☐ Alternative
- Proposed Closure Method: ☐ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☒ On-site Closure Method (Only for temporary pits and closed-loop systems)
☐ In-place Burial ☒ On-site Trench Burial
☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC

Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

- | | |
|---|---|
| Ground water is less than 50 feet below the bottom of the buried waste.
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input checked="" type="checkbox"/> NA |
| Ground water is between 50 and 100 feet below the bottom of the buried waste
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input checked="" type="checkbox"/> NA |
| Ground water is more than 100 feet below the bottom of the buried waste.
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> NA |
| Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).
- Topographic map; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.
- NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.
- Written confirmation or verification from the municipality; Written approval obtained from the municipality | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Within 500 feet of a wetland.
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Within the area overlying a subsurface mine.
- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Within an unstable area.
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Within a 100-year floodplain.
- FEMA map | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

- ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

Waste Removal Closure For Closed-loop Systems That Utilize Haul-off Bins Only: (19.15.17.13.D NMAC) *Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings.*

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

On-Site Closure Plan Checklist: (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

- ☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☒ Construction and Design of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☒ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- ☒ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Cam Robbins Title: Foreman

Signature: Cam Robbins Date: 7-22-08

e-mail address: _____ Telephone: 575-390-4666

OCD Approval: ☒ Permit Application (including closure plan) ☐ Closure Plan (only)

OCD Representative Signature: _____ Approval Date: 7/23/08

Title: Geologist OCD Permit Number: P1-00200

Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC

☐ Closure Completion Date: _____

Closure Method:

- ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method
- ☐ If different from approved plan, please explain.

Closure Report Attachment Checklist: *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

- ☐ Proof of Closure Notice
- ☐ Proof of Deed Notice (if applicable)
- ☐ Plot Plan
- ☐ Confirmation Sampling Analytical Results
- ☐ Waste Material Sampling Analytical Results
- ☐ Disposal Facility Name and Permit Number
- ☐ Soil Backfilling and Cover Installation
- ☐ Re-vegetation Application Rates and Seeding Technique
- ☐ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____ Longitude _____ NAD: ☐ 1927 ☐ 1983

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

P 2 CONSTRUCTION, INC.

Maintenance ■ Lease ■ Construction ■ Dirt Work ■ Environmental Services

1656 N. Flamingo Ave. Unit A, Odessa, TX 79763 ■ Office (432) 381-4800 ■ Fax # (432) 381-4801

July 18, 2008

Melrose Operating Company
P. O. Box 953
Midland TX. 79702

Attn: Mr. Cam Robbins
Production Supervisor

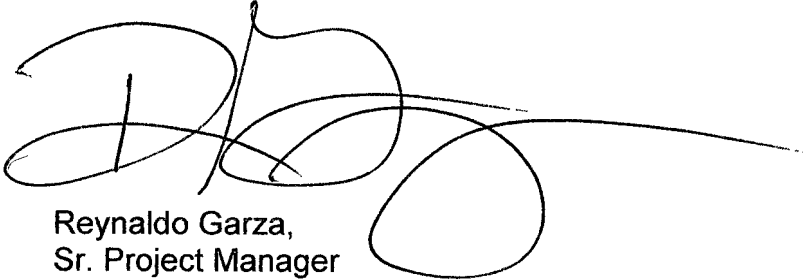
**RE: Work Plan For Pit Closure Located Jalmat Field Yates Sand Unit#232;
U/L A Sec 23, T23S and R35E of Lea County, New Mexico**

Dear Mr. Robbins:

P2 Construction, Inc. would like to take this time to thank you and Melrose Operating Co., for the opportunity to provide our professional services. Please find attached our work plan and cost for the above listed site.

If you have any questions and/or need more data in regards to projects please call at any time. My cell phone is 432-425-6192.

Sincerely,



Reynaldo Garza,
Sr. Project Manager
P2 Construction Inc.

Summary/Overview

The Jalmat Field Yates Sand Unit site should be completed and remediated in accordance with the standards of the NMOCD. It is our understanding that any potential contamination from the site was a result of drilling petroleum product.

The potential contaminants of concern are mid to high-level concentrations of Production water and Drill Cuttings circulated into reserve pit for well bore.

The lands primary use is domestic pasture for ranching and the production of oil and gas.

The ground water depth data available for this area showed the depth to ground water to be in the 240' range BGS.

Pursuant to the standards of the NMOCD, the clean up level for this site will be at <5,000ppm of TPH, <50ppm for BTEX and Chlorides less than <250ppm.

The following scope of work was based on data from our site visit and the requirements of the NMOCD for site clean up.

Scope of Work for Entombment and site reclamation

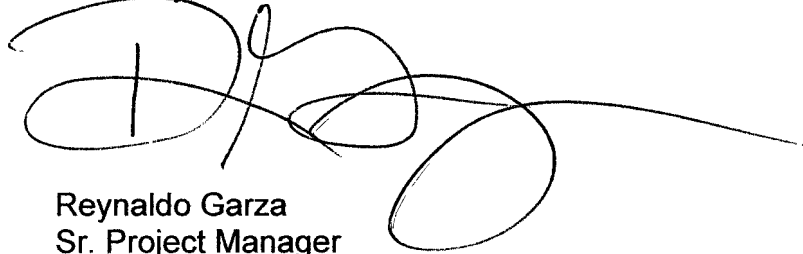
NOTE: Melrose Operating Co. has requested for P2 Construction, Inc. to remove and remediate reserve pit drill cuttings for pit closure. Melrose has also requested that P2 Construction submit a copy of results and reclamation plan to NMOCD for entombment of impacted soils.

1. First P2 Construction will call One-Call for line spot clearance before any excavation at the site is started.
2. P2 Construction will mobilize to the site located in the area Southwest of Eunice, NM equipment and personnel necessary to start and complete the site remediation as required, getting the site back into compliance.
3. P2 Construction will delineate the site vertical and horizontal for chloride's to determine the extent of impacted soil. Due to the size of reserve pit P2 will split the site into quadrants testing 25% of impacted soils. P2 will test the vertical; starting one foot from mud removal into deep bury pit.

4. P2 Construction, Inc. will then start excavation of impacted soil for on-site deep bury pit. Impacted soils will then be mixed on a 3 to 1 ratio, and then placed in an approved reinforced 20 ml poly liner for entombment. The entombment pit will be approximately 100x40x20 foot deep; which will hold 2,500 Cubic yards of material. Once all contents are place in entombment pit; P2 will cap pit with an approved 20 ml poly liner. Then pit will be backfilled so that contents are 4 foot below ground level.
5. P2 Construction will field screen the site during the excavation and once the CL levels have dropped below NMOCD guidelines, final samples will be taken and sent to a third party lab for analysis.
6. If site does not clear NMOCD guidelines on the 3 to 1 mix ratio then P2 construction will submit a report for waste removal to the NMOCD office. Then waste material will be transferred to Sundance Disposal or an approved NMOCD disposal site.
7. Once all of the remediation criteria have been met for site closure and compliance, the site will be backfilled with clean material from the site. The site will be contoured with a slight crown to prevent the ponding of any rain water and reseeded; with the proper seed according to the NMOCD. Vegetative cover will equal 70% of the native perennial vegetative cover consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons or until successful growth is established.
8. Trench burial pit will be marked by an approved steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial. The marker will be flush with the ground to allow access of the active well pad and for safety concerns. The marker will include a threaded collar to be used for future abandonment. The top of the marker will contain a welded steel plate 12" square that indicates the onsite burial of the temporary pit. The plate will be easily removable and a four foot tall riser will be threaded into the top of the collar marker and welded around the base with the operator's information. The operator's information will include the following: Operator Name, Lease Name, Well Name and Number, Unit Number, Section, Township, Range and an indicator that the marker is an onsite burial location.
9. Once all of the closure criteria have been met, a final closure report will be prepared by P2 Construction. This report will include a summary of remediation operations, findings on-site and lab analysis, site maps and project photos.

If you have any questions and/or need more data in regards to this project please
call 432-425-6192 at any time.

Sincerely,

A handwritten signature in black ink, consisting of a large, stylized 'R' followed by a series of loops and a long horizontal stroke extending to the right.

Reynaldo Garza
Sr. Project Manager
P2 Construction, Inc.