

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

Form C-101  
June 16, 2008

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

Submit to appropriate District Office

☐ AMENDED REPORT

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

|                                                                                                                             |                                     |                                             |
|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------------|
| <sup>1</sup> Operator Name and Address<br>El Paso E&P Company, L.P.<br>1001 Louisiana, Room 9.028TP<br>Houston, Texas 77002 |                                     | <sup>2</sup> OGRID Number<br>180514         |
| <sup>3</sup> Property Code<br>25180                                                                                         | <sup>4</sup> Property Name<br>VPR B | <sup>5</sup> API Number<br>30 - 007 - 20981 |
| <sup>9</sup> Proposed Pool 1                                                                                                |                                     | <sup>6</sup> Well No.<br>329                |
| <sup>9</sup> Proposed Pool 1                                                                                                |                                     | <sup>10</sup> Proposed Pool 2               |

**7 Surface Location**

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| A             | 35      | T30N     | R18E  | A       | 631           | North            | 323           | West           | Colfax |

**8 Proposed Bottom Hole Location If Different From Surface**

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
|               |         |          |       |         |               |                  |               |                |        |

**Additional Well Information**

|                                   |                                       |                                          |                                    |                                               |
|-----------------------------------|---------------------------------------|------------------------------------------|------------------------------------|-----------------------------------------------|
| <sup>11</sup> Work Type Code<br>N | <sup>12</sup> Well Type Code<br>G     | <sup>13</sup> Cable/Rotary<br>Rotary/Air | <sup>14</sup> Lease Type Code<br>P | <sup>15</sup> Ground Level Elevation<br>8189' |
| <sup>16</sup> Multiple<br>Yes     | <sup>17</sup> Proposed Depth<br>2810' | <sup>18</sup> Formation<br>Vermejo       | <sup>19</sup> Contractor<br>Pence  | <sup>20</sup> Spud Date<br>January 1, 2011    |

**21 Proposed Casing and Cement Program**

| Hole Size | Casing Size | Casing weight/foot | Setting Depth | Sacks of Cement | Estimated TOC |
|-----------|-------------|--------------------|---------------|-----------------|---------------|
| 11"       | 8.625"      | 24                 | 330           | 140             | 0             |
| 7.875"    | 5.5"        | 15.5               | 2810          | 370             | 0             |
|           |             |                    |               |                 |               |
|           |             |                    |               |                 |               |
|           |             |                    |               |                 |               |

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

See attached procedure.

**OIL CONSERVATION COMMISSION TO BE NOTIFIED  
WITHIN 24 HOURS OF BEGINNING OPERATIONS**

**OIL CONSERVATION COMMISSION TO BE NOTIFIED  
WITHIN 24 HOURS OF BEGINNING OPERATIONS**

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Maria S. Gomez*

Printed name:  
Maria S. Gomez

Title:  
Sr. Regulatory Analyst

E-mail Address:  
maria.gomez@elpaso.com

Date:  
December 07, 2010

Phone:  
713-420-5038/832-683-0361 cell

OIL CONSERVATION DIVISION

Approved by:

*Ed Martin*

Title:

**DISTRICT SUPERVISOR**

Approval Date:

*12/10/2010*

Expiration Date:

*12/10/2012*

Conditions of Approval Attached ☐

VPR B 329 – New Drill

CASING:

|        | Hole Size (in) | Csg Size (in) | Wt (ppf) | Grade     | Coupling |
|--------|----------------|---------------|----------|-----------|----------|
| ± 330  | 11"            | 8-5/8"        | 24       | J-55      | STC      |
| ± 2810 | 7-7/8"         | 5-1/2"        | 15.5     | J-55/N-80 | LTC      |

CEMENT:

Surface:

| CEMENT DESIGN                  |              |          |          |             |           |             |
|--------------------------------|--------------|----------|----------|-------------|-----------|-------------|
| Slurry                         | Weight (ppg) | TOC (ft) | BOC (ft) | Slurry Vol  | Cmt Req'd | Comment     |
| Lead                           | 13.5         | 0        | 230      | 25.4 bbls   | 90 sks    | Incl excess |
| Tail                           | 14.0         | 230      | 330      | 13.5 bbls   | 50 sks    | Bottom 100' |
| Lead/Tail Slurry               |              |          |          |             |           |             |
| CBMCEM (Trinidad Blend) - Lead |              |          |          | 90 sks      |           |             |
| CBMCEM (Trinidad Blend) - Tail |              |          |          | 50 sks      |           |             |
| Mix water                      |              |          |          | Fresh water |           |             |

Production:

| CEMENT DESIGN                            |              |          |          |              |           |              |
|------------------------------------------|--------------|----------|----------|--------------|-----------|--------------|
| Slurry                                   | Weight (ppg) | TOC (ft) | BOC (ft) | Slurry Vol   | Cmt Req'd | Comment      |
| Lead/Tail                                | 12.5         | 0        | ±2810    | 139.1 bbls   | 370 sks   | Circ to surf |
| Lead/Tail Slurry                         |              |          |          |              |           |              |
| Trinidad Hot Blend                       |              |          |          | 370 sks      |           |              |
| LGC-35 CBMI (Gelling agent)              |              |          |          | 0.2 gal/bbl  |           |              |
| Poly-E-Flake (Lost circulation additive) |              |          |          | 1.25 lbm/bbl |           |              |
| Barazan D (Viscosifier)                  |              |          |          | 0.62 lbm/bbl |           |              |
| Mix water                                |              |          |          | Fresh water  |           |              |

Proposed Summary of Operations  
VPR B 329

1. Drill 11" hole to +/-330' with air.
2. Set 8-5/8" surface casing and cement to surface with 100 sks of cement.
3. Drill 7-7/8" hole to 2,810' with air. Run open hole logs.
4. Set 5 1/2" production casing to TD and cement to surface. Cement volumes calculated from open hole logs.
5. Perforate and stimulate the Vermejo and/or Raton Coals. Clean out wellbore and run production equipment.



Date: November 30, 2010  
 TD: 2810'  
 AFE #: \_\_\_\_\_  
 BHL: Vertical Well  
 Elevation: 8189'  
 Spud (est.): February, 2011

| LOGS               | TOPS | DEPTH (' MD) | HOLE SIZE | MECHANICAL CASING SIZE | MUD WEIGHT  |
|--------------------|------|--------------|-----------|------------------------|-------------|
|                    |      | 20' MD/TVD   | 17"       | 13-3/8" 48 H-40 LTC    | NA          |
|                    |      | 330 MD/TVD   | 11"       | 8-5/8" 24# J-55        | Air / Water |
| Raton Formation    |      | 400          | 7-7/8"    | 5-1/2" 15.5# J-55      | Aerated WBM |
| Vermejo Formation  |      | 2308         |           |                        |             |
| Trinidad Sandstone |      | 2551         |           |                        |             |
|                    |      | 2810' MD/TVD |           |                        |             |

**DRILLING PROGRAM****CASING PROGRAM**

|            | SIZE    | INTERVAL | WT.   | GR.  | CPLG. | BURST | COLLAPSE | TENSION |
|------------|---------|----------|-------|------|-------|-------|----------|---------|
| CONDUCTOR  | 13-3/8" | 0' - 20' | 48    | H-40 | LTC   | 1730  | 770      | 541K    |
| SURFACE    | 8-5/8"  | 0' - 330 | 24.00 | J-55 | LTC   | 2950  | 1370     | 244K    |
| PRODUCTION | 5-1/2"  | 0' - TD  | 15.50 | J-55 | LTC   | 4810  | 4040     | 248K    |

| CEMENT PROGRAM | FT. OF FILL | DESCRIPTION                                                                   | SACKS | EXCESS | WEIGHT   | YIELD |
|----------------|-------------|-------------------------------------------------------------------------------|-------|--------|----------|-------|
| SURFACE        | 330         | CBMCEM & FW                                                                   | 140   | 40%    | 14.0 ppg | 1.62  |
| PRODUCTION     | TD to Surf  | Trinidad Hot Blend + LGC-35 CBMI +<br>Poly-E-Flake + Barazan +<br>Fresh Water | 370   | 20%    | 12.50    | 2.12  |

**FLOAT EQUIPMENT & CENTRALIZERS**

|            |                                                                                                                                         |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| SURFACE    | One centralizer every joint to surface.                                                                                                 |
| PRODUCTION | Texas pattern float shoe and float collar. Two centralizers per joint for first 5 joints, then one every other joint to surface casing. |

PROJECT ENGINEER: Mike GrangerCASED HOLE SUPERVISOR : Bryan OlmsteadOPERATIONS MANAGER: Mike Vennes

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

State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised July 16, 2010  
Submit one copy to appropriate  
District Office

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

|                                                |                                                         |                                                            |
|------------------------------------------------|---------------------------------------------------------|------------------------------------------------------------|
| <sup>1</sup> API Number<br><b>30-007-20981</b> | <sup>2</sup> Pool Code<br>97047                         | <sup>3</sup> Pool Name<br>VAN BREMMER CANYON - VERMEJO GAS |
| <sup>4</sup> Property Code<br>25180            | <sup>5</sup> Property Name<br>VERMEJO PARK RANCH        | <sup>6</sup> Well Number<br>VPR B 329                      |
| <sup>7</sup> OGRID No.<br>180514               | <sup>8</sup> Operator Name<br>EL PASO E&P Company, L.P. | <sup>9</sup> Elevation<br>8189'                            |

**<sup>10</sup> Surface Location**

| UL or lot no. | Section | Township | Range  | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|--------|---------|---------------|------------------|---------------|----------------|--------|
| A             | 35      | T 30 N   | R 18 E | A       | 631           | NORTH            | 323           | WEST           | COLFAX |

**<sup>11</sup> Bottom Hole Location If Different From Surface**

| UL or lot no.                 | Section | Township                      | Range | Lot Idn                          | Feet from the | North/South line        | Feet from the | East/West line | County |
|-------------------------------|---------|-------------------------------|-------|----------------------------------|---------------|-------------------------|---------------|----------------|--------|
|                               |         |                               |       |                                  |               |                         |               |                |        |
| <sup>12</sup> Dedicated Acres |         | <sup>13</sup> Joint or Infill |       | <sup>14</sup> Consolidation Code |               | <sup>15</sup> Order No. |               |                |        |
|                               |         |                               |       |                                  |               |                         |               |                |        |

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

|  |                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>LAT/LONG NAD83 (DMS)<br/>N 36°47'48.1"<br/>W 105°00'25.4"</p> | <p><b><sup>17</sup> OPERATOR CERTIFICATION</b></p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p><i>Maria S. Gomez</i> 12/07/10<br/>Signature Date</p> <p>Maria S. Gomez<br/>Printed Name</p> <p>maria.gomez@elpaso.com<br/>E-mail Address</p> |
|  |                                                                  | <p><b><sup>18</sup> SURVEYOR CERTIFICATION</b></p> <p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i></p> <p>November 15, 2010</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p><i>Gu Shilder</i></p> <p>Certificate Number NMLS NO. 5103</p>                                                                                                                                                                                                                                                                        |
|  |                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|  |                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

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

Form C-144  
July 21, 2008

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  
☐ Modification to an existing permit  
☐ Closure plan only submitted for an existing permitted or non-permitted 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.

1.  
Operator: El Paso E&P Company, L.P. OGRID #: 180514  
Address: 1001 Louisiana, Rm 9.028TP, Houston, Texas 77002  
Facility or well name: VPR B-329  
API Number: 30-007-20981 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr NWNW Section 35 Township 30N Range 18E County: Colfax  
Center of Proposed Design: Latitude 36 47 48.1 Longitude 105 00 25.4 NAD: ☐ 1927 ☒ 1983  
Surface Owner: ☐ Federal ☐ State ☒ Private ☐ Tribal Trust or Indian Allotment

2.  
☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC  
Temporary: ☒ Drilling ☐ Workover  
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A  
☒ Lined ☐ Unlined Liner type: Thickness 20 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_  
☐ String-Reinforced  
Liner Seams: ☒ Welded ☒ Factory ☐ Other \_\_\_\_\_ Volume: \_\_\_\_\_ bbl Dimensions: L \_\_\_\_\_ x W \_\_\_\_\_ x D \_\_\_\_\_

3.  
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC  
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)  
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other \_\_\_\_\_  
☐ Lined ☐ Unlined Liner type: Thickness \_\_\_\_\_ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_  
Liner Seams: ☐ Welded ☐ Factory ☐ Other \_\_\_\_\_

4.  
☐ **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 \_\_\_\_\_

5.  
☐ **Alternative Method:**  
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6.

**Fencing:** Subsection D of 19.15.17.11 NMAC (*Applies to permanent pits, temporary pits, and below-grade tanks*)

- ☐ Chain link, six feet in height, two strands of barbed wire at top (*Required if located within 1000 feet of a permanent residence, school, hospital, institution or church*)
- ☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet
- ☐ Alternate. Please specify \_\_\_\_\_

7.

**Netting:** Subsection E of 19.15.17.11 NMAC (*Applies to permanent pits and permanent open top tanks*)

- ☐ Screen ☐ Netting ☐ Other \_\_\_\_\_
- ☐ Monthly inspections (If netting or screening is not physically feasible)

8.

**Signs:** Subsection C of 19.15.17.11 NMAC

- ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- ☐ Signed in compliance with 19.15.3.103 NMAC

9.

**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.

10.

**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.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells                                                                                                                                                                                       | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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).<br>- 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.<br>(Applies to temporary, emergency, or cavitation pits and below-grade tanks)<br>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image                                                                                          | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br><input type="checkbox"/> NA |
| Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.<br>(Applies to permanent pits)<br>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image                                                                                                                                         | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br><input type="checkbox"/> 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.<br>- NM Office of the State Engineer - iWATERS database search; 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.<br>- 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.<br>- 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.<br>- 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.<br>- 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.<br>- FEMA map                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                |



11.

**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 (Please complete Boxes 14 through 18, if applicable) - 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: \_\_\_\_\_

12.

**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 (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9  
☐ Siting Criteria Compliance Demonstrations (only 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 (Please complete Boxes 14 through 18, if applicable) - 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: \_\_\_\_\_  
☐ Previously Approved Operating and Maintenance Plan API Number: \_\_\_\_\_ (Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

13.

**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 H<sub>2</sub>S, 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

14.

**Proposed Closure:** 19.15.17.13 NMAC**Instructions:** Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

- Type: ☒ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ 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)

15.

**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

16.

**Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or 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. Use attachment if more than two facilities are required.

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?☐ Yes (If yes, please provide the information below) ☐ No*Required for impacted areas which will not be used for future service and operations:*☐ 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

17.

**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

☐ Yes ☒ No  
☐ 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

☐ Yes ☒ No  
☐ 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

☐ Yes ☐ No  
☒ 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

☐ Yes ☒ 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

☐ Yes ☒ 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

☐ 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 &amp; Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☒ No

Within a 100-year floodplain.

- FEMA map

☐ Yes ☒ No

18.

**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/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC☒ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - 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

19.

**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): Maria S. GomezTitle: Sr. Regulatory AnalystSignature: Maria S. GomezDate: December 07, 2010e-mail address: maria.gomez@elpaso.comTelephone: 713-420-5038 / cell 832-683-0361

20.

**OCD Approval:** ☒ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: Ed MartinApproval Date: 12/10/2010Title: DISTRICT SUPERVISOR

OCD Permit Number: \_\_\_\_\_

21.

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

*Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.*

☐ Closure Completion Date: \_\_\_\_\_

22.

**Closure Method:**

☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)  
☐ If different from approved plan, please explain.

23.

**Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:**

*Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.*

Disposal Facility Name: \_\_\_\_\_

Disposal Facility Permit Number: \_\_\_\_\_

Disposal Facility Name: \_\_\_\_\_

Disposal Facility Permit Number: \_\_\_\_\_

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

*Required for impacted areas which will not be used for future service and operations:*

- ☐ Site Reclamation (Photo Documentation)  
☐ Soil Backfilling and Cover Installation  
☐ Re-vegetation Application Rates and Seeding Technique

24.

**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 (surface owner and division)  
☐ Proof of Deed Notice (required for on-site closure)  
☐ Plot Plan (for on-site closures and temporary pits)  
☐ Confirmation Sampling Analytical Results (if applicable)  
☐ Waste Material Sampling Analytical Results (required for on-site closure)  
☐ 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

25.

**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: \_\_\_\_\_



# *New Mexico Office of the State Engineer*

## **Water Column/Average Depth to Water**

---

No records found.

**PLSS Search:**

**Q64: NW**

**Q16: NW**

**Q4: NW**

**Section(s): 35**

**Township: 30N**

**Range: 18E**

---

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

---

12/7/10 10:16 AM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER



# *New Mexico Office of the State Engineer* **Water Column/Average Depth to Water**

---

No records found.

**PLSS Search:**

**Q64:** SW

**Q16:** NW

**Q4:** NW

**Section(s):** 35

**Township:** 30N

**Range:** 18E

---

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

---

12/7/10 10:16 AM

Page 1 of 1

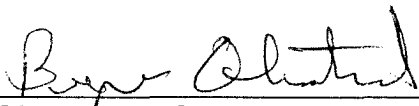
WATER COLUMN/ AVERAGE  
DEPTH TO WATER

## VPR B-329

### Siting Criteria Certification

I certify that all the following are true statements and were made through visual inspection:

- This location is not 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).
- This location is not within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.
- This location is not within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.
- This location is not 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.
- This location is not within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.
- This location is not within 500 feet of a wetland.
- This location is not within the area overlaying a subsurface mine.
- This location is not within an unstable area.
- This location is not within a 100-year floodplain.

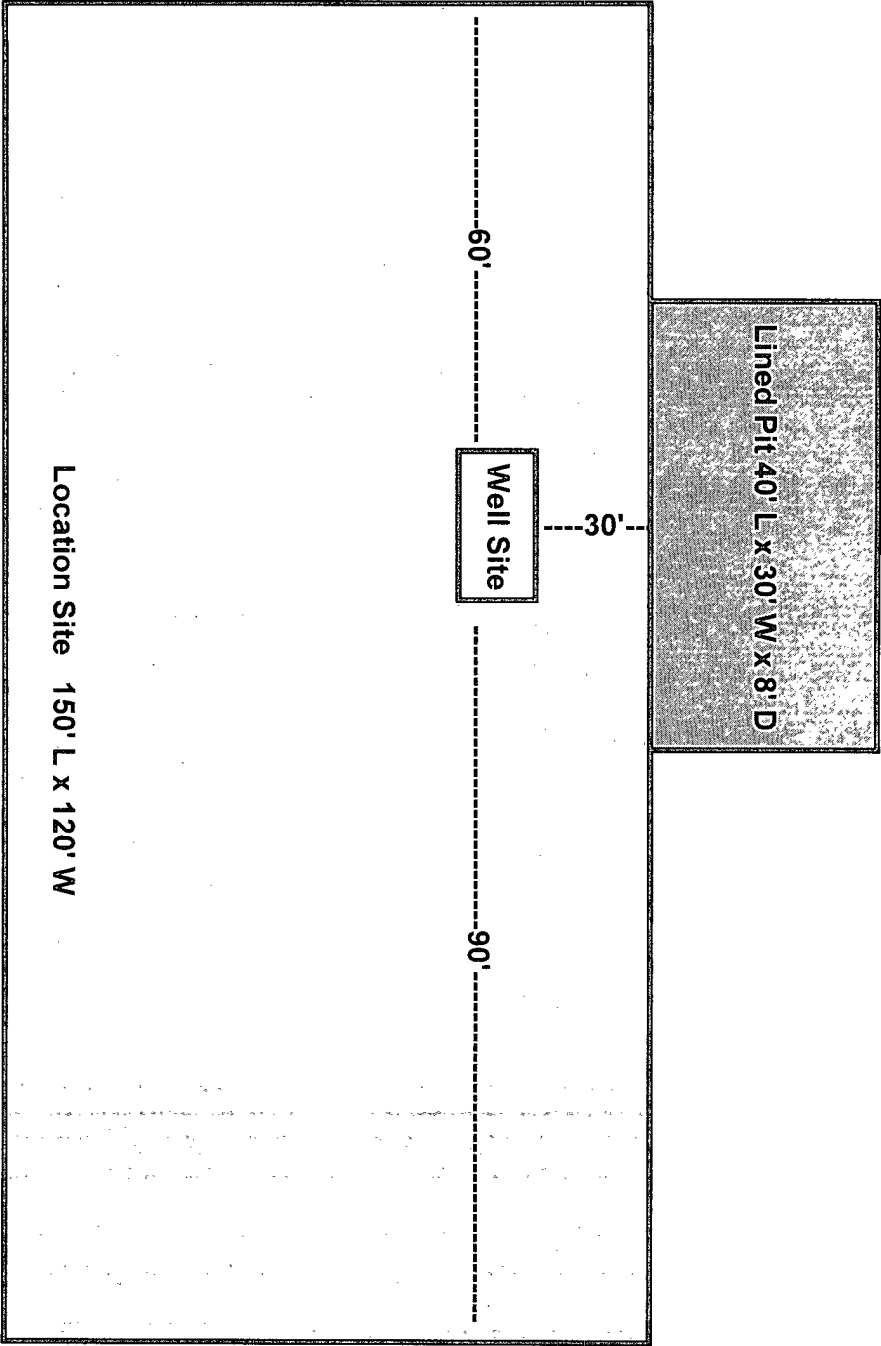


Bryan Olmstead – Operations Spvsr – Raton

11-19-2010

Date

El Paso E & P CBM Vertical Drill Site Location/Pit Design



## El Paso E&P Company, L.P. Pit Design and Construction Plan

In accordance with Rule 19 15 17 the following information describes the design and construction of temporary pits on El Paso E&P Company, L.P. (El Paso) locations. This El Paso's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

1. El Paso will design and construct a temporary pit to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
2. Prior to construction the pit, topsoil will be stockpiled in the construction zone for later use in restoration.
3. El Paso will post a well sign, not less than 12" by 24", on the well site prior to construction of the temporary pit. The sign will list the operator on record as the operator, the location of the well site by section, township, range, and emergency numbers.
4. El Paso shall construct all new fences utilizing 4 strand barbed wire. T-posts shall be installed every 12 feet and corners shall be anchored utilizing wooded posts. The entire location including pits will be fenced at all times.
5. El Paso shall construct the temporary pits so that the foundation and interior slope are firm and free of rocks, debris, sharp edges or irregularities to prevent liner failure.
6. Pit walls will be walked down by a crawler type tractor following construction.
7. All temporary pits will be lined with 20-mil, reinforced, <sup>✓</sup>LDPE liner, complying with EPA SW-846 method 9090A requirements.
8. Geotextile will be installed beneath the liner when rocks, debris, sharp edges or irregularities cannot be avoided.
9. All liners will be anchored in the bottom of a compacted earth-filled trench at least 18 inches deep.
10. El Paso will utilize bonded seamed liners.
11. The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
12. The pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some cases.
13. The volume of the pit shall not exceed 10 acre-feet, including freeboard.



El Paso E&P Company, L.P.  
Maintenance and Operating Plan for Temporary Pits

In accordance with Rule 19 15 17, El Paso E&P Company, L.P. (El Paso) will maintain and operate a temporary pit in accordance with the following plan:

1. El Paso will discharge into a temporary pit only fluids used or generated during the drilling or workover process.
2. El Paso will maintain a temporary pit free of miscellaneous solid waste or debris.
3. Any hydrocarbon base drilling fluid generated during the drilling or workover operation will be contained in an appropriate tank, it will not be discharged into a temporary pit. If any measureable layer of oil from the surface or a temporary pit after any drilling or workover operation, El Paso will remove it immediately.
4. El Paso shall maintain at least two feet of freeboard for a temporary pit.
5. El Paso will use a check list to perform a daily pit inspection while the drilling or workover rig is on-site. After drilling or workover operations, El Paso will inspect the temporary pit weekly so long liquids remain in the temporary pit. A log of the inspections will be kept in the well file, inspections will be available for the district office's review upon request. El Paso will file a copy of the log with the District IV office once temporary pit is closed.
6. El Paso shall remove all free liquids from a temporary pit within 30 days from the date the drilling or workover rig is released.
7. El Paso shall remove any liquids from the temporary pit used for cavitation within 48 hours after completing cavitation. El Paso may request additional time to remove the liquids from The District IV Division Office if it is not feasible to remove the liquids within 48 hours.

## El Paso E&P Company, L.P. Pit Closure Plan

In accordance with Rule 19 15 17 12 NMAC, the following information describes the closure requirements of temporary pits on locations. This is El Paso E&P Company, L.P.'s (El Paso) standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

All closure activities will include proper documentation and be available for review upon request and will be submitted to NMOCD within 60 days of pit closure. Closure report will be filed on C-144 and incorporate the following:

- Details on Capping and Covering, where applicable
- Plot Plan (Pit Diagram)
- Inspection Reports
- Sampling Results

### **General Plan**

1. Free standing liquids will be removed as soon as practical for recycle use in the drilling of other wells. Any free standing liquids that are not recycled will be removed prior to pit closure and disposed of in a division approved facility or recycle, reuse or reclaim the liquids in a manner the appropriate division district office approves. Pit solids will be allowed to air dry as completely as possible prior to starting pit closing activities.
2. The preferred method of closure for all temporary pits will be on-site burial, assuming that all the criteria listed in sub-section (8) of 19 15 17 13 are met.
3. The surface owner shall be notified of El Paso's proposed closure plan using a means that provides proof of notice (i.e., certified mail, return receipt requested).
4. Within 6 months of the Rig Off status occurring, El Paso will ensure that temporary pits are closed, re-contoured.
5. Notice of Closure will be given to the Santa Fe Division office between 72 hours and one week of closure, via email, or verbally. The notification of closure will include the following:
  - Operator's Name
  - Location by Section, Township, Range, Well Name and API Number
6. Liner of temporary pit shall be removed above "mud level" after stabilization. Removal of liner will consist of manually or mechanically cutting liner at mud level and removing all remaining liner. Care will be taken to remove "All" of the liner (i.e., edges of liner entrenched or buried). All excessive liner will be disposed of at a licensed disposal facility.
7. Pit contents shall be tested prior to mixing of any soils. Test results will be compared to NMOCD limits. If the test results are within the NMOCD limits no soil will be mixed with the pit contents. If the sample results exceed the NMOCD limits the contents will be mixed with non-waste containing, earthen material in order to achieve the solidification process. The mixing ratio shall not exceed 3 parts clean soil to 1 part pit contents. The mixed contents will then be re-tested and the results will be compared to the NMOCD limits.
8. A five point composite sample will be taken of the pit using sampling tools and all samples tested per subsection B of 19 15 17 13(B)(1)(b). In the event that the criteria

are not met, all contents will be handled per Subparagraph (a) of Paragraph (1) of Subsection B of 19 15 17 13 (i.e. dig, haul).

| <b>Composite</b> | <b>Tests Method</b>       | <b>Limit (mg/kg)</b> |
|------------------|---------------------------|----------------------|
| Benzene          | EPA SW-846 8021B or 826oB | 0.2                  |
| BTEX             | EPA SW-846 8021B or 826oB | 50                   |
| TPH              | EPA SW-846 418 1          | 2500                 |
| GRO/DRO          | EPA SW-846 8015M          | 500                  |
| Chlorides        | EPA 300 1                 | 1000                 |

9. Upon completion of testing, the pit area will be backfilled with compacted, non-waste containing, earthen material. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.
10. Re-contouring of location will match fit, shape, line, form and texture of the surrounding as closely as possible. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainage will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.
11. Notification will be sent to NMOCD when the reclaimed area is seeded.
12. El Paso shall seed the disturbed areas upon abandonment of the pit and well site. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. Vegetation cover will be as per Vermejo Ranch requirements.
13. The temporary pit will be located with a steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial upon the abandonment of all the wells on the pad. The marker will be flushed 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 12" square plate that indicated 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 at the time of all wells on the pad are abandoned. The operator's information will include the following – Operator Name, Lease Name, Well Name and number, Section, Township, Range and an indicator that the marker is an onsite burial location.