# **GW - 007 CLASSIFIER SYSTEM CLOSURE** PLAN

## **APRIL 2012**

From: Sent: To: Subiect: VonGonten, Glenn, EMNRD Thursday, November 15, 2012 4:15 PM Chavez, Carl J, EMNRD FW: Jal Closure - November 2012

#### Glenn von Gonten

Senior Hydrologist Environmental Bureau Oil Conservation Division Energy, Minerals and Natural Resources Department 1220 South St. Francis Drive Santa Fe, New Mexico 87505 505-476-3488 Fax-476-3462 glenn.vongonten@state.nm.us http://www.emnrd.state.nm.us/ocd/

From: Weaver, Ron [mailto:Ron.Weaver@wnr.com]
Sent: Thursday, November 15, 2012 1:31 PM
To: VonGonten, Glenn, EMNRD
Cc: Schmaltz, Randy; Hains, Allen; Robinson, Kelly
Subject: Jal Closure - November 2012

Mr. von Gonten,

Western appreciates OCD's acceptance of our safety concerns regarding allowing personnel to enter the contingency tank during closure activities. As requested by OCD, Western proposes to collect soil samples at a depth of 0 to 2 feet below the contingency bottom from three locations along the outer perimeter of the contingency tank. Sample collection activities will include excavating down to approximately two feet below the contingency tank bottom. The size of the excavated area and its proximity to the edge of the contingency tank side wall will be determined based upon the stability of the perimeter soil. The samples collected from the three locations around the contingency tank perimeter will be analyzed for BTEX, TPH-DRO, and TPH-GRO, as indicated in the Classifier Closure Work Plan.

Sincerely,

Ron Weaver Regional Terminals Manager Western Refining Inc. 505-632-4185 office 505-320-7074 cell ron.weaver@wnr.com

From:	VonGonten, Glenn, EMNRD
Sent:	Wednesday, November 14, 2012 10:34 AM
То:	Schmaltz, Randy
Cc:	Chavez, Carl J, EMNRD; Weaver, Ron; Hains, Allen; Robinson, Kelly
Subject:	RE: Jal Closure - November 2012

Randy,

OCD has reviewed Western's proposal for tank closure. OCD accepts Western's safety concern about allowing humans to enter the tank during closure activities. However, Western must still make a good faith effort to sample beneath the tank. It should be possible for Western to obtain soil samples by directionally drilling under the tank. Please let OCD know what Western will do to obtain soil samples.

#### Glenn von Gonten

Senior Hydrologist Environmental Bureau Oil Conservation Division Energy, Minerals and Natural Resources Department 1220 South St. Francis Drive Santa Fe, New Mexico 87505 505-476-3488 Fax-476-3462 glenn.vongonten@state.nm.us http://www.emnrd.state.nm.us/ocd/

From: Schmaltz, Randy [mailto:Randy.Schmaltz@wnr.com]
Sent: Wednesday, November 07, 2012 1:27 PM
To: VonGonten, Glenn, EMNRD
Cc: Chavez, Carl J, EMNRD; Weaver, Ron; Hains, Allen; Robinson, Kelly; Schmaltz, Randy
Subject: Jal Closure - November 2012

Glenn,

Please find enclosed the Closure follow up letter as discussed in the phone conference held on Tuesday, November 6, 2012.

Thanks

Randy Schmaltz Health, Safety, Environmental and Regulatory Director

Western Refining Southwest, Inc. #111 County Road 4990 Bloomfield, New Mexico 87413 (505) 632-4171 Cell (505) 320-6989 email: randy.schmaltz@wnr.com

From:	Schmaltz, Randy <randy.schmaltz@wnr.com></randy.schmaltz@wnr.com>
Sent:	Wednesday, November 07, 2012 1:27 PM
То:	VonGonten, Glenn, EMNRD
Cc:	Chavez, Carl J, EMNRD; Weaver, Ron; Hains, Allen; Robinson, Kelly; Schmaltz, Randy
Subject:	Jal Closure - November 2012
Attachments:	Closure letter - November 2012.pdf

Glenn,

Please find enclosed the Closure follow up letter as discussed in the phone conference held on Tuesday, November 6, 2012.

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Thanks

Randy Schmaltz Health, Safety, Environmental and Regulatory Director

Western Refining Southwest, Inc. #111 County Road 4990 Bloomfield, New Mexico 87413 (505) 632-4171 Cell (505) 320-6989 email: <u>randy.schmaltz@wnr.com</u>



November 7, 2012

Glenn von Gonten Environmental Bureau Energy, Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505 WNR

NVSF

Delivery: Via e-mail

Re: Former Classifier System Closure Plan Jal LPG Storage Terminal Western Refining Company, L.P. Discharge Permit GW-007

#### Dear Mr. Von Gonten:

As we discussed on Tuesday November 6, 2012, Western has health and safety concerns regarding the New Mexico Oil Conservation Division (NMOCD) conditions outlined in an e-mail to Western dated November 2, 2012 regarding the above referenced Closure Plan. A copy of the e-mail from NMOCD dated November 2, 2012 is attached.

#### Background

In 1986, the contingency tank was placed out-of-service by EPNG. EPNG removed the waste from all three tanks. Since that time, windblown sand has accumulated on the tank bottom. The water from precipitation events may be present in the tank until removed through evaporation, Some plastic-liner material was also placed into the tank with NMOCD knowledge. After more than 20 years of exposure, the tank is rusted on the inside. The tank integrity is not known.

#### Health and Safety Concerns

Western has two safety concerns: the tank integrity and confined space. Because of the collapse potential and confined space issues, Western cannot allow human entry into the tank to operate equipment and remove the liner material. Due to the collapse potential, Western cannot allow a track-hoe to operate in close proximity to the tank for purposes of puncturing the tank floor and removing material.

#### Proposed Path Forward

- Western proposes to safely remove the liner material from the tank using some type of grappler system. NMOCD will be notified of any problems with removal and a solution will be discussed.
- The windblown material and any minor amounts of rain water will not be removed.
- The tank will be filled with clean fill material. From approximately 3 feet below-surface to final grade, the fill material will be compacted using the earthmoving equipment. Final

grade will be a mounded above surrounding grade to promote storm water flow away from the tank.

- The two smaller tanks will be removed and soil beneath sampled.
- A third-party consultant will prepare a report to document the work including many photographs.

Western appreciates the opportunity to discuss this path forward.

Sincerely,

FOR RON WEAVER

Roh Weaver Regional Terminals Manager Western Refining Company, L.P.

cc: Carl Chavez - NMOCD Allen Hains – WNR Randy Schmaltz - WNR From: VonGonten, Glenn, EMNRD [mailto:Glenn.VonGonten@state.nm.us] Sent: Friday, November 02, 2012 1:54 PM To: Hains, Allen Cc: Sanchez, Daniel J., EMNRD; Chavez, Carl J, EMNRD Subject: GW-007 Western Jai LPG Storage Terminal

Allen,

As we discussed, OCD is revising its conditional approval of Western's "Closure Plan – Former Classifier System – Jal LPG Storage Terminal" submitted in April 2012. Western's may close its Contingency Tank in place because 19.15.17.8A NMAC (Part 17 - Pit Rule) specifies that facilities with a WQCC permit are exempt from Part 17, including the below-grade tank closure provisions.

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Western may implement its proposed closure plan with the following conditions.

1. Western must remove all waste from the Contingency Tank and visually inspect it for signs of damage, corrosion, or leakage.

2. Western must collect soil samples from beneath the Contingency Tank to demonstrate that no leakage has occurred. OCD prefers that Western take a five-point composite soil sample and analyze the sample for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1, does not exceed 100 mg/kg; and the chloride concentration, as determined by EPA method 300.1, does not exceed 250 mg/kg, or the background concentration, whichever is greater. Western shall inform OCD as to how it intends to collect soil samples from beneath the Contingency Tank before it collects the samples.

3. If Western determines that a release has occurred that exceeds the above specified concentrations, then it shall report this to OCD on form C-141, in addition to its Closure Report. OCD may require additional delineation upon review of the results.

4. Western shall puncture the bottom of the Contingency Tank to allow rain water to pass through and not collect in the Contingency Tank.

5. Western shall backfill the Contingency Tank with compacted clean fill and install a cover graded to facilitate drainage away from the tank. As discussed, Western may use clean concrete as backfill after obtaining approval from the NMED-Solid Waste Bureau. Western may not dispose of any waste material in the Contingency Tank, including old plastic liners.

6. Western shall survey the location of the Contingency Tank and permanently mark its location.

7. Western shall follow the above sampling procedures to demonstrate that no release has occurred at the other two tanks.

If you have any questions, please contact Carl Chavez at 505-476-3490.

#### Glenn von Gonten

Senior Hydrologist Environmental Bureau Oil Conservation Division Energy, Minerals and Natural Resources Department 1220 South St. Francis Drive Santa Fe, New Mexico 87505 505-476-3488 Fax-476-3462 glenn.vongonten@state.nm.us http://www.emnrd.state.nm.us/ocd/

From: Sent: To: Cc: Subject: VonGonten, Glenn, EMNRD Friday, November 02, 2012 1:54 PM Hains, Allen Sanchez, Daniel J., EMNRD; Chavez, Carl J, EMNRD GW-007 Western Jal LPG Storage Terminal

Allen,

As we discussed, OCD is revising its conditional approval of Western's "Closure Plan – Former Classifier System – Jal LPG Storage Terminal" submitted in April 2012. Western's may close its Contingency Tank in place because 19.15.17.8A NMAC (Part 17 - Pit Rule) specifies that facilities with a WQCC permit are exempt from Part 17, including the below-grade tank closure provisions.

Western may implement its proposed closure plan with the following conditions.

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If you have any questions, please contact Carl Chavez at 505-476-3490.

#### Glenn von Gonten

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Senior Hydrologist Environmental Bureau Oil Conservation Division Energy, Minerals and Natural Resources Department 1220 South St. Francis Drive Santa Fe, New Mexico 87505 505-476-3488 Fax-476-3462 glenn.vongonten@state.nm.us http://www.emnrd.state.nm.us/ocd/

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From: Sent: To: Cc: Subject: Chavez, Carl J, EMNRD Friday, May 11, 2012 9:51 AM 'Ron.Weaver@wnr.com' VonGonten, Glenn, EMNRD GW-007 Classifier Closure Plan April 2012

Ron:

Good morning. Thank you for the submittal of the above subject closure plan.

One comment on Page 4, Section 4 Closure Rationale of the above subject closure plan: The OCD does not recall any agreements as expressed in this section, but does recall carrying over the provision from a previous permit requirement at the time of permit renewal. If you can provide the agreement(s) in writing, the OCD would be glad to review correspondence supporting this or these claims.

In consideration of the Oil Conservation Division (OCD) review of the Below-Grade Tank (BGT) Closure Regulations provided below, and its review of the above subject closure plan, the OCD **approves** the closure plan with the following condition highlighted in green below:

First, the BGT Contingency Tank, if unused, must also be closed with the other two BGTs.

Second, the OCD approves the removal method with sampling with the closure requirements or conditions cited below in 19.1.17.13 NMAC. Note that the operator must literally satisfy the requirements. The term "literally" is used based on Section 5.1 (Waste Removal): "The rainfall and wind-blown solids that accumulated and discarded liner material within the uncovered below-grade contingency tank will not be removed." This does not appear to satisfy the closure requirements cited below, i.e., liners left on the ground would not satisfactorily address 13(E)(6) below......

#### **19.15.17.13 CLOSURE REQUIREMENTS:**

E. Closure method for below-grade tanks.

(1) The operator shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility.

(2) The operator shall remove the below-grade tank and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.

(3) If there is any on-site equipment associated with a below-grade tank, then the operator shall remove the equipment, unless the equipment is required for some other purpose.

(4) The operator shall test the soils beneath the below-grade tank to determine whether a release has occurred. The operator shall collect, at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyze for BTEX; TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 100 mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. The operator shall notify the division of its results on form C-141. The division may require additional delineation upon review of the results.

(5) If the operator or the division determines that a release has occurred, then the operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate.

(6) If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, then the operator shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour

and re-vegetate the site. The division-prescribed soil cover, recontouring and re-vegetation requirements shall comply with Subsections G, H and I of 19.15.17.13 NMAC.

Third, before any demolition debris may be used, the operator will need to contact the NMED Solid Waste Bureau for sampling instructions and/or waste disposition instructions to determine whether the debris is inert and/or can be beneficially reused for backfill if the operator believes that based on its use it will meet E(6) above. I have copied the most recent feedback sent to me by Glenn von Gonten and it is provided below.

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Use of Debris Waste for Backfill, etc.....

Carl,

We need to be careful about unilaterally allowing Western to fill in the BGT with rip rap.

Glenn

From: VonGonten, Glenn, EMNRD Sent: Friday, March 18, 2011 3:59 PM To: Leking, Geoffrey R, EMNRD; Sanchez, Daniel J., EMNRD Subject: FW: Burying concrete and water in the well.

Geoff:

FYI. The operator must contact the Solid Waste Bureau to confirm that they are allowed to use "clean fill" such as concrete to fill in low spots. They are not allowed to just bury it, they must use it.

Glenn

From: Hansen, Edward J., EMNRD Sent: Tuesday, March 15, 2011 9:16 AM To: VonGonten, Glenn, EMNRD; Jones, Brad A., EMNRD Subject: RE: Burying concrete and water in the well.

Under the SWR old concrete (uncontaminated) could be considered "clean fill"; and therefore, could be buried at their yard. However, the presumption is that the material is being used for fill (and not merely disposal) (e.g., filling in a low spot at the yard) and they don't make a public nuisance or create a public hazard or impact the environment; don't place in a watercourse nor a wetland; and cover with at least 2 feet of clean soils.

*From:* VonGonten, Glenn, EMNRD Sent: Tuesday, March 15, 2011 8:43 AM To: Hansen, Edward J., EMNRD; Jones, Brad A., EMNRD Subject: FW: Burying concrete and water in the well.

Thoughts?

Glenn

*From:* Leking, Geoffrey R, EMNRD Sent: Tuesday, March 15, 2011 8:42 AM To: VonGonten, Glenn, EMNRD Subject: Burying concrete and water in the well.

Glenn

Just a tickler re: desires to break up some old concrete pump jack supports and bury them on their yard property owned by them. Is this okay?

Thank you again.

Geoff

Please contact me to discuss and/or if you have questions. Thank you.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*END\*\*\*\*\*\*\*\*\*\*\*\*\*

#### **Below-Grade Tank Closure Regulations:**

#### **19.15.17.9 PERMIT APPLICATION:**

**C.** Closure plans. A closure plan that an operator submits in a plan required in Subsection B of 19.15.17.9 NMAC, or any other closure plan required pursuant to 19.15.17 NMAC, shall describe the proposed closure method and the proposed procedures and protocols to implement and complete the closure.

(1) If the operator proposes an on-site closure method, the operator shall also propose other methods to be used if the initial method does not satisfy the on-site closure standards specified in Subsection F of 19.15.17.13 NMAC or, if applicable, other on-site closure standards that the environmental bureau in the division's Santa Fe office approves.
 (2) An operator of an existing unlined permanent pit that is permitted by or registered with the division, or an existing, lined or unlined, permanent pit not permitted by or registered with the division, identified under Paragraphs (1) or (2) of Subsection A of 19.15.17.13 NMAC, shall submit the respective closure plan required under the transitional provisions of Subsection B of 19.15.17.17 NMAC to the environmental bureau in the division's Santa Fe office.
 (3) An operator of an existing unlined, temporary pit or an existing below-grade tank, identified under Paragraphs (3) or

(4) of Subsection A of 19.15.17.13 NMAC, shall submit the respective closure plan required under the transitional provisions of Subsection B of 19.15.17.17 NMAC to the appropriate division district office.

#### **19.15.17.17 TRANSITIONAL PROVISIONS:**

**B.** An operator of an existing operation that is required to close pursuant to Paragraphs (2) or (3) of Subsection A of 19.15.17.13 NMAC shall submit a closure plan pursuant to Subsection C of 19.15.17.9 NMAC to the division not later than 30 days after June 16, 2008. An operator of an existing operation that is required to close pursuant to Paragraphs (1) or (4) of Subsection A of 19.15.17.13 NMAC shall submit a closure plan pursuant to Subsection C of 19.15.17.9 NMAC to the division not later than six months after June 16, 2008. An operator of an existing operator of an existing operation that is required to close pursuant to the division not later than six months after June 16, 2008. An operator of an existing operation that is required to close pursuant to Paragraph (5) of Subsection A of 19.15.17.13 NMAC shall submit a closure plan pursuant to Subsection C of 19.15.17.9 NMAC to the division prior to the time of requesting a permit transfer. The division must approve the closure plan and the operator must complete closure activities pursuant to the closure requirements of 19.15.17.13 NMAC prior to any sale or change of operator pursuant to 19.15.9.9 NMAC, unless otherwise approved by the division.

#### **19.15.17.9 PERMIT APPLICATION:**

**C.** Closure plans. A closure plan that an operator submits in a plan required in Subsection B of 19.15.17.9 NMAC, or any other closure plan required pursuant to 19.15.17 NMAC, shall describe the proposed closure method and the proposed procedures and protocols to implement and complete the closure.

(1) If the operator proposes an on-site closure method, the operator shall also propose other methods to be used if the initial method does not satisfy the on-site closure standards specified in Subsection F of 19.15.17.13 NMAC or, if applicable, other on-site closure standards that the environmental bureau in the division's Santa Fe office approves.
 (2) An operator of an existing unlined permanent pit that is permitted by or registered with the division, or an existing.

lined or unlined, permanent pit not permitted by or registered with the division, identified under Paragraphs (1) or (2) of

Subsection A of 19.15.17.13 NMAC, shall submit the respective closure plan required under the transitional provisions of Subsection B of 19.15.17.17 NMAC to the environmental bureau in the division's Santa Fe office.

(3) An operator of an existing unlined, temporary pit or an existing below-grade tank, identified under Paragraphs (3) or (4) of Subsection A of 19.15.17.13 NMAC, shall submit the respective closure plan required under the transitional provisions of Subsection B of 19.15.17.17 NMAC to the appropriate division district office.

#### E. Closure method for below-grade tanks.

(1) The operator shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility.

(2) The operator shall remove the below-grade tank and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.

(3) If there is any on-site equipment associated with a below-grade tank, then the operator shall remove the equipment, unless the equipment is required for some other purpose.

(4) The operator shall test the soils beneath the below-grade tank to determine whether a release has occurred. The operator shall collect, at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyze for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 100 mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. The operator shall notify the division of its results on form C-141. The division may require additional delineation upon review of the results.

(5) If the operator or the division determines that a release has occurred, then the operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate.

(6) If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, then the operator shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site. The division-prescribed soil cover, recontouring and re-vegetation requirements shall comply with Subsections G, H and I of 19.15.17.13 NMAC.

**F.** On-site closure methods. The following closure requirements and standards apply if the operator proposes a closure method for a drying pad associated with a closed-loop system or a temporary pit pursuant to Paragraph (2) of Subsection D of 19.15.17.13 NMAC or Paragraph (2) of Subsection B of 19.15.17.13 NMAC that involves on-site burial, or an alternative closure method pursuant to Paragraph (3) of Subsection D of 19.15.17.13NMAC or Paragraph (3) of Subsection B of 19.15.17.15NMAC.

(1) General requirements.

(a) Any proposed on-site closure method shall comply with the siting criteria specified in Subsection C of 19.15.17.10 NMAC.

(b) The operator shall provide the surface owner notice of the operator's proposal of an on-site closure method. The operator shall attach the proof of notice to the permit application.

(c) The operator shall comply with the closure requirements and standards of Paragraphs (2) and (3), as applicable, of Subsection F of 19.15.17.13 NMAC if the proposed closure method for a drying pad

associated with a closed-loop system or for a temporary pit involves on-site burial pursuant to Paragraph (2) of Subsection D of 19.15.17.13 NMAC or Paragraph (2) of Subsection B of 19.15.17.13 NMAC, or involves an alternative closure method pursuant to Paragraph (3) of Subsection D of 19.15.17.13 NMAC or Paragraph (3) of Subsection D of 19.15.17.13 NMAC or Paragraph (3) of Subsection B of 19.15.17.1

(d) The operator shall place a steel marker at the center of an on-site burial. The steel marker shall be not less than four inches in diameter and shall be cemented in a three-foot deep hole at a minimum. The

steel marker shall extend at least four feet above mean ground level and at least three feet below ground level. The operator name, lease name and well number and location, including unit letter, section, township and range, and that the marker designates an on-site burial location shall be welded, stamped or otherwise permanently engraved into the metal of the steel marker. A person shall not build permanent structures over an on-site burial without the appropriate division district office's written approval. A person shall not remove an on-site burial marker without the division's written permission.

(e) The operator shall report the exact location of the on-site burial on form C-105 filed with the division.

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(f) The operator shall file a deed notice identifying the exact location of the on-site burial with the county clerk in the county where the on-site burial occurs.

(2) In-place burial.

(a) Where the operator meets the siting criteria specified in Paragraphs (2) or (3) of Subsection C of 19.15.17.10 NMAC and the applicable waste criteria specified in Subparagraphs (c) or (d) of Paragraph (2) of Subsection F of 19.15.17.13 NMAC, an operator may use in-place burial (burial in the existing temporary pit) for closure of a temporary pit or bury the contents of a drying pad associated with a closed-loop system in a temporary pit that the operator constructs in accordance with Paragraphs (1) through (6) and (10) of Subsection F of 19.15.17.11 NMAC for closure of a drying pad associated with a closed-loop system.

(b) Prior to closing an existing temporary pit or to placing the contents from a drying pad associated with a closed-loop system into a temporary pit that the operator constructs for disposal, the operator shall

stabilize or solidify the contents to a bearing capacity sufficient to support the temporary pit's final cover. The operator shall not mix the contents with soil or other material at a mixing ratio of greater than 3:1, soil or other material to contents. (c) Where ground water will be between 50 and 100 feet below the bottom of the buried waste, the operator shall collect at a minimum, a five point, composite sample of the contents of the drying pad associated with a closed-loop system or the contents of a temporary pit after treatment or stabilization, if treatment or stabilization is required, to demonstrate that benzene, as determined by EPA SW-846 method 8021 B or 8260B, does not exceed 0.2 mg/kg; total BTEX, as determined by EPA SW-846 method 8021 B or 8260B, does not exceed 50 mg/kg; TPH, as determined by EPA SW-846 method 418.1 or other EPA method approved that the division approves, does not exceed 500 mg/kg; and chlorides, as determined by EPA method 300.1, do not exceed 500 mg/kg or the background concentration, whichever is greater. The operator may collect the composite sample prior to treatment or stabilization to demonstrate that the contents do not exceed these concentrations. However, if the contents collected prior to treatment or stabilization exceed the specified concentrations the operator shall collect a second five point, composite sample of the contents after treatment or stabilization to demonstrate that the contents do not exceed these concentrations.

(d) Where the ground water will be more than 100 feet below the bottom of the buried waste, the operator shall collect at a minimum, a five point, composite sample of the contents of the drying pad associated

with a closed-loop system or the contents of a temporary pit after treatment or stabilization, if treatment or stabilization is required, to demonstrate that benzene, as determined by EPA SW-846 method 8021B or 8260B, does not exceed 0.2 mg/kg; total BTEX, as determined by EPA SW-846 method 8021B or 8260B, does not exceed 50 mg/kg; the GRO and DRO combined fraction, as determined by EPA SW-846 method 8015M, does not exceed 500 mg/kg; TPH, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 2500 mg/kg; and chlorides, as determined by EPA method 300.1, do not exceed 1000 mg/kg or the background concentration, whichever is greater. The operator may collect the composite sample prior to treatment or stabilization to demonstrate that the contents do not exceed these concentrations. However, if the contents collected prior to treatment or stabilization exceed the specified concentrations the operator shall collect a second five point, composite sample of the contents after treatment or stabilization to demonstrate that the contents do not exceed these concentrations.

(e) Upon closure of a temporary pit, or closure of a temporary pit that the operator constructs for burial of the contents of a drying pad associated with a closed-loop system, the operator shall cover the

geomembrane lined, filled, temporary pit with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site. The division-prescribed soil cover, recontouring and re-vegetation shall comply with Subsections G, H and I of 19.15.17.13 NMAC.

(f) For burial of the contents from a drying pad associated with a closed-loop system, the operator shall construct a temporary pit, in accordance with Paragraphs (1) through (6) and (10) of Subsection F of

19.15.17.11 NMAC, within 100 feet of the drying pad associated with a closed-loop system, unless the appropriate division district office approves an alternative distance and location. The operator shall use a separate temporary pit for closure of each drying pad associated with a closed-loop system.

(3) On-site trench burial.

(a) Where the operator meets the siting criteria in Paragraph (4) of Subsection C of 19.15.17.10 NMAC, an operator may use on-site trench burial for closure of a drying pad associated with a closed loop system or for closure of a temporary pit when the waste meets the criteria in Subparagraph (c) of Paragraph (3) of Subsection F of 19.15.17.13 NMAC, provided that the operator certifies to the division that it has given written notice to the surface owner that it intends to do so. The operator shall use a separate on-site trench for closure of each drying pad associated with a closed-loop system or each temporary pit.

(b) Prior to placing the contents from a drying pad associated with a closed-loop system or from a temporary pit into the trench, the operator shall stabilize or solidify the contents to a bearing capacity

sufficient to support the final cover of the trench burial. The operator shall not mix the contents with soil or other material at a mixing ratio of greater than 3:1, soil or other material to contents.

(c) The operator shall collect at a minimum, a five point, composite sample of the contents of the drying pad associated with a closed-loop system or of the temporary pit to demonstrate that the TPH

concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 2500 mg/kg. Using EPA SW-846 method 1312 or other EPA leaching procedure that the division approves, the operator shall demonstrate that (i) the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 3000 mg/l or the background concentration, whichever is greater, (ii) the concentrations of the inorganic water contaminants specified in Subsection A of 20.6.2.3103 NMAC as determined by appropriate EPA methods do not exceed the standards specified in Subsection A of 20.6.2.3103 NMAC or the background concentration, whichever is greater, and (iii) the concentrations of the organic water contaminants specified in Subsection A of 20.6.2.3103 NMAC or the background concentration, whichever is greater, and (iii) the concentrations of the organic water contaminants specified in Subsection A of 20.6.2.3103 NMAC as determined by appropriate EPA methods do not exceed the standards specified appropriate EPA methods specified in Subsection A of 20.6.2.3103 NMAC as determined by appropriate EPA methods do not exceed the standards specified in Subsection A of 20.6.2.3103 NMAC, unless otherwise specified above. The

operator may collect the composite sample prior to treatment or stabilization to demonstrate that the contents do not exceed these concentrations. However, if the contents collected prior to treatment or stabilization exceed the specified concentrations the operator shall collect a second five point, composite sample of the contents after treatment or stabilization to demonstrate that the contents do not exceed these concentrations.

(d) If the contents from a drying pad associated with a closed-loop system or from a temporary pit do not exceed the criteria in Subparagraph (c) of Paragraph (3) of Subsection F of 19.15.17.13 NMAC, the

operator shall construct a trench lined with a geomembrane liner located within 100 feet of the drying pad associated with a closed-loop system or temporary pit, unless the appropriate division district office approves an alternative distance and location. The operator shall design and construct the lined trench in accordance with the design and construction requirements specified in Paragraphs (1) through (8) of Subsection J of 19.15.17.11 NMAC.

(e) The operator shall close each drying pad associated with a closed-loop system or temporary pit by excavating and transferring all contents and synthetic pit liners or liner material associated with a closed-loop system or temporary pit to a lined trench. The excavated materials shall pass the paint filter liquids test (EPA SW- 846, method 9095) and the closure standards specified in Subparagraph (c) of Paragraph (3) of Subsection F of 19.15.17.13 NMAC.

(f) The operator shall test the soils beneath the temporary pit after excavation to determine whether a release has occurred.(i) Where ground water is between 50 and 100 feet below the bottom of the temporary pit, the operator shall collect, at a minimum, a five point, composite sample; collect individual grab samples from

any area that is wet, discolored or showing other evidence of a release; and analyze for BTEX, TPH, benzene, GRO and DRO combined fraction and chlorides to demonstrate that benzene, as determined by EPA SW-846 method 8021B or 8260B, does not exceed 0.2 mg/kg; total BTEX, as determined by EPA SW-846 method 8021B or 8260B, does not exceed 50 mg/kg; TPH, as determined by EPA SW-846 method 418.1 or other EPA method approved that the division approves, does not exceed 2500 mg/kg; the GRO and DRO combined fraction, as determined by EPA SW-846 method 8015M, does not exceed 500 mg/kg; and chlorides, as determined by EPA method 300.1, do not exceed 500 mg/kg or the background concentration, whichever is greater. The operator shall notify the division of its results on form C-141. The division may require additional delineation upon review of the results. The operator shall notify the division of its results on form C-141.

(ii) Where ground water is more than 100 feet below the bottom of the temporary pit, the operator shall collect at a minimum, a five point, composite sample; collect individual grab samples from any area

that is wet, discolored or showing other evidence of a release; and analyze for BTEX, TPH, benzene, GRO and DRO combined fraction and chlorides to demonstrate that benzene, as determined by EPA SW-846 method 8021B or 8260B, does not exceed 0.2 mg/kg; total BTEX, as determined by EPA SW-846 method 8021B or 8260B, does not exceed 50 mg/kg; the GRO and DRO combined fraction, as determined by EPA SW-846 method 8015M, does not exceed 500 mg/kg; TPH, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 2500 mg/kg; and chlorides, as determined by EPA method 300.1, do not exceed 1000 mg/kg or the background concentration, whichever is greater. The operator shall notify the division of its results on form C-141.

The division may require additional delineation upon review of the results.

(g) If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Subparagraph (c) of Paragraph (3) of Subsection F of 19.15.17.13

NMAC, then the operator shall backfill the excavation with compacted, non-waste containing earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site. The division-prescribed soil cover, recontouring and re-vegetation shall comply with Subsections G, H and I of 19.15.17.13 NMAC.

(h) If the operator or the division determines that a release has occurred, then the operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate. The operator may propose to transfer the

excavated, contaminated soil into the lined trench.

(i) The operator shall install a geomembrane cover over the excavated material in the lined trench. The operator shall design and construct the geomembrane cover in accordance with the requirements

specified in Paragraphs (9) and (10) of Subsection J of 19.15.17.11 NMAC.

(j) The operator shall cover the geomembrane lined and covered, filled, trench with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site. The division-prescribed soil cover, recontouring and re-vegetation shall comply with Subsections G, H and I of 19.15.17.13 NMAC.

#### **19.15.17.15 EXCEPTIONS:**

**B**: Alternative closure methods. The operator of a temporary pit or a closed-loop system may apply to the environmental bureau in the division's Santa Fe office for an exception to the closure methods specified in Paragraphs (1) and (2) of Subsection B of 19.15.17.13 NMAC or Paragraphs (1) and (2) of Subsection D of 19.15.17.13 NMAC. The environmental bureau in the division's Santa Fe office may grant the proposed exception if all of the following requirements are met. (3) The operator demonstrates to the satisfaction of the environmental bureau in the division's Santa Fe office that any proposed alternative closure method will implement one or more of the following practices: waste minimization; treatment using best demonstrated available technology; reclamation; reuse; recycling; or reduction in available contaminant concentration; and subject to such conditions as the environmental bureau in the division's Santa Fe office deems necessary in order to protect fresh water, public health and the environment.

Disclaimer: Please be advised that NMOCD approval of this plan does not relieve Western Refining L.P. of responsibility should their operations fail to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve Western Refining L.P. of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Carl J. Chavez, CHMM

New Mexico Energy, Minerals & Natural Resources Department Oil Conservation Division, Environmental Bureau 1220 South St. Francis Drive, Santa Fe, New Mexico 87505 Office: (505) 476-3490 E-mail: <u>CarlJ.Chavez@State.NM.US</u> Website: <u>http://www.emnrd.state.nm.us/ocd/</u> "Why Not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward With the Rest of the Nation?" To see how, please go to: "Pollution Prevention & Waste Minimization" at <u>http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental</u>



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April 30, 2012

Carl Chavez New Mexico Energy, Minerals & Natural Resources Department Oil Conservation Division, Environmental Bureau 1220 South St. Francis Drive Santa Fe, NM 87505

#### Certified Mail #: 7010 1870 0001 6760 0078

Re: Former Classifier System Closure Plan Jal LPG Storage Terminal Western Refining Company, L.P. GW-007

Dear Mr. Chavez:

Western Refining Company, L.P. submits the above referenced Closure Plan pursuant to Condition 20.C of the facility's OCD Discharge Permit Renewal dated May 23, 2008. This Closure Plan covers closure activities associated with the classifier, waste oil storage tank, and contingency tank.

If you have any questions or would like to discuss the Investigation Report, please contact me at (505) 632-4171

Sincerely,

For What

Ron Weaver Regional Terminals Manager Western Refining Company L.P.

cc:

Ken Parker - WNR Joe Wiley – EPNG

Allen Hains – WNR



## Closure Plan Former Classifier System Jal LPG Storage Terminal

Western Refining Company, L.P. Jal, New Mexico

April 2012

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#### **Executive Summary**

The Western Refining, L.P. (Western) Jal LPG Storage Terminal is located on Highway 18 approximately 9 miles north of Jal, New Mexico. The terminal was part of the El Paso Natural Gas Company (EPNG) Jal #4 natural gas processing plant and underground LPG storage facility which was constructed in 1952. EPNG discontinued the gas processing operations in 1987. Since 1991, the terminal has operated as an underground storage facility for liquefied petroleum gas (LPG) from offsite sources. Western Refining Company purchased the facility in 2007. Currently, LPG is transported to the facility via truck, railcar and pipeline.

Between 1981, when the injection well was placed into service, and 1987, when EPNG discontinued plant operations, a classifier system processed wastewater from natural gas processing plants and blow-down from two cooling towers. The primary purpose of the classifier system was to remove solids and some lubricating oil before disposal in a nearby injection well. The classifier system originally consisted of two below-grade tanks: a classifier and oil storage tank. In 1982, a below-grade contingency tank was added to hold wastewater in the event that the injection well was shut down.

The objective of this closure plan is to satisfy OCD Discharge Permit Renewal (dated May 23, 2008) Condition 20.C. *"The closure of the classifier and associated equipment shall be completed on or before the expiration date of this permit."* 

Western proposes to remove and close the classifier and waste oil storage tank. Due to its size and service, the contingency tank will be closed in place. As part of the closure activities, Western Refining will collect confirmation soil samples from beneath the removed tanks to assess whether a release has occurred. A closure report will be submitted to the OCD for approval.

#### **Section 1 Introduction**

The Western Refining Company, L.P. (Western) Jal LPG Storage Terminal is located on Highway 18 approximately 9 miles north of Jal, Lea County, New Mexico. The property includes two contiguous parcels of land totaling 141.173 acres as depicted in Figure 1. The terminal is located in the northern portion of the parcel. The legal description is the southwest quarter of the southwest quarter of Section 32, Township 23S, Range 37E. Bordering the facility are state and private properties. State Highway 18 is adjacent to the eastern boundary of the terminal property. Adjacent to the western boundary is a used extensively for oil and gas production and, in some instances, grazing.

Historically, the terminal property was part of the El Paso Natural Gas Company (EPNG) Jal No. 4 natural gas processing plant. After being constructed in 1952, the plant's primary purpose was to treat, compress and transport natural gas. Operations also included the storage of liquefied petroleum gas (LPG) utilizing four underground salt caverns. EPNG ceased gas processing operations in 1987 and began dismantling most of the processing/treating plants. The plants that were demolished by EPNG are depicted in Figure 3. Portions of the property were leased to Christie Gas Corporation (Christie) that same year. EPNG eventually sold the facility to Christie in 1991. With plans to use the NGL treating and fractionating plant, Christie took ownership of the plant and the classifier system. The NGL treating and fractionating plant was not put into operation as proposed.

Since 1991, the site has been operated as an underground LPG storage terminal for offsite customers. In December 2002, Christie sold the facility to Texas LPG Storage Company (Texas LPG). Texas LPG requested a permit condition to use the out of service contingency tank as secondary containment for disposal of salt contaminated sand. Salt contaminated sand was not disposed in the tank. Therefore, there was no requirement to satisfy the permit condition.

Western purchased the facility in 2007. Currently, LPG is transported to the facility for storage via truck, railcar and pipeline.

#### Classifier System

The primary purpose of the classifier system was to remove solids and some lubricating oil before disposal in a nearby injection well. Between 1981, when the injection well was placed into service, and 1987, when EPNG discontinued plant operations, a classifier system processed wastewater from natural gas processing plants and blow-down from two cooling towers.

The classifier system consisted of a three below-grade tanks:

- a closed-topped classifier used to remove solids (grit) and oil;
- a closed-topped waste oil tank; and
- an open-topped contingency tank which stored effluent in the event of an injection well shut down.

An aerial photograph of the classifier system is presented as Figure 2. Photographs of the classifier system are provided in Appendix A.

#### **Closure Plan Objective**

The objective of this closure plan is to satisfy the OCD Discharge Permit Renewal (dated May 23, 2008) Condition 20.C. *"The closure of the classifier and associated equipment shall be completed on or before the expiration date of this permit."* 

#### **Section 2 Background**

The terminal property was originally developed as part of EPNG's Jal No. 4 natural gas processing plant. The processing plant was constructed in 1952 and consisted of a gasoline plant, a purification plant, a dehydration plant, and gas compression facilities. The plant treated, compressed, and transported natural gas to EPNG's main transmission pipeline. In 1959, additional fractionation and underground gas storage facilities were constructed. Process flow diagrams and a general description of the facility operations in 1983 are included in Appendix B. These processes did not appreciably change until 1987 when EPNG discontinued their plant operations and subsequently sold the plant.

According to site documents, wastewater consisted of water, solids and some lubricating oil from the processing plants, cooling tower blow-down, and domestic wastewater from the facility camp housing located west of the compressor station. Initially, effluent from the facility was disposed within a series of seven evaporation ponds. In addition to the evaporation ponds, three lined brine storage ponds associated with the underground LPG storage caverns were also present. On the topographic map in Figure1, the configuration of the ponds in 1979 is shown in blue.

#### 2.1 Injection Well

In October 1979, OCD issued Administrative Order No. SWD-214 which approved the conversion of a offsite oil well, Shell State Well No. 13, into a disposal well. The well allowed injection of treated wastewater and salt water from LPG Storage operations for disposal purposes into the Grayburg Formation approximately 3900 feet below ground surface (bgs). The injection well was placed into operation on March 7, 1981. Use of the injection well allowed the discharge to the evaporation ponds to cease.

#### 2.2 Classifier System

Between 1981 and 1987, when EPNG discontinued plant operations, the classifier system processed wastewater from natural gas processing plants and blow-down from two cooling towers. Wastewater from the compressor and processing plants flowed through steel drain pipes to the classifier system. Water from the cooling tower basins flowed through a galvanized steel storage tank. The water was then pumped to Conoco for use in their nearby water-flood operations. If needed, excess or unused cooling tower blow-down was transferred to the classifier through an overflow return line. The classifier effluent was pumped through an anthracite filter before disposal down the injection well. The oil recovered by the classifier was transferred to the oil tank. In August 1982, the large contingency tank was installed near the classifier to hold effluent during those periods when the injection well was shut down.

#### **2.3 Classifier System Releases**

There are no documented historical releases from the former wastewater classifier system. During EPNG operations, sludge from the classifier tank was removed and dewatered and stored on site to permit stabilization and volume reduction under the OCD Discharge Permit. The sludge was tested for ignitability and toxicity and disposed of appropriately. Prior to the sale of the facility, EPNG removed and disposed of any sludge and liquids that had remained within the classifier system.

#### 2.4 Historical Brine and Hydrocarbon Releases

Since the 1980s, EPNG has operated a groundwater monitoring and remediation system to address brine (chloride) and hydrocarbon contamination within the Ogallala Aquifer. The remediation is a result of releases from EPNG operations including the former brine and evaporation ponds. As part of the 1991 sale to Christie, EPNG retained responsibility for groundwater remediation. Approximately eighteen groundwater monitoring wells, one piezometer, and two active recovery wells have been completed within the Ogallala Aquifer. Today, the recovered groundwater continues to be disposed in Shell State #13 injection well. The wells are routinely sampled to assess the effectiveness of the remediation system. EPNG annually reports the results of the groundwater monitoring and remediation activities in annual groundwater remediation reports.

#### **Section 3 Site Conditions**

The surface and subsurface conditions that could affect the fate and transport of any contaminants are discussed below. This information is based on visual observations, lithologic descriptions, EPNG's Annual Groundwater Remediation Reports and OCD files.

#### 3.1 Surface Conditions

The boundaries of the property are located on the Rattlesnake Canyon, NM (1979) and Jal NW, NM (1979) USGS topographic maps (Figure 1). The land surface at the site is nearly flat with a surface elevation of about 3305 feet above mean sea level. The land surface slopes gently to the east of the site. Surface drainage flows to the eastern boundary of the plant and then under State Highway 18. The surface impoundments depicted in blue on the topographic map do not reflect the current configuration of the brine storage ponds. There are no wetlands on the site.

The terminal is located in the Pecos River Basin of the Great Plains Physiographic province. The region is characterized by flat to rolling plains and lowlands with scattered hills and bluffs gradually rising westward toward the Rocky Mountains. Characteristic of the high plains desert environment, there are no perennial streams. However, a few ephemeral streams and broad shallow drainages may flow during thunderstorms. The surface topography in the vicinity of the site slopes to the east at approximately 30 feet per mile towards Cheyenne Draw, a north-south trending tributary of Monument Draw located to the east of the property.

#### **3.2 Subsurface Conditions**

Beneath the surficial windblown fine sands and loam of much of the high plains are layers of resistant caliche which is formed by the leaching of carbonate and silica from surface soils and the re-deposition of the dissolved mineral layers below the surface. The Ogallala Formation unconformably overlies Permian, Triassic, Jurassic, and Cretaceous strata and consists primarily of heterogeneous sequences of coarse-grained sand and gravel in the lower part grading upward into fine clay, silt, and sand. Gravel commonly occurs in layers in the basal section and ranges in size from boulders to pea size. Based on the well log for Well No. 9 of EPNG Jal No. 4, the base of the Ogallala occurs at about 260 feet below ground surface (bgs). No gravel was reported to be present at the base of the Ogallala at this well location.

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The Ogallala Aquifer is the principal source of potable groundwater in the area. In the classifier area, the Ogallala Aquifer occurs at approximately 109 feet bgs. The bottom of the classifier system tanks are no more than 20 feet below ground surface and well above the depth of saturation. Groundwater flows towards the southeast with a hydraulic gradient of approximately 0.002 feet per foot. The groundwater surface is substantially influenced in the vicinity of the property by the active groundwater recovery system operated by EPNG.

The Ogallala overlies the relatively impermeable Chinle Group red beds that partially comprise the Chinle and Dockum Formations. The Salado Formation consisting of salt occurs from approximately 1300 feet to 2,680 feet bgs. The LPG storage caverns reside in the Salado Formation. The Yates Formation (starting at approximately 3,000 feet bgs), the Queens Formation (at about 3,500 feet bgs) and the Greyburg Formations (from about 3,800 to 4,000 feet bgs) underlie the Salado. Oil and/or gas production occurs or has occurred within the deeper Yates and Queens Formations. The Greyburg Formation is used by the facility for water disposal through injection well Shell State #13.

#### **Section 4 Closure Rationale**

Western proposes to remove and close the classifier and waste oil storage tank because both tanks were in continuous oil service. It is unlikely that lubricating oils were present in the contingency tank because it was in "as needed" or contingent service and stored effluent from the classifier process. During the negotiations for the 2008 Discharge Permit Renewal, closing the contingency tank in place was agreed upon. It was also agreed that construction debris, such as discarded concrete debris and brine pond liner, that resides onsite could be used as part of the backfill material and that the liner material already placed into the classifier was satisfactory. During recent discussions, OCD expressed concerns with backfilling with construction debris. Due to its size and service, the contingency tank will be closed in place and backfilled with clean soil.

Any petroleum hydrocarbon and chloride groundwater impacts should be covered by the ongoing EPNG groundwater remediation program.

#### **Section 5 Closure Activities**

Closure of the classifier system will be accomplished through the following activities:

- Waste removal, if necessary;
- Excavation and equipment removal;
- Confirmation soil sampling;
- Chemical analyses:
- Backfilling and grading; and
- Closure Report.

#### 5.1 Waste Removal

Although all wastewater and sludge were removed after plant operations ceased and prior to the sale of the facility in 1987, any liquid waste or sludge present within the classifier and oil waste tank prior to implementing a closure will be removed and properly characterized and disposed of in accordance with applicable regulations. The rainfall and wind-blown solids that accumulated and discarded liner material within the uncovered below-grade contingency tank will not be removed.

#### 5.2 Excavation and Tank Removal

The classifier, waste oil storage tank and associated piping will be removed by excavating around the perimeter of the tanks and dismantling and removing the tanks and piping. The removed materials will be staged onsite and eventually sold as scrap metal or otherwise properly disposed. . The excavation will remain uncovered until confirmation sampling and analyses is completed

If a reportable quantity release is discovered, the agency will be notified in accordance to state regulations. At that time, a path forward to address the waste will be communicated to the OCD. The path forward may include over excavation.

#### **5.3 Soil Confirmation Sampling**

After the tanks have been removed, soil samples will be collected to determine whether a release had occurred from the tanks. One five-point composite soil sample will be collected from soil beneath each of the removed tanks. Discrete grab samples may be collected and analyzed from any uncovered area that is wet, discolored, or showing other signs of a release. Soil samples will be collected as discussed in Appendix C.

#### **5.4 Chemical Analyses**

All samples collected for laboratory analysis will be submitted to an accredited laboratory. The laboratory will use the most recent standard EPA and industry-accepted analytical methods for target analytes as the testing methods for each medium sampled. Chemical analyses will be performed in accordance with the most recent EPA standard analytical methodologies and extraction methods.

All soil samples will be analyzed by the following methods:

- SW-846 Method 8021B or equivalent for benzene, toluene, ethyl benzene, and xylenes; and
- SW-846 Method 8015 or equivalent for total petroleum hydrocarbons GRO and DRO.

The chemical analyses results will be compared to the following standard:

- Benzene.....0.2 mg/kg
- Total BTEX.....50 mg/kg
- TPH (GRO+DRO)..... 100 mg/kg

#### 5.5 Backfilling and Grading

After confirmation activities are complete, the excavations will be backfilled with clean fill sourced from the terminal property. A five point composite confirmation sample of fill material will sampled and analyzed for the constituents above. The contingency tank will be closed in place by backfilling. Although the backfill will be compacted, the surface grade will be mounded to allow for settlement.

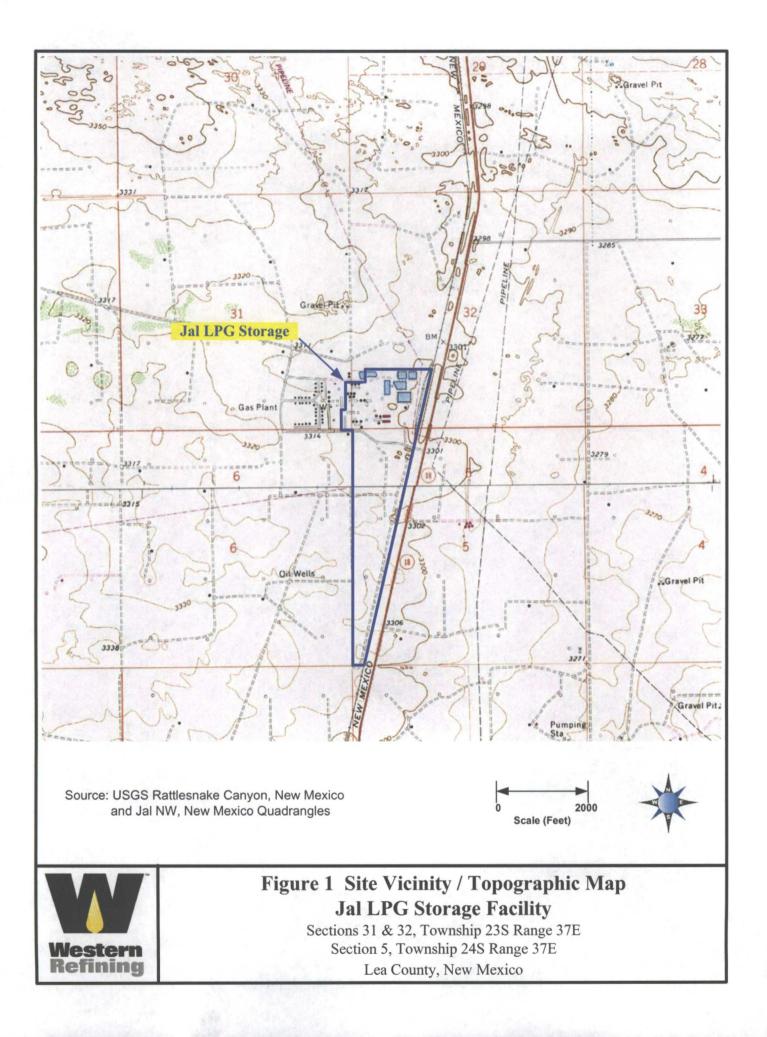
#### 5.6 Closure Report

After completion of the final closure activities, Western Refining will submit a closure report to OCD. The report will document that the final closure was conducted in accordance with the procedures outlined in this closure plan. Oversight of the closure activities will be provided by an authorized representative of Western Refining and the independent consultant who will ensure that all steps of the closure plan are followed.

#### **Section 6 Schedule**

Western Refining plans to have all closure activities completed in 2012. Closure activities are scheduled to begin within 60 days of OCD approval of this closure plan. Within 60 days of completion of the closure activities, Western Refining will submit a closure report to OCD.

## Figures



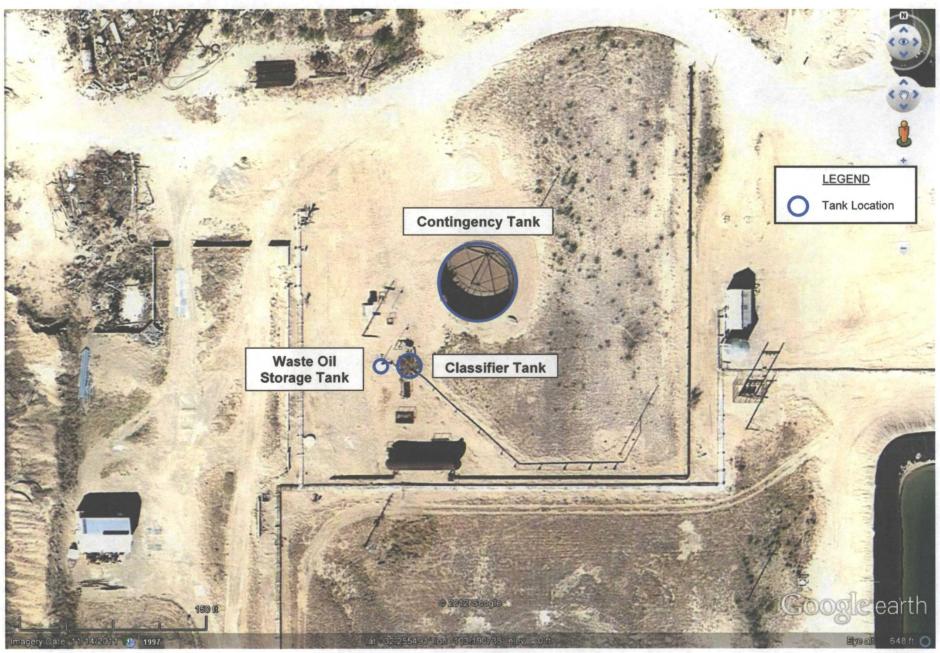
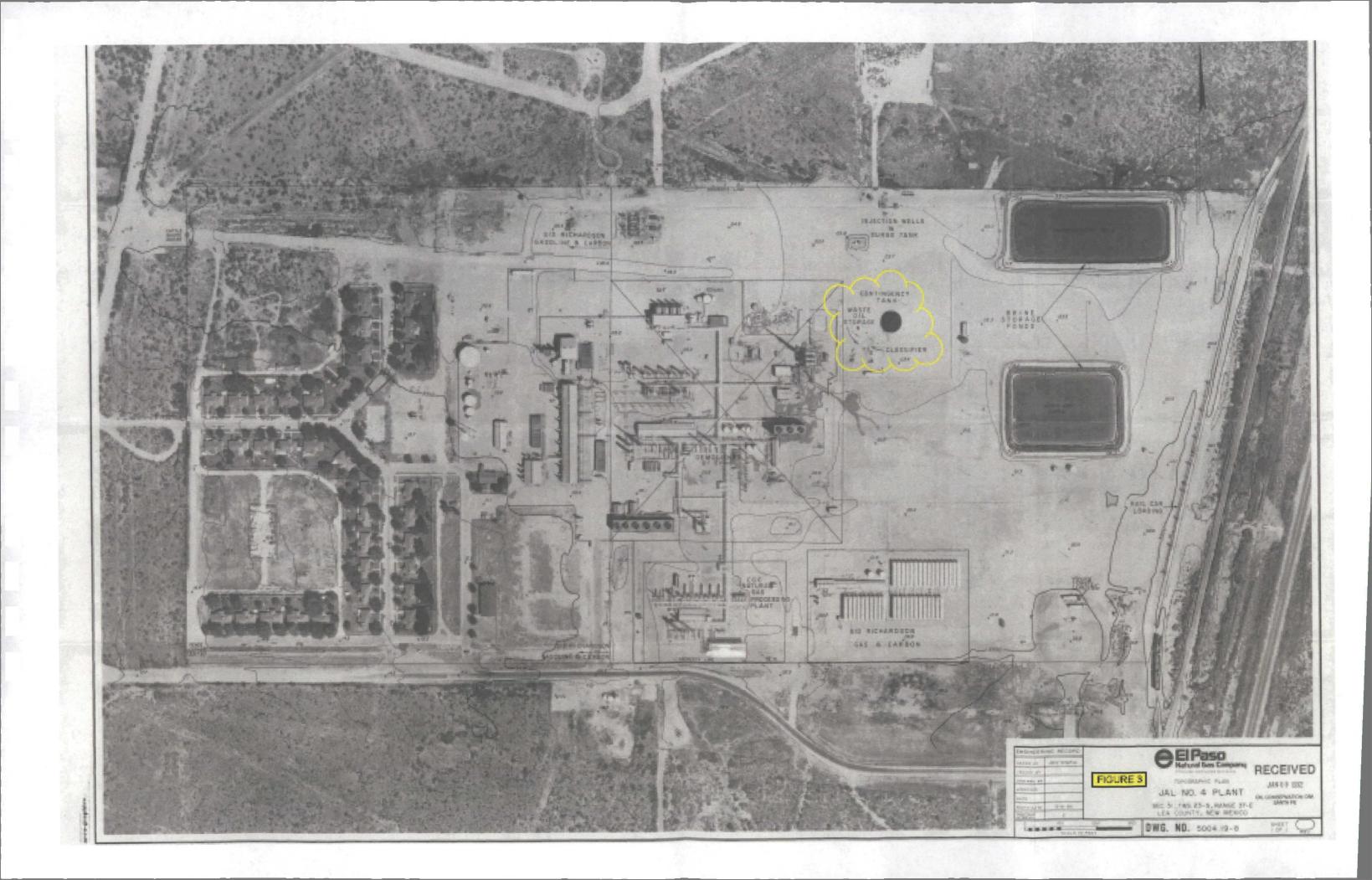


Figure 2. Classifier System Location



## Appendix A

## Photographs



Surge Tank (Left) and Below Grade Classifier and Waste Oil Storage Tanks



Interior of Surge Tank



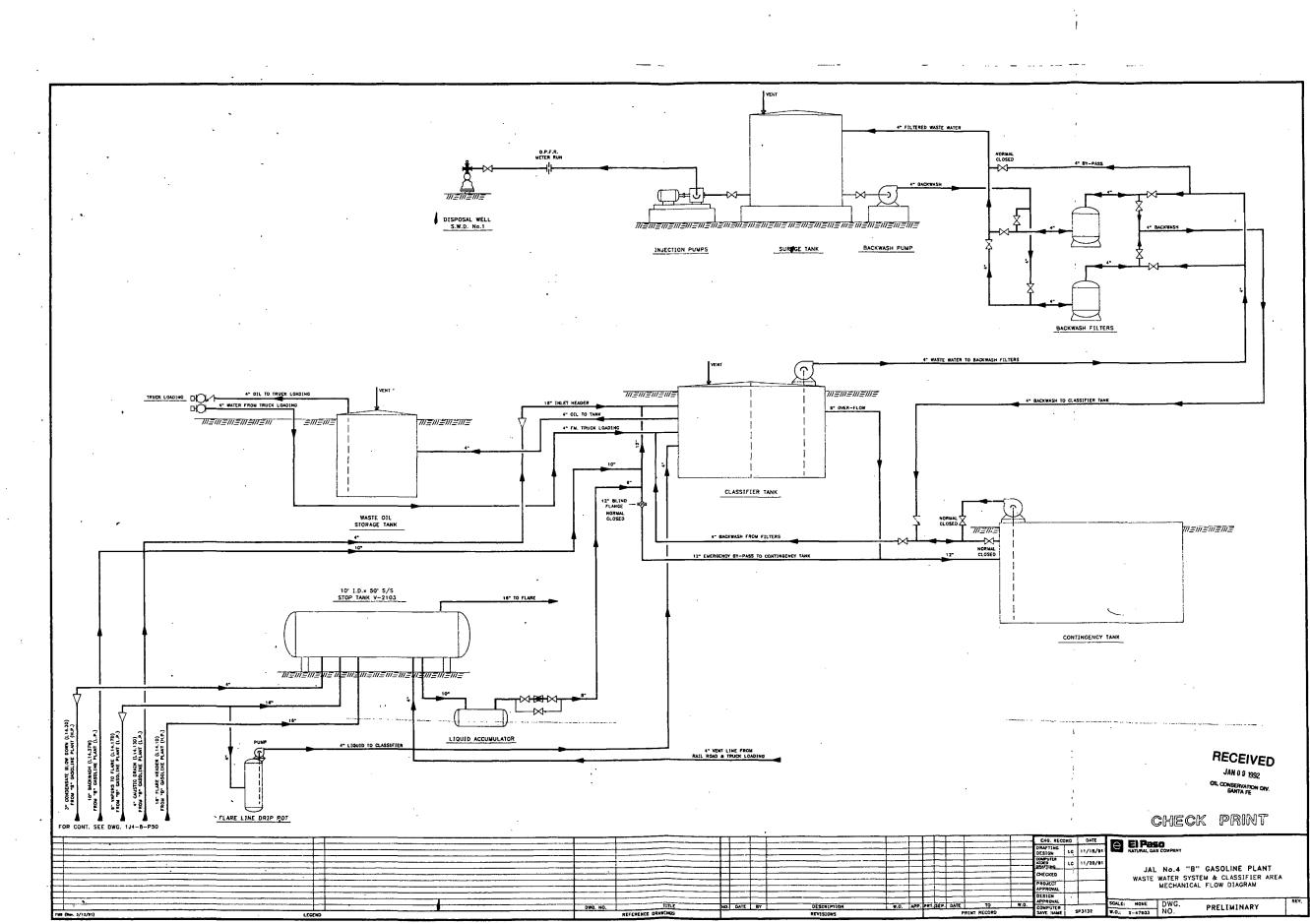
Below Grade Classifier and Waste Oil Storage Tank (with vent)

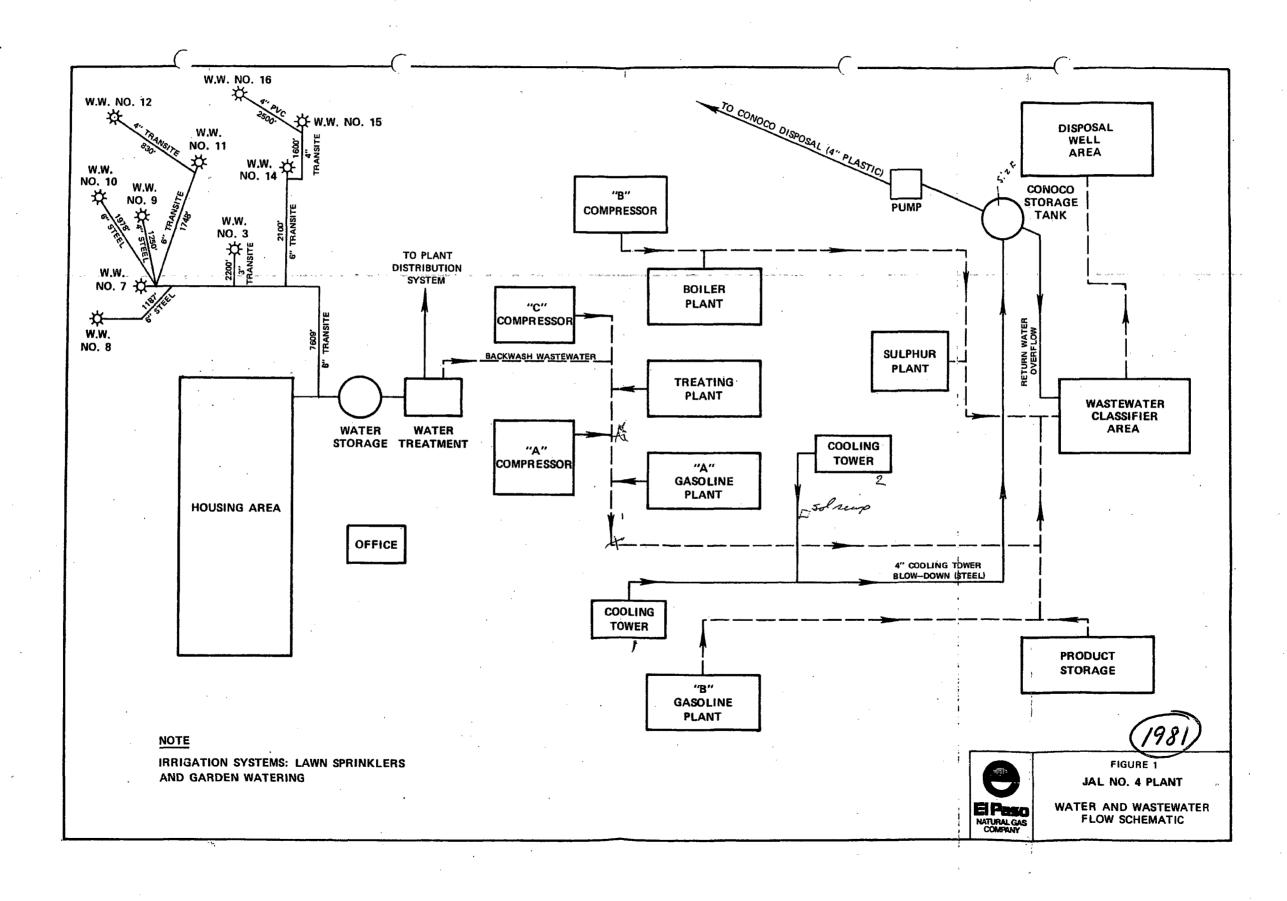


Close Up of Below Grade Classifier

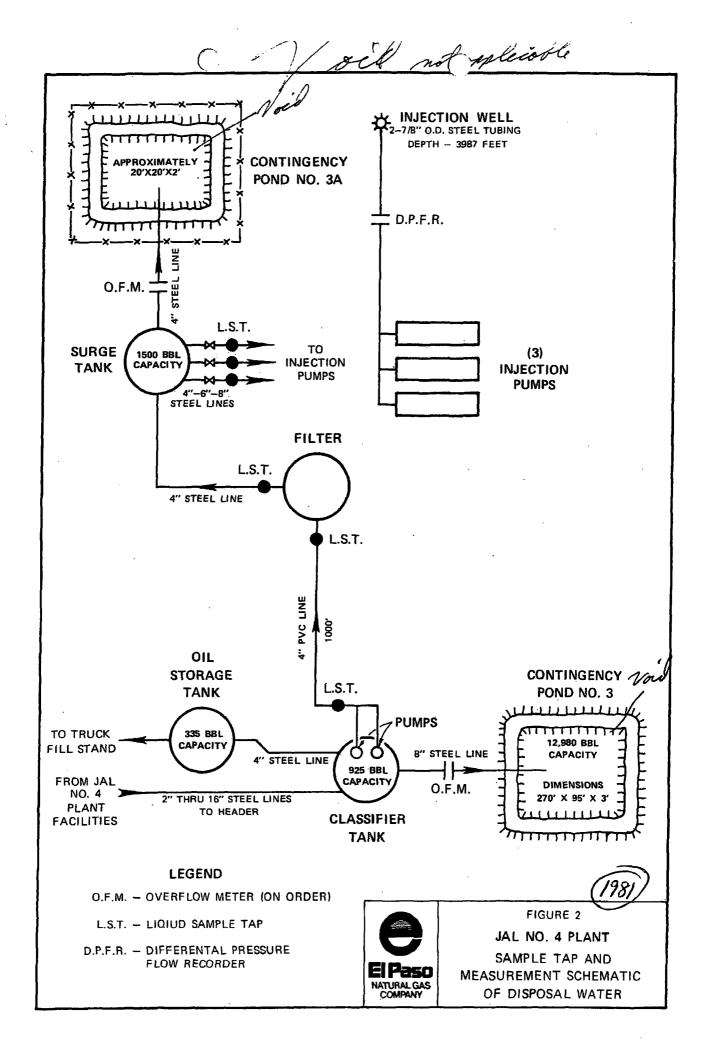
## Appendix B

**Site Documents** 





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TWO PETROLEUM CENTER / SUITE 200 NORTH "A" AT WADLEY MIDLAND, TEXAS 79701

PHONE: 915-684-5701

JUN 6 1983

New Mexico Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87501

Attention: Mr. R. L. Stamets

Gentlemen:

During our meeting of May 5, 1983 you requested a brief description of the Jal No. 4 Plant LPG storage operation and brine pond construction. Attached, in response to your request, are the following items:

- 1) Description of the storage facilities operation
- 2) Drawing No. JJ4-L-90 Ja1 No. 4 Storage Facilities Flow Diagram

June 1, 1983

- 3) Drawing No. 1J4-1-M35 North Brine Pond Plan and Profile
- 4) Drawing No. 1J4-1-M36 North Brine Pond Leak Detection Plan, Section and Details
- 5) Drawing No. 1J4-1-M37 North Brine Pond Section and Details
- 6) Drawing No. 1J4-1-M10 South Brine Pond Plan and Profile
- 7) Drawing No. 1J4-1-M33 South Brine Pond Leak Detection Plan, Section and Details
- Drawing No. 1J4-1-M34 South Brine Pond Section and Details

If you should require additional information or have any questions relative to this system, please call.

Sincerely,

EL PASO NATURAL GAS COMPANY Lalle de

D. N. Bigbie Ass't Division Superintendent

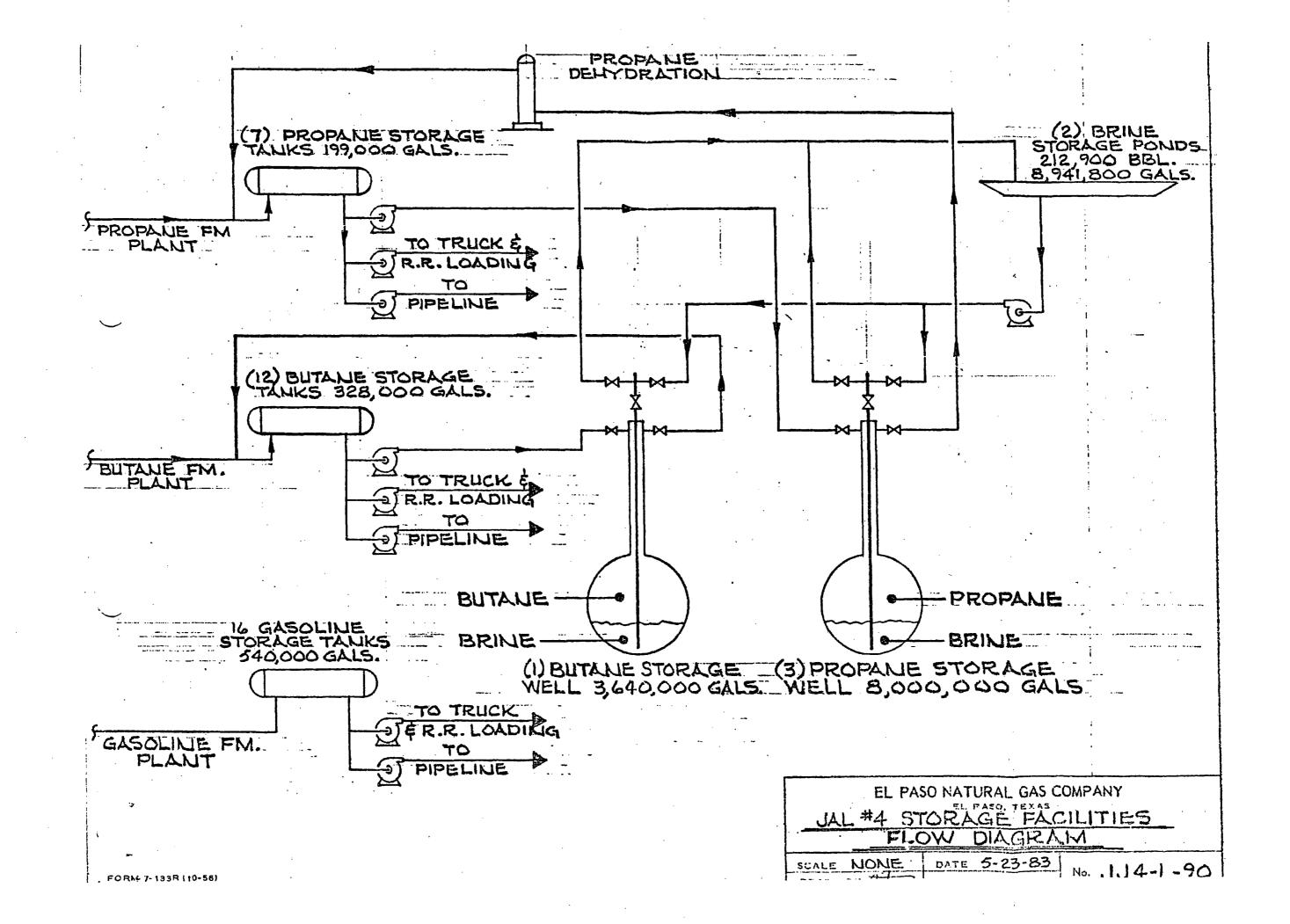
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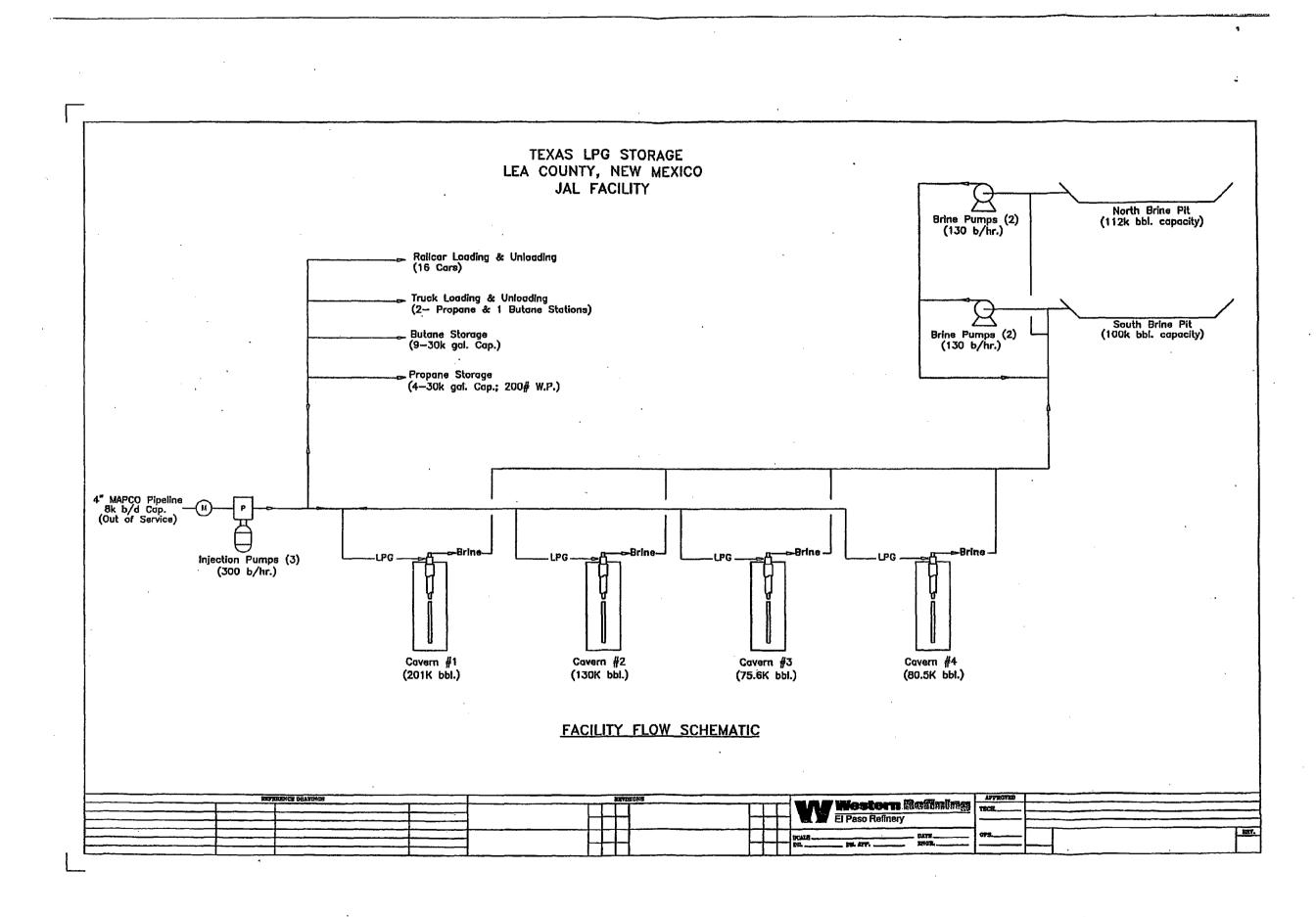
#### STORAGE FACILITIES OPERATION

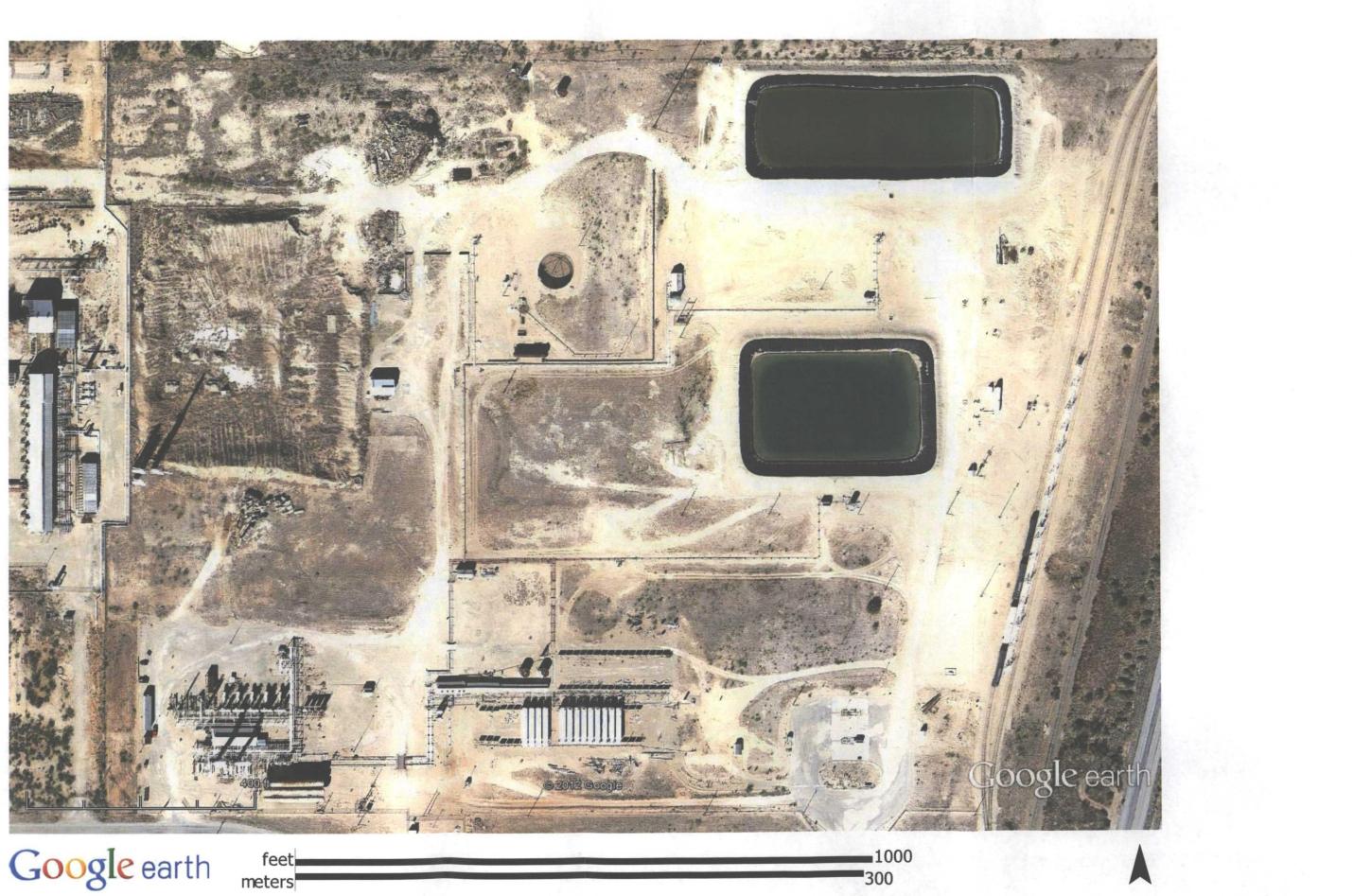
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Propane, Butane and Gasoline is piped from the fractionation and treating plant into above ground horizontal storage vessels. From these vessels the three products can be pumped into products pipelines, trucks or rail cars. Butane and Propane can also be pumped into underground storage wells. When Butane or Propane is pumped into the underground storage wells it displaces brine which is forced to the surface and stored in two lined brine storage ponds. When it is necessary to bring Butane or Propane out of underground storage, brine is pumped into the appropriate well, which forces the product out of the well, and back into the above ground horizontal storage tanks.

Attached is a piping diagram of the storage facilities and drawings showing details and specifications of both brine storage ponds.







## Appendix C Field Methods

## Appendix C Field Methods

The purpose of the soil sampling is to determine and evaluate the presence and nature of any releases of contaminants that may have occurred from the below-grade tanks as part of the closure process.

#### C.1 Soil Sampling Activities

Since the tanks will have been removed prior to the sampling event, a five-point composite sample will be collected from beneath where the each tank had been installed. Equal portions of soil collected from five individual locations within the tank bed will be placed in a single appropriate pre-cleaned, laboratory-prepared sample container, including samples for VOC analysis. Any remaining portions of the collected sample will be used for logging and field screening as discussed in Section C.2. Sample handling and chain-of-custody procedures will be in accordance with the procedures presented below in Section C.3.

If discrete sampling is necessary, the collected soil sample will be placed in pre-cleaned, laboratory-prepared sample containers for laboratory chemical analysis.

Known site features and/or site survey grid markers will be used as references to locate each surface soil sampling locations. The sample locations will be measured to the nearest foot, and locations will be recorded on a scaled site map upon completion of each sampling event.

#### C.2 Soil Sample Field Screening and Logging

Soil samples will be screened in the field for evidence of contamination. Field screening results will be recorded on the field sampling logs. The primary screening methods include visual screening and headspace vapor screening for volatile organic compounds.

Visual screening includes examination of soil samples for evidence of staining caused by petroleum-related compounds or other substances that may cause staining of natural soils. Headspace vapor screening targets volatile organic compounds and involves placing a soil sample in a plastic sample bag or a foil sealed container allowing space for ambient air. The container will be sealed and then shaken gently to expose the soil to the air trapped in the container. The sealed container will be allowed to rest for a minimum of 5 minutes while vapors equilibrate. Vapors present within the sample bag's headspace will then be measured by inserting the probe of the instrument in a small opening in the bag or through the foil. The maximum value and the ambient air temperature will be recorded for each sample.

A photo-ionization detector (PID) equipped with a 10.6 or higher electron volt (eV) lamp or a combustible gas indicator will be used for VOC field screening. Field screening results may be site-specific and the results may vary with instrument type, the media screened, weather conditions, moisture content, soil type, and type of contaminant.

The physical characteristics of the samples (such as mineralogy, ASTM soil classification, moisture content, texture, color, presence of stains or odors, and/or field screening results), depth where each sample was obtained, method of sample collection, and other observations will be recorded in the field log by a qualified geologist or engineer.

#### C.3 Sample Handling

At a minimum, the following procedures will be used at all times when collecting samples during investigation, corrective action, and monitoring activities:

- 1. Nitrile, neoprene, or other protective gloves will be worn when collecting samples. New disposable gloves will be used to collect each sample;
- 2. All samples collected of each medium for chemical analysis will be transferred into clean sample containers supplied by the project analytical laboratory. Sample container volumes and preservation methods will be in accordance with the most recent standard EPA and industry accepted practices for use by accredited analytical laboratories. Sufficient sample volume will be obtained for the laboratory to complete the method-specific QC analyses on a laboratory-batch basis; and
- 3. Sample labels and documentation will be completed for each sample following procedures discussed below. Immediately after the samples are collected, they will be stored in a cooler with ice or other appropriate storage method until they are delivered to the analytical laboratory. Standard chain-of-custody procedures, as described below, will be followed for all samples collected. All samples will be submitted to the laboratory to allow the laboratory to conduct the analyses within the method holding times.

Chain-of-custody and shipment procedures will include the following:

- 1. Chain-of-custody forms will be completed at the end of each sampling day, prior to the transfer of samples off site.
- 2. Individual sample containers will be packed to prevent breakage and transported in a sealed cooler with ice or other suitable coolant or other EPA or industry-wide accepted method. The drainage hole at the bottom of the cooler will be sealed and secured to prevent leakage.
- 3. Each cooler or other container will be delivered directly to the analytical laboratory.
- 4. Glass bottles will be separated in the shipping container by cushioning material to prevent breakage.
- 5. Plastic containers will be protected from possible puncture during shipping using cushioning material.
- 6. The chain-of-custody form and sample request form will be shipped inside the sealed storage container to be delivered to the laboratory.
- 7. Chain-of-custody seals will be used to seal the sample-shipping container in conformance with EPA protocol.
- 8. Signed and dated chain-of-custody seals will be applied to each cooler prior to transport of samples from the site.
- 9. Upon receipt of the samples at the laboratory, the custody seals will be broken, the chain-of-custody form will be signed as received by the laboratory, and the conditions of the samples will be recorded on the form. The original chain-of-custody form will remain with the laboratory and copies will be returned to the relinquishing party.
- 10. Copies of all chain-of-custody forms generated as part of sampling activities will be maintained in Western's files.

#### **C.4 Decontamination Procedures**

The objective of the decontamination procedures is to minimize the potential for cross-contamination. Sampling or measurement equipment will be decontaminated in accordance with the following procedures or other methods before each sampling attempt or measurement:

1. Brush equipment with a wire or other suitable brush, if necessary or practicable, to remove large particulate matter;

- 2. Rinse with potable tap water;
- 3. Wash with non-phosphate detergent (examples include Fantastik<sup>™</sup>, Liqui-Nox®);
- 4. Rinse with potable tap water; and
- 5. Double rinse with de-ionized water.

All decontamination solutions will be collected and stored temporarily prior to proper disposal. Decontamination procedures and the cleaning agents used will be documented in the daily field log.

#### **C.5 Documentation of Field Activities**

Daily field activities, including observations and field procedures, will be recorded in a field log book. The original field forms will be maintained in Western's files. Copies of the completed forms will be maintained in a bound and sequentially numbered field file for reference during field activities. Indelible ink will be used to record all field activities. Photographic documentation of field activities will be performed, as appropriate. The daily record of field activities will include the following:

- 1. Site or unit designation;
- 2. Date;
- 3. Time of arrival and departure;
- 4. Field investigation team members including subcontractors and visitors;
- 5. Weather conditions;
- 6. Daily activities and times conducted;
- 7. Observations;
- 8. Record of samples collected with sample designations and locations specified;
- 9. Photographic log, as appropriate;
- 10. Field monitoring data, including health and safety monitoring;
- 11. Equipment used;
- 12. List of additional data sheets and maps completed;
- 13. An inventory of the waste generated and the method of storage or disposal; and
- 14. Signature of personnel completing the field record.