MISC.

CORRESPONDENCE

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

May 28, 2003

Mr. William von Drehle, Director, Environmental
EOTT ENERGY LLC
P.O. Box 4666
Houston, Texas 77210-4666

RE: CASE #1R 0087 RED BYRD #2

Dear Mr. Von Drehle:

The New Mexico Oil Conservation Division (OCD) has reviewed the April 2003 "ANNUAL MONITORING REPORT, EOTT ENERGY, LLC, RED BYRD NO. 2, SE¼, NE¼ OF SECTION 1, TOWNSHIP 20, RANGE 36 EAST, LEA COUNTY NEW MEXICO" which was submitted to the OCD by EOTT Energy consultant Environmental Technology Group, Inc (ETGI.)

This document contains the results of ETGI's ground water monitoring activities of a single monitoring well on this site. Monitoring and passive recovery of oil from this well indicate that there is no ground water or oil in this well as of November 2002. Ground water sampled in 2001 indicated a total dissolved solids concentration of 15,900 mg/l.

The closure for this site **is approved on the condition that the monitor well be properly plugged and abandoned according to standard industry practices.**

Please be advised that OCD approval does not relieve EOTT of responsibility if remaining contaminants are found to pose a future threat to surface water, ground water, human health or the environment. In addition, OCD approval does not relieve EOTT of responsibility for compliance with any other federal, state, tribal or local laws and regulations. If you have any questions, please email me or call me at (505) 476-3493.

Sincerely,

Randolph Bayliss, P.E.
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

November 20, 2001

CERTIFIED MAIL
RETURN RECEIPT NO. 3929-3930

Mr. Wayne Brunette
EOTT Energy Pipeline Limited Partnership
5805 East Highway 80
P.O. Box 1660
Midland, Texas 79703

RE: RED BYRD #2
NMOCD File 1R 86
LEA COUNTY, NEW MEXICO

Dear Mr. Brunette:

The New Mexico Oil Conservation Division (NMOCD) has reviewed the November 2001 "ADDENDUM TO THE SUPPLEMENTAL WORK PLAN, EOTT – RED BYRD #2 CRUDE OIL RELEASE SITE, LEA COUNTY, NEW MEXICO" which was submitted on behalf of EOTT by your consultant ETGI, their Project No. EOT2051C. This document describes details of the proposed free product recovery system. On November 19, 2001, Ken Dutton of ETGI reported that four monitoring wells surrounding the release site were drilled to confining soil layers without encountering ground water. Mr. Dutton also said ETGI found that the only water at the site was perched below the release site and the recharge time for the monitoring wells was about 24 hours.

The above referenced work plan addendum is **approved with the following conditions.**

1. On August 4, 2000 NMOCD approved a work plan supplement submitted on behalf of EOTT by ENTRIX dated July 2000. That approval contained several conditions, one of which has not been met. NMOCD required that a comprehensive report be submitted to NMOCD on September 29, 2000. Details of the report were to have included the following.

   a. A description of all investigation, remediation and monitoring activities which occurred including conclusions and recommendations.

   b. A geologic/lithologic log and well completion diagram for each monitor well and soil boring.

   c. A site map showing the locations of the spill area, excavated areas, soil borings and soil samples.

   d. A water table potentiometric map showing the location of the spills, excavated areas, monitor wells, and the direction and magnitude of the hydraulic gradient.

e. A free product thickness map.

f. Summary tables of all ground water quality sampling results and copies of all recent laboratory analytical data sheets and associated QA/QC data.

h. The disposition of all wastes generated.

NMOCD requires that this comprehensive report be submitted by March 1, 2002 along with results of free product recovery system operations and of testing to show whether ground water in the project area will yield sufficient quantities to be protected for use as domestic, industrial and agricultural water supply. NMOCD also requires an as-built drawing of the free product recovery system, showing its location, depth, and construction details.

2. The other conditions in our August 4, 2000 letter still apply.

3. All wastes generated shall be disposed of at an OCD-approved facility.

The work plan also stated that EOTT was awaiting written approval of the July 17, 2000 General Work Plan. For your information, NMOCD approved EOTT's general remediation work plan on August 1, 2000.

Please be advised that NMOCD approval does not relieve EOTT of liability should the investigation actions fail to adequately define the extent of contamination related to EOTT's pipeline, or if contamination exists which is outside the scope of the work plan. In addition, NMOCD approval does not relieve EOTT of responsibility for compliance with any other federal, state or local laws and regulations.

If you have any questions, please contact me at (505) 476-3493 or rbayliss@state.nm.us.

Sincerely,

Randolph Bayliss, P.E.
Hydrologist
Environmental Bureau

xc: Chris Williams, NMOCD Hobbs District Office cwilliams@state.nm.us
Ken Dutton, ETGI kdutton@etgi.cc

November 5, 2001

Oil Conservation Division, District 1
Mr. William C. Olson, Hydrologist
Mr. Randy Bayliss, Hydrologist
Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Title: Addendum to the Supplemental Work Plan Proposal
Project: Product Recovery System Design and Installation
Location: Red Byrd #2 Release Site
Lea County, New Mexico

Project #: EOT2051C

Environmental Technology Group, Inc. (ETGI) is pleased to provide the New Mexico Oil Conservation District (NMOCD) with this Addendum to the Supplemental Work Plan Proposal concerning design, installation, construction and operation of the proposed free product recovery system at the Red Byrd #2 Release Site.

As per our discussion on Friday, November 2, 2001, a pilot test will be conducted to determine if the source of the groundwater found in the excavation will yield sufficient quantities to be considered of beneficial use. ETGI has prepared the attached scope of work associated with the design, installation, construction and operation of the above referenced free product recovery system for your review and approval. Results of the pilot test will be included with the report documenting installation of the above referenced recovery system. The attachments provide detailed descriptions of the additional work proposed at this site. If you should have any questions or require any additional information, please contact me at (505) 397-4882 or (505) 910-9883.

Sincerely,

For

Ken Dutton
New Mexico Regional Manager
Environmental Technology Group, Inc.

xc: Mr. Chris Williams, OCD Hobbs District Office

Attachment

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

November 20, 2001

CERTIFIED MAIL
RETURN RECEIPT NO. 3929-3930

Mr. Wayne Brunette
EOTT Energy Pipeline Limited Partnership
5805 East Highway 80
P.O. Box 1660
Midland, Texas 79703

RE: RED BYRD #2
NMOCD File 1R 86
LEA COUNTY, NEW MEXICO

Dear Mr. Brunette:

The New Mexico Oil Conservation Division (NMOCD) has reviewed the November 2001 "ADDENDUM TO THE SUPPLEMENTAL WORK PLAN, EOTT – RED BYRD #2 CRUDE OIL RELEASE SITE, LEA COUNTY, NEW MEXICO" which was submitted on behalf of EOTT by your consultant ETGI, their Project No. EOT2051C. This document describes details of the proposed free product recovery system. On November 19, 2001, Ken Dutton of ETGI reported that four monitoring wells surrounding the release site were drilled to confining soil layers without encountering ground water. Mr. Dutton also said ETGI found that the only water at the site was perched below the release site and the recharge time for the monitoring wells was about 24 hours.

The above referenced work plan addendum is **approved with the following conditions.**

1. On August 4, 2000 NMOCD approved a work plan supplement submitted on behalf of EOTT by ENTRIX dated July 2000. That approval contained several conditions, one of which has not been met. NMOCD required that a comprehensive report be submitted to NMOCD on September 29, 2000. Details of the report were to have included the following.

   a. A description of all investigation, remediation and monitoring activities which occurred including conclusions and recommendations.

   b. A geologic/lithologic log and well completion diagram for each monitor well and soil boring.

   c. A site map showing the locations of the spill area, excavated areas, soil borings and soil samples.

   d. A water table potentiometric map showing the location of the spills, excavated areas, monitor wells, and the direction and magnitude of the hydraulic gradient.

e. A free product thickness map.

f. Summary tables of all ground water quality sampling results and copies of all recent laboratory analytical data sheets and associated QA/QC data.

h. The disposition of all wastes generated.

NMOCD requires that this comprehensive report be submitted by March 1, 2002 along with results of free product recovery system operations and of testing to show whether ground water in the project area will yield sufficient quantities to be protected for use as domestic, industrial and agricultural water supply. NMOCD also requires an as-built drawing of the free product recovery system, showing its location, depth, and construction details.

2. The other conditions in our August 4, 2000 letter still apply.

3. All wastes generated shall be disposed of at an OCD-approved facility.

The work plan also stated that EOTT was awaiting written approval of the July 17, 2000 General Work Plan. For your information, NMOCD approved EOTT's general remediation work plan on August 1, 2000.

Please be advised that NMOCD approval does not relieve EOTT of liability should the investigation actions fail to adequately define the extent of contamination related to EOTT's pipeline, or if contamination exists which is outside the scope of the work plan. In addition, NMOCD approval does not relieve EOTT of responsibility for compliance with any other federal, state or local laws and regulations.

If you have any questions, please contact me at (505) 476-3493 or rbayliss@state.nm.us.

Sincerely,

Randolph Bayliss

Randolph Bayliss, P.E.
Hydrologist
Environmental Bureau

xc: Chris Williams, NMOCD Hobbs District Office cwilliams@state.nm.us
Ken Dutton, ETGI kdutton@etgi.cc

November 5, 2001

RECEIVED

NOV 0 6 2001

Environmental Bureau
Oil Conservation Division

Oil Conservation Division, District 1
Mr. William C. Olson, Hydrologist
Mr. Randy Bayliss, Hydrologist
Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Title: Addendum to the Supplemental Work Plan Proposal
Project: Product Recovery System Design and Installation
Location: Red Byrd #2 Release Site
Lea County, New Mexico

Project #: EOT2051C

Environmental Technology Group, Inc. (ETGI) is pleased to provide the New Mexico Oil Conservation District (NMOCD) with this Addendum to the Supplemental Work Plan Proposal concerning design, installation, construction and operation of the proposed free product recovery system at the Red Byrd #2 Release Site.

As per our discussion on Friday, November 2, 2001, a pilot test will be conducted to determine if the source of the groundwater found in the excavation will yield sufficient quantities to be considered of beneficial use. ETGI has prepared the attached scope of work associated with the design, installation, construction and operation of the above referenced free product recovery system for your review and approval. Results of the pilot test will be included with the report documenting installation of the above referenced recovery system. The attachments provide detailed descriptions of the additional work proposed at this site. If you should have any questions or require any additional information, please contact me at (505) 397-4882 or (505) 910-9883.

Sincerely,

For

Ken Dutton
New Mexico Regional Manager
Environmental Technology Group, Inc.

xc: Mr. Chris Williams, OCD Hobbs District Office

Attachment

NEW MEXICO ENERGY, MINERALS and
NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

August 3, 2000

CERTIFIED MAIL
RETURN RECEIPT NO: 5051-3396

Mr. Glen Waldrop
EOTT Energy Pipeline Limited Partnership
P.O. Box 1660
Midland, Texas 79702

RE: SOIL AND GROUND WATER INVESTIGATION WORK PLAN
RED BYRD #2 SITE
LEA COUNTY, NEW MEXICO

Dear Mr. Waldrop:

The New Mexico Oil Conservation Division (OCD) has completed a review of EOTT Energy Pipeline Limited Partnership's (EOTT) July 31, 1999 "WORK PLAN SUPPLEMENT FOR RED BYRD SITE #2 , ENTRIX PROJECT NO. 466509" which was submitted on behalf of EOTT by their consultant ENTRIX, Inc. This document contains EOTT's plan investigating the extent of soil and ground water contamination resulting from a crude oil spill at EOTT's Red Byrd #2 Site located in Section 31, Township 19 South, Range 37 East, Lea County, New Mexico. The document also contains a soil remediation plan and a plan for interim recovery of free phase product from the ground water.

The above-referenced work plan **is approved** with the following conditions:

1. EOTT shall complete all permanent monitor wells as follows:

   a. At least 15 feet of well screen shall be placed across the water table interface with 5 feet of the well screen above the water table and 10 feet of the well screen below the water table.

   b. An appropriately sized gravel pack shall be set in the annulus around the well screen from the bottom of the hole to 2-3 feet above the top of the well screen.

   c. A 2-3 foot bentonite plug shall be placed above the gravel pack.

d. The remainder of the hole shall be grouted to the surface with a cement grout containing 3-5% bentonite.

e. A concrete pad and locking well cover shall be placed around the well at the surface.

f. The well shall be developed after construction using EPA approved procedures.

2. No less than 24 hours after the wells are developed, ground water from the monitor wells shall be purged, sampled and analyzed for concentrations of benzene, toluene, ethylbenzene, xylene, polycyclic aromatic hydrocarbons (PAH), total dissolved solids (TDS) and major cations and anions metals using EPA approved methods and quality assurance/quality control (QA/QC) procedures.

Note: The OCD does not require that ground water samples be analyzed for concentrations of TPH since there is not a state standard for TPH in ground water.

3. All wastes generated shall be disposed of at an OCD approved facility.

4. A soil sample shall be taken for every 100 yards of backfill to verify that the backfill meets the remediation criteria. The samples sample be obtained and analyzed for concentrations of BTEX and TPH using EPA approved methods and QA/QC.

5. EOTT shall submit the results of the investigation and remediation work to the OCD in a comprehensive report. The report shall be submitted to the OCD Santa Fe Office by September 29, 2000 with a copy provided to the OCD Hobbs District Office and shall include:

a. A description of all investigation, remediation and monitoring activities which have occurred including conclusions and recommendations.

b. A geologic/lithologic log and well completion diagram for each monitor well and soil boring.

c. A site map showing the locations of the spill area, excavated areas, soil borings and soil samples.

c. A water table potentiometric map showing the location of the spills, excavated areas, monitor wells and the direction and magnitude of the hydraulic gradient.

d. A free product thickness map.

e. Summary tables of all soil ground water quality sampling results and copies of all laboratory analytical data sheets and associated QA/QC data

f. The disposition of all wastes generated.

6. EOTT shall notify the OCD at least 24 hours in advance of all scheduled activities such that the OCD has the opportunity to witness the events and split samples.

Please be advised that OCD approval does not limit EOTT to the proposed work plan should their actions fail to adequately investigate or remediate contamination related to EOTT's activities, or if contamination exists which is outside the scope of the work plan. In addition, OCD approval does not relieve EOTT of responsibility for compliance with any other federal, state or local laws and regulations.

If you have any questions or comments, please contact me at (505) 827-7154 .

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
W.A. Shook, ENTRIX, Inc.

ENTRIX, Inc.
5252 Westchester, Suite 250
Houston TX 77005
(713) 666-6223
(713) 666-5227 FAX

Since 1984 - Environmental Excellence

AUG - 1

July 31, 2000

Mr. William Olson
Environmental Bureau
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, New mexico 87505

VIA FEDERAL EXPRESS

Re: Work Plan Supplement for Red Byrd Site #2
ENTRIX Project No. 466509

Dear Mr. Olson:

Please find enclosed one copy of the above referenced plan as you requested in your telephone conversation with Kiran Srinivasan of our office on July 28, 2000. We have also included a figure of the site.

You may contact me at 713-662-1959 or Kiran Srinivasan at 713-662-1920 if you have any questions or need additional information.

Sincerely,

W. A. Shook, P.E.
Environmental Engineer

enclosure

cc: Glenn Waldrop - EOTT
Wayne Brunette - EOTT
Rich Myers - ENTRIX
Kiran Srinivasan - ENTRIX

E N T R I X

WORK PLAN SUPPLEMENT FOR EOTT - RED BYRD #2 CRUDE OIL RELEASE SITE LEA COUNTY, NEW MEXICO

RECEIVED

AUG 0 1 2000

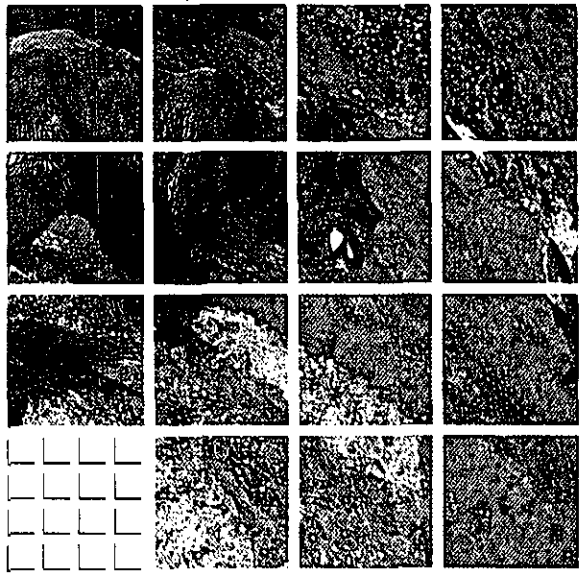
ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Prepared for:

EOTT ENERGY PIPELINE LIMITED PARTNERSHIP
Midland, Texas

Prepared by:

ENTRIX, Inc.
Houston, TX



Project No. 466509

July 2000

WORK PLAN SUPPLEMENT
EOTT - RED BYRD #2
CRUDE OIL RELEASE SITE
LEA COUNTY, NEW MEXICO

Prepared for:

EOTT ENERGY PIPELINE LIMITED PARTNERSHIP
Midland, Texas

Prepared by:

ENTRIX, Inc.
5252 Westchester, Suite 250
Houston, Texas 77005

Project No. 466509

July 2000

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ENTRIX

WORK PLAN SUPPLEMENT
EOTT Crude Oil Pipeline Release Site

Red Byrd Ranch (Red Byrd #2 Site)
Lea County, New Mexico

July 31, 2000

Prepared By:
ENTRIX, Inc.

1.0 Introduction

EOTT Energy Pipeline Limited Partnership (EOTT) is submitting this Work Plan Supplement pertaining to activities to be performed at the Red Byrd Ranch (Red Byrd #2 Site) in Lea County, New Mexico. These activities are necessary to define the extent of crude oil released at the site. These activities will be completed after work plan approval is granted by New Mexico Oil Conservation Division (NMOCD).

2.0 Background

Crude oil leaking from an EOTT pipeline was initially discovered on the Red Byrd Ranch in November 1999. The release site was designated Red Byrd #2 Site by EOTT, and is shown in Figure 1. The release resulted in a relatively small surface stain measuring approximately 20 feet in length by 5 feet in width. As required by the NMOCD's *Guidelines for Remediation of Leaks, Spills and Releases,* dated August 1993 (NMOCD, 1993), EOTT conducted initial response actions and site assessment activities as summarized below.

As NMOCD is aware, EOTT is addressing a number of crude oil release sites along its pipeline system in southeast New Mexico. In order to ensure protection of human health and the environment and compliance with NMOCD regulations, EOTT prepared a risk-based General Remediation Work Plan for Remediation of EOTT Pipeline Spills, Leaks and Releases in New Mexico, document dated July 2000. Such a plan was developed to ensure consistency of response and closure at all of the release sites. The details of the general remediation work plan were discussed with NMOCD officials in Santa Fe on July 18, 2000. Based on NMOCD's verbal approval of the plan concepts, copies of the plan document were submitted for NMOCD's official approval. EOTT is currently awaiting official NMOCD's written approval of the general remediation work plan.

Based on NMOCD's verbal approval, EOTT is submitting this site-specific Work Plan Supplement, as discussed in the general remediation work plan document, for conducting additional delineation and remediation-related activities at the site. The overall closure strategy for this release site will be consistent with that discussed in the July 2000 general remediation work plan currently under review by NMOCD. To reiterate the site closure strategy, upon completion of delineation activities, EOTT intends to seek regulatory closure by the following means:

- Delineate the nature and extent of contamination in soil and groundwater.

- Regardless of the fact that constituent action levels may be below approved site action levels, treat saturated/contaminated soils that were excavated at the release site (to a maximum root zone depth of 3 feet) by shredding and adding nutrients. Sample treated soils to ascertain that constituent concentrations are below approved site action levels. Backfill treated soils and re-seed the area with native grass.
- Evaluate groundwater quality/use by analyzing for total dissolved solids (TDS). If TDS is ≤ 10,000 mg/l, submit Stage 2 Abatement Plan to mitigate groundwater constituent levels to New Mexico Water Quality Control Commission (WQCC) standards. If TDS is > 10,000 mg/l, then such a plan is not warranted per NMOCD regulations.
- Address subsurface contamination by risk assessment methods.

Documentation supporting the aforementioned closure strategy will be submitted for NMOCD's approval at the appropriate time. Upon approval of this Work Plan Supplement by NMOCD, EOTT will commence delineation work at the site.

3.0 Initial Inspection/Investigation

Upon discovery of the release and completion of initial response actions which included repair of the leaking pipeline in early 2000, an attempt was made to excavate the area of the surface stain with a backhoe to determine the lateral and vertical extent of contamination. A trench, approximately 40 feet long, was extended along and below the area of the pipeline release. One additional trench, approximately 20 feet long, was placed perpendicular to the release. The depth of the excavation beneath the release point was approximately 10 feet. Following this work, it was determined that contamination extended beyond the depth of the excavations and that a subsurface investigation would be needed. The trenches were then backfilled with the excavated soil.

A Geoprobe ® unit was mobilized to the site in April 2000, to advance 14 soil borings in the area adjacent to and surrounding the release area to a maximum depth of approximately 22 feet, which was the point of refusal. Intervals of each boring were screened with a photoionization detector (PID) and samples were collected for laboratory analysis for benzene, toluene, ethylbenzene, and total xylenes (BTEX) as well as total petroleum hydrocarbons – gasoline range organics/diesel range organics (TPH-GRO/DRO) by EPA SW 846 Methods 8021B and 8015B respectively. Based on these activities, it was determined that visible contamination still existed at a depth of 22 feet in the area beneath the release point, although volatile organic concentrations appeared to be decreasing with depth based on PID readings. Volume of impacted soil was estimated to be 800 cubic yards.

Based on landowner requests, excavation of the area commenced in May 2000 to a depth of approximately 45 feet where visible contamination was still present. A decision was then made in June 2000 to extend deep borings around the excavated pit to determine if groundwater was impacted and if contamination extended beyond the perimeter. The outer dimensions of the excavation that is currently present at the site are approximately 70 feet by 40 feet.

A deep rotary drill rig was then mobilized by ETGI (EOTT's contractor) to place six borings adjacent to and around the leak on a perimeter beyond that of the original Geoprobe ® investigation. Soil samples were screened with a PID and samples were also analyzed for BTEX and TPH GRO/DRO by EPA SW 846 Methods 8021B and 8015B respectively. While an attempt was made to extend each boring to groundwater, the borings were stopped once "red bed" clay

was encountered, so as not to penetrate this natural barrier. This occurred at a depth of approximately 55 feet.

Details of field activities conducted at the site along with data tables, figures and other associated attachments will be submitted to NMOCD in a Subsurface Investigation Report, following completion of the additional delineation tasks discussed in this Work Plan Supplement.

4.0 Purpose

The purpose of the proposed investigation is to define the vertical and lateral extent of subsurface crude oil contamination that has been identified to depths of 45 feet below ground surface (bgs) at the site, based on previous activities. All data collected at the site will be used in conjunction with data gathered to-date to design the most appropriate closure strategy for the site. The extent of contamination will be defined with regard to concentrations of BTEX and TPH in the soils (and potentially groundwater) beneath the site. If encountered, groundwater samples will be collected and analyzed for BTEX, TPH (GRO/DRO) and TDS to determine if the water meets the NMOCD definition of "beneficial use" (i.e. less than or equal to 10,000 mg/l TDS). Based on the following facts: depth to water being approximately 50 feet, the nearest surface water body being greater than 1,000 feet away, and the distance of the nearest water well head being at least 1,000 feet away, according to the NMOCD ranking system (NMOCD, 1993), the site can be assigned a ranking in the range of 10-19. Therefore, target remediation action levels would most likely be 1,000 mg/kg for TPH, 50 mg/kg for total BTEX, and 10 mg/kg for benzene in soils. For groundwater, if the aquifer were deemed to be of beneficial use (based on a TDS concentration of 10,000 mg/l or less), then published WQCC standards would apply.

The site action levels will be used in conjunction with risk assessment/exposure assessment techniques to demonstrate to NMOCD that human health and the environment are adequately protected at the site. Regulatory closure will be sought based on such a demonstration.

5.0 Methodology

Due to the nature of the subsurface soils at this site, in order to define the vertical extent of crude oil contamination, it will be necessary to use a deep rotary drill rig capable of deeper depths, instead of a Geoprobe ®. This will allow penetration of subsurface areas containing rock, caliche, and other harder materials, in addition to allowing exploration to depths where groundwater may be sampled (if necessary).

A minimum of six borings (the actual number will be determined in the field based on site conditions) will be installed around the outer perimeter of the excavation area. The borings would be drilled to depths of at least 45 feet. This depth corresponds to the depth of the excavation that is present at the site. It is possible that the borings will need to be drilled deeper that 45 feet to adequately define the vertical extent of contamination (especially in the source area).

Soil samples will be collected from each of the borings for the purpose of defining the subsurface geology at the site, for field screening purposes aimed at assisting with delineation activities, and to be retained for chemical analysis. Soil samples will be screened at field-determined intervals with a PID to determine concentrations of total volatile organic compounds in the sample. This

screening tool, along with observations of visible contamination, will be used to assist with plume delineation and to help determine what samples should be selected for laboratory analysis. The exact number of samples to be analyzed from each boring will be determined in the field based on the aforementioned screening results. At least one boring in the area of the plume near the source will attempt to reach groundwater to the extent practical. If groundwater is encountered, PVC well casings will be installed in the boreholes and groundwater samples will be collected from permanent monitoring wells. In the event groundwater is not encountered within 55 feet below ground surface or when red bed clays are encountered, whichever is earlier, then drilling will be terminated and a soil sample from the base of the boring will be collected for laboratory analysis.

Appropriate decontamination procedures will be followed during all field exercises. Investigation derived wastes will be containerized onsite for subsequent treatment or off-site disposal. All field activities will be recorded in a project field logbook. All field activities will be conducted in accordance with a site-specific health and safety plan.

6.0 Analyses

As directed by NMOCD, 1993, all soil and groundwater samples will be sent to an independent laboratory for analyses. Per NMOCD, 1993, the samples will be analyzed for BTEX by EPA SW 846, Method 8021B and for TPH GRO & DRO by EPA SW 846, Method 8015B GC/FID. Selected samples will also be analyzed for polycyclic aromatic hydrocarbons (PAHs) by EPA SW 846, Method 8270C. If groundwater is encountered, at least one sample will also be analyzed for TDS by EPA SW 846 Method 160.1.

7.0 Discussion of Findings

To date, approximately 7,000 yards of soil have been excavated and stockpiled at the site.

Data collected thus far indicate that soil contamination exists at a depth of at least 45 feet and that a red bed confining layer of clay exists at a depth of approximately 55 feet. Groundwater, if actually encountered in previous borings, exists as perched water which may or may not be representative of the true uppermost aquifer.

Following receipt of analytical data from the proposed activities, a report documenting site activities and findings will be prepared for submission to NMOCD. The report will include data tables summarizing the analytical data gathered over the course of the investigation, figures (drawn to scale) illustrating the sample locations and presenting a general layout of the site, and relevant attachments. The report will also compare the site's analytical data to applicable action levels that should serve as guidance for site closure. If warranted, a schedule for submission of a Stage 2 Abatement Plan for groundwater (including a public participation proposal) will be included in the report.

8.0 Conclusions

Based on the aforementioned findings, there is a need to further delineate the extent of contamination at the site and undertake actions to support regulatory closure. This Work Plan Supplement is intended to fulfill the aforementioned data need.

Upon implementation of the activities proposed in this Work Plan Supplement, a report will be prepared for submittal to NMOCD. That report will also include a conclusions section that will discuss the results of the site activities and compare actual findings to site action levels. Based on these comparisons, recommendations for further site investigation, site remediation/abatement, or site closure will be made.

9.0 Follow-up Activities

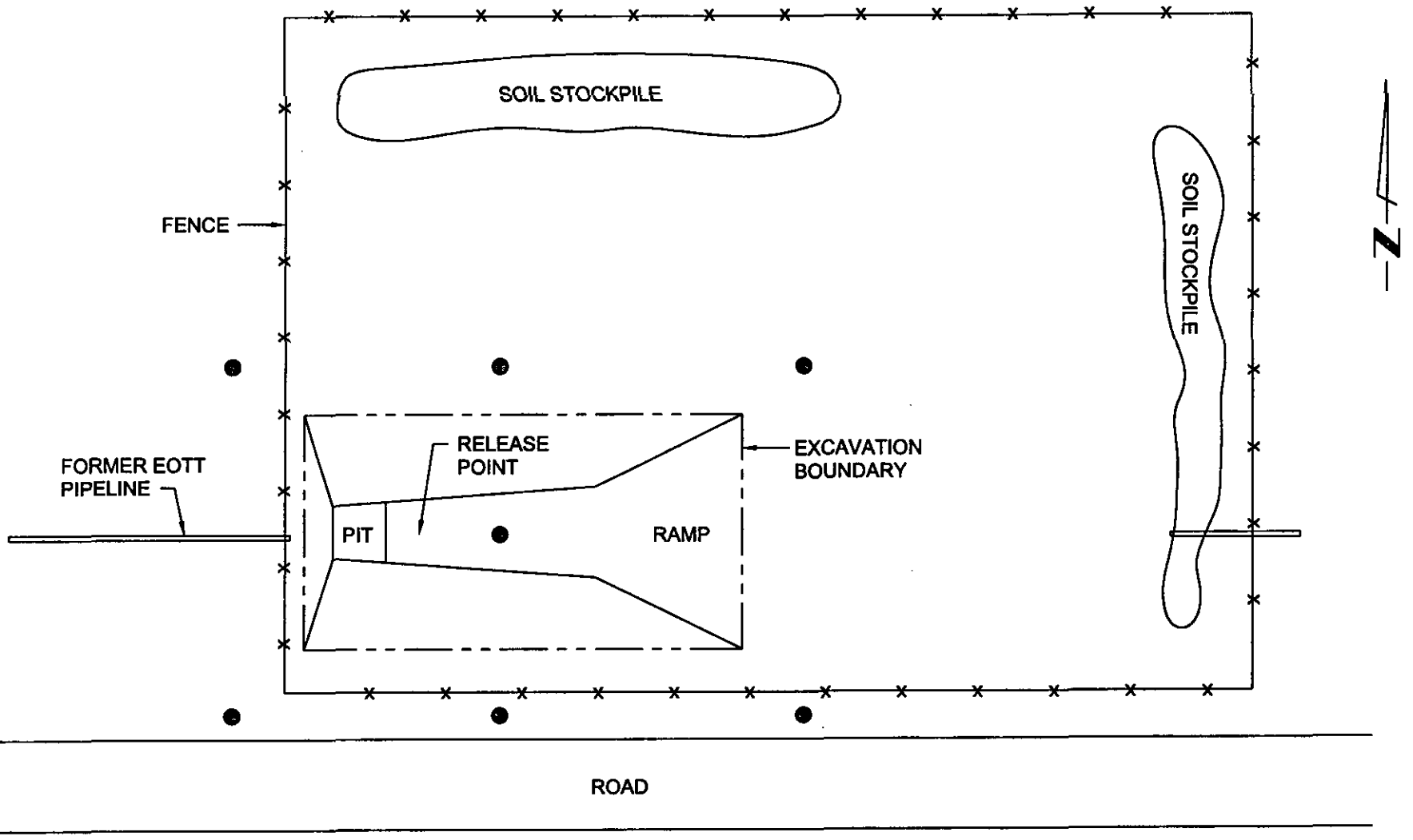
Based on the current knowledge of the site, the following activities are being proposed to assist in obtaining regulatory closure for the site:

1) Excavate additional visibly contaminated soils from within the source area on the lower northwest and southwest corners of the western wall of the current excavation. This is being proposed due to the recent observation of small amounts of phase-separated hydrocarbon (PSH) seepage into the area.
2) Excavate the stained/saturated soil from the bottom of the eastern wall. Sample the bottom and side walls of the excavation.
3) Install a minimum of six (6) deep soil borings for delineation purposes around the perimeter of the excavation/source area. As part of this exercise, at least one of the borings would be placed along what is now the ramp leading into the excavation (east of the stained area on the east wall). This location will require that the current excavation be backfilled to allow the rig to setup on the boring location (see step 5 below for activities related to backfilling. Backfilling will not be conducted until approved by NMOCD). At a minimum, two of the borings will also be placed to the northwest and southwest of the PSH seepage source along the western wall. The locations and actual number of the additional borings will be determined in the field, based on previously collected data and visual observations. The borings will extend to minimum depths that would be at least as deep as the bottom of the excavation (approximately 45 bgs) and up to a maximum depth of the "red beds" that have been previously encountered at approximately 55 bgs at the site, or to groundwater, whichever occurs earlier. If groundwater is encountered, some of the borings will be developed into permanent monitoring wells. At this stage of the investigation, caution will be taken not to penetrate the red bed clays that may act as a confining unit.
4) It is anticipated, based on regional data, that perched groundwater will be encountered immediately above the red bed clay unit (at an approximate depth of 50-55 feet bgs). If groundwater is encountered within the prescribed depth, then collect samples not only for BTEX and TPH analysis, but for TDS analysis as well from permanent monitoring wells.
5) The soil stockpile will be sampled, the saturated/contaminated soils will be shredded and blended and adequate nutrients will be added (for root zone soils only). If site action levels are achieved, indicating that the stockpiled soils and pit bottom and side walls have been remediated to acceptable concentrations, the excavated area will be backfilled. The root zone will be re-seeded to enable growth of native grasses. Backfilling will be done only upon receipt of NMOCD's approval of this Work Plan Supplement.

6) If PSH extent is delineated by the aforementioned actions, then install a recovery system (to be proposed in subsurface investigation report) to remove PSH. If PSH extent is not delineated by the aforementioned actions, then conduct additional step-out borings using techniques and parameters discussed in this document, until the extent of the PSH is ascertained.
7) If TDS concentration in perched groundwater (if encountered) is ≤ 10,000 mg/l, and BTEX and TPH constituents are detected in groundwater, then develop Stage 2 Abatement Plan for addressing groundwater contamination. If TDS is > 10,000 mg/l and BTEX and TPH constituents are detected in groundwater, then propose natural attenuation as part of closure strategy (assuming that PSH is being recovered from the site).
8) Once the above steps are completed, EOTT will use risk assessment methods to address the potential for any residual subsurface contamination to impact groundwater or adversely affect human health and the environment.

Documentation of the aforementioned actions will be submitted to NMOCD in the subsurface investigation report. Due to landowner demands, in the last week, EOTT has begun implementation of steps 1,2, 4 and 5 above. These actions were undertaken as they are only likely to mitigate the conditions at the site. Upon receipt of NMOCD's approval of this Work Plan Supplement, the remaining steps described above will be implemented.

07/31/00 11:09 tdunn T:\ACAD\466509\46650901.dwg



NOT TO SCALE

LEGEND:
● - PROPOSED BORINGS

ENTRIX

Figure 1
Red Byrd Site #2
Red Byrd Ranch
Lea County, New Mexico

PROJ. NO: 466509	CK:	DATE: 7/00

ENTRIX

ATLANTA
1850 Graves Road, Suite 328
Atlanta, GA 30093
(770) 825-0229
FAX (770) 825-0155

BOSTON
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Walpole, MA 02081
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FAX (508) 660-0441

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Dallas, TX 75251
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DETROIT
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Dearborn, MI 48126
(313) 271-7355
FAX (313) 271-7366

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(Corporate Headquarters)
5252 Westchester, Suite 250
Houston, TX 77005
(713) 666-6223
FAX (713) 666-5227

LOS ANGELES
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Ventura, CA 93003
(805) 644-5948
FAX (805) 658-0612

OKLAHOMA CITY
712 East Drive, Suite 100
Edmond, OK 73034
(405) 340-0222
FAX (405) 359-9944

SACRAMENTO
2601 Fair Oaks Boulevard, Suite 200
Sacramento, CA 95864
(916) 923-1097
FAX (916) 923-6251

SAN FRANCISCO
590 Ygnacio Valley Road, Suite 200
Walnut Creek, CA 94596
(925) 935-9920
FAX (925) 935-5368

SANTA BARBARA
5951 Encina Road, Suite 206
Goleta, CA 93117
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FAX (805) 681-7225

SEATTLE–TACOMA
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Olympia, WA 98502
(360) 866-2560
FAX (360) 866-2712

WASHINGTON D.C.
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Washington, DC 20004
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FAX (202) 220-3104

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CARACAS
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Conjunto Centro-Parque-Boyaca
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SANTA CRUZ DE LA SIERRA
Barrio Urbani
Calle Mocapini, No. 471
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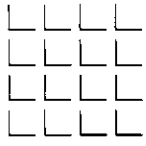

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☑ Telephone ☐ Personal	Time 1600	Date 7/28/00
Originating Party		**Other Parties**
Bill Olson - OCD		Kiran Srinivasan - Enrix (713) 662-1920

Subject

Red Byrd #2 - EOTT

Discussion

Reviewed 7/26/00 document
Concepts ok.
Need to expand on - excavation confirmation sampling
- temporary monitor well construction & sampling
- backfill cleanup levels
- purpose of temporary borings/wells
He said this is not final work plan

Conclusions or Agreements

Document submitted was just conceptual, wait for final work plan to approve

Distribution

Signed Bill Olson

Olson, William

From: Kiran Srinivasan [SMTP:ksrinivasan@entrix.com]
Sent: Wednesday, July 26, 2000 11:53 AM
To: Olson, William
Cc: rmyers@entrix.com
Subject: EOTT-Red Byrd #2 Site. Work Plan Synopsis

Bill: Per my voicemail to you today, I am attaching a copy of the work plan synopsis (in Word) for the referenced site. We prepared this synopsis to assist you in your timely review (considering the volume of paperwork that must cross your desk everyday). Please call Glenn Waldrop (EOTT) or myself with questions. We would appreciate your prompt response to this synopsis so that work can continue at the site. Following receipt of your approval, we will submit a full blown work plan for your records.

Thank you for your assistance.

Regards
Kiran Srinivasan
Senior Consultant
ENTRIX, Inc.
5252 Westchester, Suite 250
Houston, Texas 77005
713-662-1920
713-256-0429 (Cell)
713-666-5227 (FAX)

ksrinivasan@entrix.com


Information about this message.


rb2synop.doc

WORK PLAN SYNOPSIS
EOTT Crude Oil Pipeline Release Site

Red Byrd Ranch (Red Byrd #2 Site)
Lea County, New Mexico

July 26, 2000

Prepared By:
ENTRIX, Inc.

Crude oil leaking from an EOTT pipeline was initially discovered on the Red Byrd Ranch in November 1999. The release site was designated Red Byrd #2 Site by EOTT. The release resulted in a relatively small surface stain measuring approximately 20 feet in length by 5 feet in width. As required by the NMOCD's *Guidelines for Remediation of Leaks, Spills and Releases,* dated August 1993 (NMOCD, 1993), EOTT conducted initial response actions and other assessment activities as discussed below.

- Upon discovery of the release and completion of initial response actions (consisting of clamping of the line to prevent further leakage, and replacing the leaking section of pipeline with a new section) in early 2000, an attempt was made to excavate the area of the surface stain with a backhoe to determine the lateral and vertical extent of contamination. A trench, approximately 40 feet long, was extended along and below the area of the pipeline release. One additional trench, approximately 20 feet long, was placed perpendicular to the release. The depth of the excavation beneath the release point was approximately 10 feet. Following this work, it was determined that contamination extended beyond the depth of the excavations and that a subsurface investigation would be needed. The trenches were then backfilled with the excavated soil.

- A Geoprobe ® unit was mobilized to the site in April 2000, to advance 14 soil borings in the area adjacent to and surrounding the release area to a maximum depth of approximately 22 feet, which was the ultimate point of refusal. Intervals of each boring were screened with a photoionization detector (PID) and samples were collected for laboratory analysis for benzene, toluene, ethylbenzene, and total xylenes (BTEX) as well as total petroleum hydrocarbons – gasoline range organics/diesel range organics (TPH-GRO/DRO) by EPA SW 846 Methods 8021B and 8015B respectively. Based on these activities, it was determined that visible contamination still existed at a depth of 22 feet in the area beneath the release point, although volatile organic concentrations appeared to be decreasing with depth based on PID readings. Volume of impacted soil was estimated to be 800 cubic yards.

- Based on landowner requests, excavation of the area commenced in May 2000 to a depth of approximately 45 feet where visible contamination and phase-separated hydrocarbons (PSH) were still present. A decision was then made in June 2000 to extend deep borings around the excavated pit to determine if groundwater was impacted and if contamination extended beyond the perimeter. The outer dimensions of the excavation that is currently present at the site are approximately 70 feet by 40 feet.

- A deep rotary drill rig was then mobilized by ETGI (EOTT's contractor) to place six borings adjacent to and around the leak on a perimeter beyond that of the original Geoprobe ®

investigation. Soil samples were screened with a PID and samples were also analyzed for BTEX and TPH GRO/DRO by EPA SW 846 Methods 8021B and 8015B respectively. While an attempt was made to extend each boring to groundwater, the borings were stopped once "red bed" clay was encountered, so as not to penetrate this natural barrier. This occurred at a depth of approximately 55 feet. Contamination was not detected in these perimeter borings.

- To date, approximately 7,000 yards of soil have been excavated and stockpiled at the site. Data collected thus far indicate that soil contamination exists at a depth of at least 45 feet in the footprint of the excavation, and that a red bed confining layer of clay exists at a depth of approximately 55 feet. Groundwater, if actually encountered in previous borings and in the excavation, exists as perched water which may or may not be representative of the true uppermost aquifer (pockets of perched water were encountered in some of the borings and in the excavation itself; however, a determination of whether or not a defined aquifer exists at this depth is unknown).

Based on current knowledge of the site, the activities discussed below are being proposed to assist in further delineating contamination and obtaining regulatory closure for the site. Documentation and the results of these actions will be submitted to NMOCD in a subsurface investigation report. Due to landowner demands, in the last week, EOTT has begun implementation of steps 1,2, 4 and 5 below. These actions were initiated, as they will only mitigate the conditions at the site. The completed actions and associated results are indicated in italics below. Upon receipt of NMOCD's approval of this Work Plan Synopsis, the remaining steps described below will be implemented.

1) Remove additional visibly contaminated soils from within the source area on the lower northwest and southwest corners of the western wall of the current excavation. This is being proposed due to the recent observation of small amounts of phase-separated hydrocarbon (PSH) seepage into the area. *This action was completed last week and the seepage from the residual soil was observed to be minimal. This is likely an artifact of isolated pockets of PSH leaching out of the remaining soils in the wall of the excavation. The excavated soils are currently stockpiled onsite and will be treated along with previously excavated soils as outlined in Step 5 below.*

2) Investigate the stained/saturated soil from the bottom of the eastern wall by trenching. *This action was completed last week and a trench measuring 5 feet in length was dug perpendicular to the stained soil along the east wall. This action intercepted PSH that was trapped in soils to the east of the excavation. The PSH flowed into the excavation and is being pumped out once daily.*

3) Install a minimum of 6 additional deep soil borings for delineation purposes around the perimeter of the excavation/source area. As part of this exercise, at least one of the borings would be placed along what is now the ramp leading into the excavation (east of the stained area on the east wall). This location will require that the current excavation be backfilled to allow the rig to setup on the boring location (see step 5 below for activities related to backfilling. Backfilling will not be conducted until approval of this work plan by NMOCD). At a minimum, two of the borings will also be placed to the northwest and southwest of the PSH seepage source along the western wall. The locations and actual number of the additional borings will be determined in the field, based on previously collected data and

visual observations. The borings will extend to minimum depths that would be at least as deep as the bottom of the excavation (approximately 45 bgs) and up to a maximum depth of the "red beds" that have been previously encountered at approximately 55 bgs at the site, or to groundwater, whichever occurs earlier. At this stage of the investigation, caution will be taken not to penetrate the red bed clays that may act as a confining unit.

4) It is anticipated, based on regional data, that perched groundwater will be encountered immediately above the red bed clay unit (at an approximate depth of 50-55 feet bgs). If a defined groundwater aquifer is encountered within the prescribed depth, then collect samples not only for BTEX and TPH analysis, but for TDS analysis as well.

5) The soil stockpile will be sampled, the saturated/contaminated soils will be shredded and blended and adequate nutrients will be added (for root zone soils only). If site action levels are achieved, indicating that the stockpiled soils have been remediated to acceptable concentrations, the excavated area will be backfilled. The root zone will be re-seeded to enable growth of native grasses. Backfilling will be done only upon receipt of NMOCD's approval of this Work Plan Supplement. *Soil shredding and nutrient blending commenced this week. This action will continue until all stockpiled soils are addressed.*

6) If PSH extent is delineated by the aforementioned actions, then install a recovery system (to be proposed in subsurface investigation report) to remove PSH. If PSH extent is not delineated by the aforementioned actions, then conduct additional step-out borings using techniques and parameters discussed in this document, until the extent of the PSH is ascertained.

7) If TDS concentration in the defined aquifer (if encountered) is $\leq$ 10,000 mg/l, and BTEX and TPH constituents are detected in groundwater, then develop Stage 2 Abatement Plan for addressing groundwater contamination (if PSH cannot be recovered in a year or less). If TDS is > 10,000 mg/l and BTEX and TPH constituents are detected in groundwater, then propose natural attenuation as part of closure strategy (assuming that PSH is being recovered from the site).

8) Once the above steps are completed, EOTT will use risk assessment methods to address the potential for any residual subsurface contamination to impact groundwater or adversely affect human health and the environment.

EOTT requests NMOCD's speedy approval of this work plan synopsis to enable work to continue at the site. A comprehensive work plan detailing the activities proposed in this synopsis will be submitted to NMOCD upon receipt of NMOCD's approval of this synopsis. If there are questions regarding the site or the proposed actions, please contact Glenn Waldrop of EOTT at (915) 684-3453.

Olson, William

From: ALLSTATEENV@aol.com [SMTP:ALLSTATEENV@aol.com]
Sent: Tuesday, July 18, 2000 7:48 AM
To: Olson, William
Subject: EOTT, Red Byrd #2 Lea County, NM

Mr. Olson

This is a brief summary of our part in the Red Byrd #2 remediation project. ETGI did the bore hole sampling and ENTRIX did the evaluation. Please let me know if you require anything else.

Clay McDonald
Allstate Services

nmocd wolson.doc

(915) 682-3547

July 10, 2000

New Mexico Oil Conservation Commission
2040 S. Pacheco
Santa Fe, New Mexico 87505
Attn: Mr. Bill Olson

Re: EOTT Energy Pipeline
Red Byrd #2, Lea County New Mexico
Sec 31 T19S R37E

Mr. Olson

Wayne Brunette, EOTT Energy Pipeline, Midland, Texas asked that a brief summary of our work in progress at their Red Byrd #2 remediation site be forwarded to you for your records.

Contaminated soil was excavated from the surface to a depth of 8' bgl on the east end to 51' bgl on the west end. At an approximate depth of 45' – 48' free product was observed seeping in from the edges. An evaluation trench was dug approximately 6' wide x 12' long to a depth of 51'. An oil/water mixture was observed in this trench and the decision was made to have Environmental Technology Group Inc., Midland, Texas drill 6 offset bore holes for further evaluation. These 6 bore holes revealed no contamination and led to the conclusion that the plume of free product was localized to the one area.

The decision was made to use a 2' trash pump to extract the oil/water mixture for 5 – 10 working days for evaluation of the amount of free product and water flow. From 6/21/00 through 6/28/00 approximately 790 gallons of fluid was recovered. Approximately 80 – 100 gallons of this fluid were oil and the remainder water. The recovery time for 150 gallons of fluid was approximately 10 hours, which led to our conclusion of this water being more of an isolated "perch water" rather than a section of an underground water flow.

On 6/29/00 the decision was made to excavate the bottom hole west side to approximately 20' x 20' with a total depth of 51' to give us a better idea of the area and possible direction of any further contamination. Due to recent record rainfalls this excavation work has been delayed but will take place the week of 7/10/00.

If you have any questions or need any other information please feel free to contact me at (915) 682-3547 or email to allstateenv@aol.com.

Respectfully,
Clay McDonald
Allstate Services Environmental
(915) 682-3547
(915) 553-6072

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☑ Telephone ☐ Personal	Time 1101	Date 6/30/00
Originating Party		**Other Parties**
Wayne Brunette - EOTT (915) 556-0190		Bill Olson - OCD

Subject

Report of Ground Water Contamination

Discussion

Site - Red Byrd #2

During excavation of contaminated soils encountered ground water at approx. 48'
Product on ground water

Conclusions or Agreements

EOTT will file written notice

Distribution

file
OCD Hobbs Office

Signed Will Olson

State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
Santa Fe, New Mexico 87505

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☑ Telephone ☐ Personal	Time 0609	Date 6/15/00
Originating Party		**Other Parties**
Wayne Bruhott - EOTT		Bill Olson - Envir. Bureau (voice mail)

Subject

Red Byrd #2 Spill Site

Discussion

Location - Sec 31, T19S, R37E

Reporting discovery of product on ground water during excavation of contaminated soils from a crude oil pipeline spill at Red Byrd #2

Conclusions or Agreements

Will file subsequent written notification

Distribution

File
OCD Hobbs District Office

Signed Bill Olson

EOTT ENERGY Pipeline Limited Partnership

P.O. BOX 1660
5805 E. BUSINESS 20
MIDLAND, TEXAS 79702
(915) 682-3761

June 13, 2000

Mr. William C. Olson
Environmental Bureau
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM. 87505

Re: Additional Investigation of the Red Byrd Ranch Release Site No. 2

Dear Mr. Olson:

EOTT Energy Pipeline (EOTT) recently submitted to NMOCD a Soil Remediation Work Plan for the Red Byrd No. 2 Release Site. This plan was developed using the New Mexico Oil Conservation Division (OCD) Guidelines for the Remediation of Leaks, Spills, and Releases, dated August 1993 (NMOCD, 1993). Soon after implementing the work plan on May 22, 2000, which provided for excavation, soil treatment, sampling, and backfilling, it was discovered that contamination extends to a depth of at least 40 feet below grade. At this depth, product was encountered in soils. Due to the fact that the contamination is apparently deeper than originally believed based on surface staining, EOTT proposes to perform additional investigation at the site to further define the horizontal and vertical extent of contaminant migration and identify any other contaminant sources not related to EOTT that may be the source of the free product. This approach is discussed below.

A rotary drill rig with deep-drilling capabilities will be used to extend borings at five locations around the excavation. In addition, a sixth boring will be extended as close as possible to the original source of the contamination. Each boring will be extended until groundwater is encountered and soil samples will be screened with a PID at five-foot intervals with each observation recorded. Samples will be taken from surface soil (0-5 foot depth interval); the interval with the highest PID reading; the most visibly contaminated interval (if PID readings don't coincide with visual observations); and the groundwater. All samples will be analyzed for TPH-GRO and DRO using SW 846 Method 8015, and BTEX using SW 846 Method 8021C.

One groundwater sample will also be analyzed for TDS, to determine the use of the aquifer per NMOCD, 1993. In addition, a free product sample, if free product is encountered, will be collected for fingerprinting purposes to assess if any non-EOTT related sources are the cause of the free product occurrence at depth.

Upon conclusion of this additional investigation and site remediation, a Stage 1 Abatement Plan – subsurface investigation report will be submitted to the NMOCD for future action or site closure approval. If you have any questions or need any additional information, please contact me at 915 684 3453. EOTT appreciates your assistance in resolving this issue.

Sincerely,

Glenn Waldrop
Director of Operations

EOTT ENERGY Pipeline Limited Partnership

P.O. BOX 1660
5805 E. BUSINESS 20
MIDLAND, TEXAS 79702
(915) 682-3761

May 23, 2000

Mr. William C. Olson
Environmental Bureau
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM. 87505

Re: Soil Remediation Work Plan for the Red Byrd Ranch Release Site No. 2

Dear Mr. Olson:

EOTT Energy Pipeline (EOTT) is presenting a Soil Remediation Work Plan for the Red Byrd No. 2 Release Site. This plan was developed using the New Mexico Oil Conservation Division (OCD) Guidelines for the Remediation of Leaks, Spills, and Releases, dated August 1993 (OCD, 1993).

Background

The Red Byrd Ranch is located approximately four miles southwest of the town of Monument, New Mexico in the SE ¼ of the NE ¼ of Section 1, Township 20 South, Range 36 East. EOTT currently has a crude oil pipeline traversing the property. EOTT acquired this pipeline from Texas-New Mexico Pipeline Company in May 1999.

In November 1999, a crude oil leak occurred on the Red Byrd Ranch (known as the Red Byrd No. 2 Release Site) and was reported to the OCD the same month.

A site investigation was performed at the referenced site in April 2000. This investigation consisted of 14 geoprobe borings advanced to determine the lateral and vertical extent of contamination and volume of hydrocarbon-impacted soil. The Subsurface Investigation Report which describes this investigation is currently being prepared by Environmental Technology Group, Inc. As required by OCD, 1993, soil samples from the investigation were analyzed for total petroleum hydrocarbons (TPH) gasoline range organics (GRO) and diesel range organics (DRO) and for benzene, toluene, ethylbenzene, and xylenes (BTEX). Analytical results and laboratory reports are provided in Appendix A.

As discussed below, per OCD, 1993, a site ranking was conducted and analytical results and site conditions were compared to the New Mexico OCD remediation

action levels. Soil from the site was ranked according to the OCD soil classification standards. Groundwater at the site averages 35 feet bgs which gives the soil a score of 20 as groundwater is within 50 feet of the ground surface. Data from the State Engineer's Office indicates that there is one ground water production well that may be located within 1,000 feet of the site. This also gives the site a score of 20. Based on site inspections, the distance to any natural or man-made surface water body is greater that 1,000 feet, therefore, a score of zero is assigned. The total soil ranking score for this site is 40. Below is the OCD recommended remediation action levels for sites with a ranking score of > 19.

OCD Remediation Action Levels for Soil

Benzene (ppm)	10
BTEX (ppm)	50
TPH (ppm)	100

Using the OCD, 1993 criteria, the most highly contaminated soils were observed around GP1B. The soil from boring GP1B from 20-22 feet below ground surface (bgs), had elevated concentrations for both GRO and DRO at levels of 12,103 mg/Kg and 20,622 mg/Kg respectively. Unsaturated contaminated soils were observed around GP13 which had a DRO detection of 72 mg/Kg, still less than the action level. All other soil samples were below the GRO/DRO reporting limits of 10 mg/Kg. Based on these OCD action levels, the soil from boring GP1B exceeds the level for TPH GRO and DRO. BTEX constituents for all 13 soil samples are below the OCD action levels with the exception of the soil sample from boring GP1B. The soil sample from boring GP1B had a total BTEX concentration of 198.2 mg/Kg. This detection exceeds the OCD action level for BTEX.

Groundwater from other investigations in the area of the site was tested for total dissolved solids (TDS) to determine if it is designated for beneficial use per the OCD regulations. TDS for the groundwater was between 17,000 to 25,000 mg/l, which is above the OCD cutoff of 10,000 mg/l. Therefore the site groundwater is not designated for beneficial use.

Work Plan Scope

Soil at the Red Byrd Ranch Site No. 2 exceeds the OCD action levels for TPH and BTEX in the vicinity of boring GP1B. EOTT proposes to actively remediate the site by excavating the contaminated area and removing impacted soil to a depth of approximately four feet. Additional excavation will be needed around boring GP1B to ensure all contamination is removed. Soil remaining in place following excavation of contaminated soil will be tested for BTEX and TPH to ensure that detectable

concentrations are at or below the OCD action levels for BTEX and TPH. Once the soil is excavated, it will be landfarmed in an alternate area of the site until appropriate levels have been attained. The soil will then be used to backfill the excavation.

Upon conclusion of the site remedial activities, a report will be submitted to the OCD for site closure approval. If you have any questions on the information presented in this letter report, please contact me at 915 684 3453. EOTT appreciates your assistance in resolving this issue

Sincerely,

Glenn Waldrop

Glenn Waldrop
District Manager, New Mexico Pipeline Operations