

1R - 239

**APPROVALS**

**YEAR(S):**

1994

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STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

May 31, 1994

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-111-334-120**

Mr. Kevin Forrest  
Shell Pipe Line Corporation  
Two Shell Plaza  
P.O. Box 2648  
Houston, Texas 77252-2648

**RE: SOIL REMEDIATION  
SHELL LANGLEY-JAL 6" PIPELINE  
LEA COUNTY, NEW MEXICO**

Dear Mr. Forrest:

The New Mexico Oil Conservation Division (OCD) has completed a review of Shell Pipe Line Corporation's (SPLC) May 17, 1994 "REMEDICATION PLAN FOR LANGLEY-JAL 6" PIPELINE RELEASE #LFS-10. This document contains SPLC's plan for remediation of contaminated soil related to a spill from SPLC's Langley-Jal 6" pipeline located in the NW/4, NE/4 of Section 15, T25S, R37E NMPM Lea County, New Mexico.

The above referenced remediation plan is approved with the following conditions:

1. Prior to backfilling the excavation, SPLC will obtain representative samples of unexcavated soils from the bottom of the excavation in order to determine the final remediation levels. The samples will be analyzed for purgeable aromatic hydrocarbons (ie. benzene, toluene, ethylbenzene and xylene) and total petroleum hydrocarbons (TPH) using appropriate EPA approved methods.

**NOTE:** Field headspace measurements of 100 parts per million of total organic vapor, if determined in accordance with OCD guidelines (enclosed), may be substituted for a laboratory analysis of the concentrations of purgeable aromatic hydrocarbons.

2. SPLC will notify the OCD at least 48 hours in advance of all scheduled remediation activities such that the OCD may have the opportunity to witness the events and/or split samples.

Mr. Kevin Forrest  
May 31, 1994  
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3. The final report will be submitted to the OCD by May 31, 1994 and will include a description and the results of all remediation activities during that year including the composition, volume and application rates of any materials used in bioremediation and the final remediation levels achieved in the excavated and landfarmed areas.

Please be advised that OCD approval does not relieve SPLC of liability should the remedial activities determine that contamination exists which is beyond the scope of the work plan or should the actions fail to adequately remediate contamination related to SPLC's activities. In addition, OCD approval does not relieve SPLC of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please call me at (505) 827-5885.

Sincerely,

Sincerely,  
Will C. Quinn

William C. Olson  
Hydrogeologist  
Environmental Bureau


Enclosure

xc: Jerry Sexton, OCD Hobbs District Supervisor  
Wayne Price, OCD Hobbs Office

**P 111 334 120**

**Receipt for Certified Mail**

**No Insurance Coverage Provided**  
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**PS Form 3800, June 1991**

**Shell Pipe Line Corporation**



OIL CONSERVATION DIVISION  
RECEIVED

Two Shell Plaza  
P. O. Box 2648  
Houston, Texas 77252-2648

'94 MAY 23 AM 8 50

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

May 17, 1994

Mr. Roger Anderson  
New Mexico Oil Conservation Division  
Environmental Bureau  
P. O. Box 2088  
Santa Fe, New Mexico 87504

**SUBJECT: REMEDIATION PLAN FOR LANGLEY-JAL 6" PIPELINE RELEASE  
#LFS-10**

Dear Mr. Anderson:

Per our conversation on Monday May 16, I am submitting a formal Remediation Plan for your approval. Also enclosed for your reference is a copy of the release notification form which was sent to the NMOCD back in January.

As I mentioned in our phone conversation, this Plan was originally submitted for approval to the District office in Hobbs. I would appreciate anything you can do to expedite this approval so remediation can begin at this location as soon as possible.

If you have any questions or require additional information, please contact me at 713/241-1964.

Sincerely,

A handwritten signature in cursive script that reads "Kevin J. Forrest".

Kevin Forrest

ENCLOSURE

# REMEDIATION PLAN

## CERTIFICATION OF SOIL STATUS

As a condition for acceptance of this remediation plan, it is noted that this waste is a non-exempt waste as defined by The Environmental Protection Agency's (EPA) July 1988 Regulatory Determination. A combination of process and historical knowledge along with the total 8020 analysis for benzene(attached)<sup>1</sup> has verified the nature of the soil as non-hazardous. In addition, no "hazardous or listed waste" pursuant to provisions of 40 CFR, Part 261, Subpart C and D, has been added or mixed to the soil so as to make the resultant mixture a "hazardous waste" pursuant to the provisions of 40 CFR, section 261.3(b).

## SITE DESCRIPTION

The crude oil spill contaminated a surface area approximately 0.2 acres. The vertical depth of the spill ranges from a few inches on the upper road and lower pasture to 18-20" on the lower road and upper pasture area near the release point. This depth was limited by a cliche layer which begins at a depth of 1.5'. The majority of the impacted soil is sand and loose soils.

## TREATMENT

The proposed treatment for the contaminated soils requiring remediation is bioremediation\landfarming. As shown in Figure 1, the contaminated soil from the road and the lower pasture area will be excavated and moved to the upper pasture area where it will be mixed and spread. The clean soil in the upper pasture area of the landfarm will be used to replace the contaminated soil removed from the road area. This will allow the landfarmed soils to remain in place once the bioremediation is complete.

The landfarm will be set up with contaminated soils no deeper than 8-10" so that a common farm disc will be able to turn and mix the soil. A mixing/discing frequency of about once every other month is planned for this site. In addition to the mixing, fertilizer will be added to the entire landfarm site(approx. 200 lb./acre of 13-0-0 or equivalent) to further enhance the biodegradation process. As noted on figure 1, a berm of 1 to 1.5 feet will enclose the landfarm site to prevent surface water runoff during the remediation period.

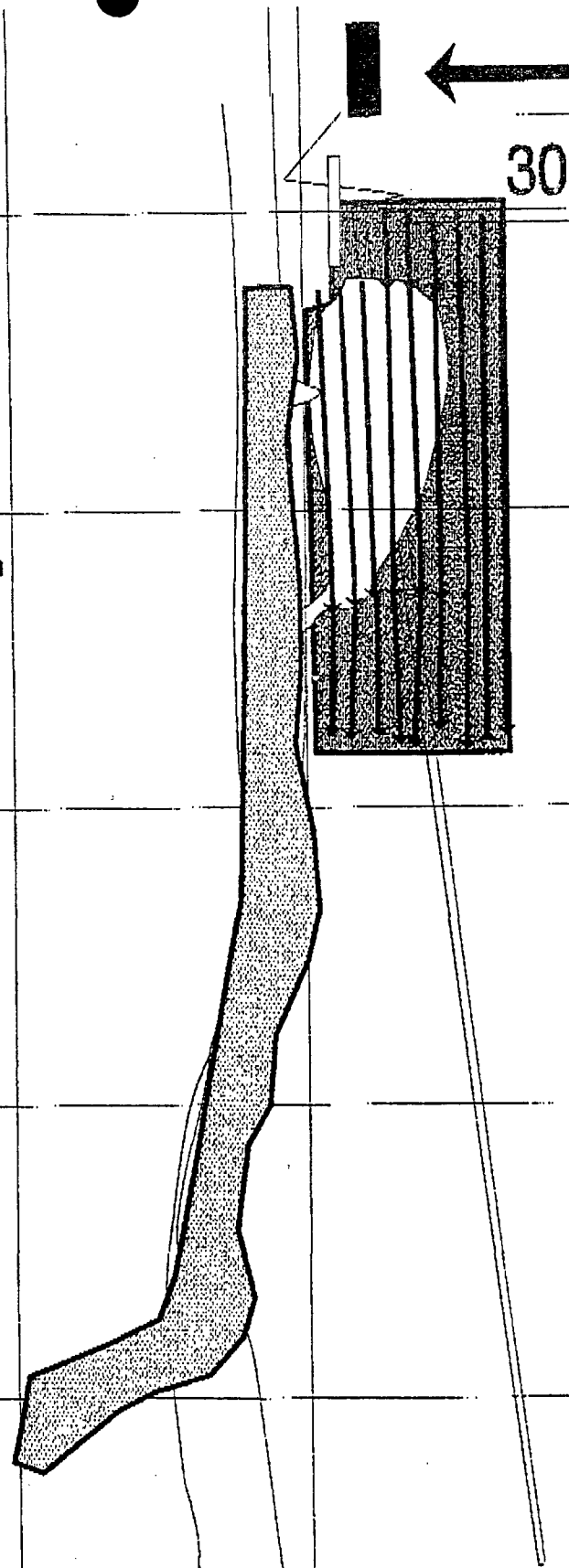
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<sup>1</sup> Note: The result for total benzene of 9200 ug/Kg shows that this soil when extracted during a TCLP(per 40 CFR Part 261, Appendix II) with 20 times its weight of extractant will not exceed the regulatory limit of 500 ug/L for Benzene.

#### CLEAN-UP GOAL

The clean-up goal of 5,000 ppm TPH is anticipated to be reached within one year of starting the landfarm. Samples will be collected and analyzed at that time to confirm closure. Once closure levels are obtained, the site will be contoured to meet the landowners requirements and a final report filed with the NMOCD.

Langlie Jal 6"



land farm area

AREA TO BE SCRAPED AND  
MOVED TO LAND FARM AREA

EXISTING STAIN TO BE  
INCLUDED IN LAND FARM AREA

LAND FARM AREA TO APPROX.  
45' X 200' AND ENCLOSED BY A  
1 TO 1-1/2 BT. BERM TO  
PREVENT RUNOFF.

caliche road

y:\hgdata\lang.ch3

Figure 1

Certificate of Analysis No. 9402916-01

Shell Pipeline Company  
200 North Loraine Street  
Midland, TX 79702  
ATTN: Hamp Kirby

P.O.#  
MESA-1312-HOE  
DATE: 03/01/94

PROJECT: Soil Analysis  
SITE: Jal, New Mexico  
SAMPLED BY: Shell Pipeline Company  
SAMPLE ID: LFS-10

PROJECT NO: COC #10678  
MATRIX: SOIL  
DATE SAMPLED: 02/24/94 14:30:00  
DATE RECEIVED: 02/26/94

ANALYTICAL DATA			
PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Benzene	9200	500	µg/Kg
METHOD 8020***			
Analyzed by: DAO			
Date: 02/28/94			

Notes: \*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA  
\*\*Ref: Standard Methods for Examination of Water & Wastewater, 17th ed.  
\*\*\*Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance  
with EPA guidelines for quality assurance.



## NEW MEXICO OIL CONSERVATION COMMISSION

## NOTIFICATION OF FIRE, BREAKS, SPILLS, LEAKS, AND BLOWOUTS

LFS-10

Nm-1

NAME OF OPERATOR Shell Pipe Line Corporation					ADDRESS P. O. Box 2648, Houston, TX 77252		
REPORT OF	FIRE	BREAK	SPILL	LEAK X	BLOWOUT	OTHER*	
TYPE OF FACILITY	DRLG WELL	PROD WELL	TANK BTTY	PIPE LINE X	GASO PLNT	OIL RFY	OTHER*
NAME OF FACILITY Langlie Station							
LOCATION OF FACILITY (QUARTER/QUARTER SECTION OR FOOTAGE DESCRIPTION) NW NE					SEC. 15	TWP. 25S	RGE. 37E
DISTANCE AND DIRECTION FROM NEAREST TOWN OR PROMINENT LANDMARK					Three miles east on 128, north 1/2 mile		
DATE AND HOUR OF OCCURENCE 1/17/94 9 a.m.				DATE AND HOUR OF DISCOVERY 1/17/94 9 a.m.			
WAS IMMEDIATE NOTICE GIVEN?	YES X	NO	NOT RE-QUIRED		IF YES, TO WHOM A. Zuniga (Home)		
BY WHOM Richard Koenig				DATE AND HOUR 1/17/94 4 p.m.			
TYPE OF FLUID LOST Crude Oil				QUANTITY OF LOSS 170 barrels		VOLUME RE-COVERED 150 barrels	
DID ANY FLUIDS REACH A WATERCOURSE?	YES	NO X	QUANTITY				
IF YES, DESCRIBE FULLY**							
DESCRIBE CAUSE OF PROBLEM AND REMEDIAL ACTION TAKEN** Internal corrosion Pipe was temporarily repaired with gaso clamp, patch and cone plug - pipe section will be replaced at a later date							
DESCRIBE AREA AFFECTED AND CLEANUP ACTION TAKEN** Pastureland Affected area is being soil farmed							
DESCRIPTION OF AREA	FARMING	GRAZING X	URBAN	OTHER*			
SURFACE CONDITIONS	SANDY X	SANDY LOAM	CLAY	ROCKY	WET	DRY X	SNOW
DESCRIBE GENERAL CONDITIONS PREVAILING (TEMPERATURE, PRECIPITATION, ETC.)** 45°F, calm							
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF							
SIGNED <i>J. M. Korpall</i> J. M. Korpall				TITLE Manager Regulatory Compliance		DATE: 1/27/94	

\*SPECIFY

with  
TAP

\*\*ATTACH ADDITIONAL SHEETS IF NECESSARY