

BIA CHANGE VICE

April 7, 2006

Mr. Larry Johnson New Mexico Oil Conservation Division – District 1 1625 North French Drive Hobbs, New Mexico 88240

Re:

Spill Investigation Workplan, BTA Oil Producers, French #3 SWD, Unit Letter H (SE/4, NE/4), Section 24, Township 18 South, Range 32 East, Lea County, New Mexico

Dear Mr. Johnson:

Please find enclosed a copy of the above-referenced workplan. The workplan is submitted on behalf of BTA Oil Producers, and presents the proposed soil investigation activities to be conducted by Larson and Associates, Inc.

Please call Royce Boyce at (432) 682-3753 or myself at (432) 687-0901 if you have questions.

Sincerely,

Larson and Associates, Inc.

Cindy K. Crain, P.G.

Project Manager

cc:

Royce Boyce – BTA

Pam Inskeep - BTA

Roger Anderson - NMOCD - Santa Fe



April 6, 2006

Mr. Larry Johnson New Mexico Oil Conservation Division – District I Energy, Minerals and Natural Resources Department 1625 N. French Drive Hobbs, New Mexico 88240



Re: Spill Investigation Workplan, BTA Oil Producers, French #3 SWD, Unit Letter H (SE/4, NE/4), Section 24, Township 18 South, Range 32 East, Lea County, New Mexico (Latitude: 32.73537 / Longitude: 103.71243)

Dear Mr. Johnson:

BTA Oil Producers (BTA) has retained Larson and Associates, Inc. (LA) to investigate the extent of impacts to soil from a salt water spill that occurred on July 12, 2005, at a tank battery in the southeast quarter (SE/4) of the northeast quarter (NE/4), Section 24, Township 18 South, Range 32 East, Lea County, New Mexico (Site). Figure 1 shows the location of the Site.

An initial investigation was conducted at the site on September 6 and 7, 2005, and details were provided to the New Mexico Oil Conservation Division (NMOCD) in a Spill Remediation Workplan, dated September 23, 2005.

Initial Investigation

On September 6 and 7, 2005, LA installed nine (9) soil borings (BH-1 through BH-9) at the site using direct-push technology (Terraprobe®) to assess the horizontal and vertical limits of the spill for defining the area of remediation. One (1) background soil boring (BH-10) was installed 100 feet north of the tank battery. Figure 2 shows the locations of the soil borings. Table 1 provides a summary of the laboratory analyses of soil samples.

As reported on September 23, 2005, soil samples collected from each boring (BH-1 through BH-10) reported TPH concentrations below the test method detection limit. Chloride concentrations in soil are shown to reduce with depth at borings BH-3, BH-4, BH-7, but increased (specifically at a depth of approximately 10-12' bgs) at borings BH-1, BH-2, BH-5, BH-6, BH-9 and background boring BH-10.

Proposed Investigation

In order to adequately delineate the horizontal and vertical limits of impacted soil, BTA proposes to install an additional ten (10) soil borings (BH-11 through BH-20) to a depth of approximately thirty feet below ground surface (bgs). Four (4) of the borings (BH-12, BH-13, BH-18 and BH-20) will be drilled at locations previously sampled by direct-push technology (BH-2, BH-5, BH-1 and BH-10 respectively). Soil borings will be installed using an air rotary drilling rig, and samples will be collected at five-foot intervals from the surface to a depth of approximately 30 feet bgs. Samples from borings BH-12, BH-13, BH-18 and BH-20 will only be collected from a depth of approximately 15 feet to 30 feet bgs. Initially, soil samples from the surface to a depth of 20 feet bgs will be submitted to an NMOCD approved laboratory for analysis of chloride. Representative samples may also be selected for synthetic precipitation

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leaching procedure (SPLP) analysis, to determine the leaching potential to groundwater. If needed to determine vertical delineation, samples from approximate depths of 25 and 30 feet bgs will be submitted for laboratory analysis. Figure 2 shows the locations of the proposed soil borings.

Notification will be given to the NMOCD at least 48 hours in advance of any activities. Results from the investigation will be reported to the NMOCD in a Remediation Workplan. If you have any questions or need additional information, please call either myself at (432) 687-0901 or Royce Boyce, with BTA, at (432) 682-3753. We may also be reached by email at Cindy@LAenvironmental.com or RBoyce@btaoil.com.

Sincerely,

Larson and Associates, Inc.

undy K. (rain

Cindy K. Crain, P.G.

Project Manager

cc:

Royce Boyce, BTA

Pam Inskeep, BTA

Roger Anderson, NMOCD - Santa Fe

TABLE

Table 1
Summary of Laboratory Analyses of Soil Samples
BTA Oil Producers, French #3 SWD
SE/4, NE/4, Section 24, Township 18 South, Range 32 East
Lea County, New Mexico

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Boring	Sample	Sample	PID	GRO	DRO	ТРН	rage 1 of 2
Number	Depth	Date		C6-C12	>C12-C35	C6-C35	Chloride
Number	(Feet)	Date	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH-1	0-2	09/06/05	2.4		(116/116)	(1116/116)	598
DII I	2-4	09/06/05	2.5	<10.0	<10.0	<20.0	172
	6-8	09/06/05	1.5				1,750
	10-12	09/06/05	1.4				9,110
BH-2	0-2	09/06/05	12.3				327
	2-4	09/06/05	34.7	<10.0	<10.0	<20.0	177
	6-8	09/06/05	7.1				7,910
	10-12	09/06/05	2.7				5,190
BH-3	0-2	09/06/05	12.7				20,300
	2-4	09/06/05	1.2	<10.0	<10.0	<20.0	973
	6-8	09/06/05	0.9				407
	10-12	09/06/05	0.6				11.1
BH-4	0-2	09/06/05	1.1				21,300
	2-4	09/06/05	1.1	<10.0	<10.0	<20.0	83.8
	6-8	09/06/05	1.0				6.08
BH-5	0-2	09/06/05	2.1				571
	2-4	09/06/05	2.7				86.8
	6-8	09/06/05	3.2	<10.0	<10.0	<20.0	301
	10 - 12	09/06/05	1.2				4,590
BH-6	0-2	09/06/05	1.1			70 CO	153
	2-4	09/06/05	1.1	<10.0	<10.0	<20.0	96
	6-8	09/06/05	1.0				4,810
	10-12	09/06/05	0.6				7,940
BH-7	0-2	09/07/05	0.6			***	116
	2-4	09/07/05	0.7	<10.0	<10.0	<20.0	79.3
	6-8	09/07/05	0.7			***	9.08
	10-12	09/07/05	0.5				35.8

Table 1 Summary of Laboratory Analyses of Soil Samples BTA Oil Producers, French #3 SWD SE/4, NE/4, Section 24, Township 18 South, Range 32 East Lea County, New Mexico

Page 2 of 2

Boring Number	Sample Depth (Feet)	Sample Date	PID (ppm)	GRO C6-C12 (mg/kg)	DRO >C12-C35 (mg/kg)	TPH C6-C35 (mg/kg)	Chloride (mg/kg)
BH-8	0-2	09/07/05	0.7				40.6
	2-4	09/0705	0.7				53.9
	6-8	09/07/05	0.8	<10.0	<10.0	<20.0	136
	10-12	09/07/05	0.7	بين بلند بي			155
BH-9	0-2	09/07/05	0.9				147
	2-4	09/07/05	0.6	<10.0	<10.0	<20.0	12.2
	6-8	09/07/05	1.0	40 40 40			21.3
	10-12	09/07/08	2.1	<10.0	<10.0	<20.0	7,750
BH-10	0-2	09/07/05	2.0	<10.0	<10.0	<20.0	65.4
(Background)	2-4	09/07/05	0.7				208
	6-8	09/07/05	0.4				129
	10-12	09/07/05	0.1				1,100

Notes: Analysis performed by Environmental Lab of Texas, I. Ltd., Odessa, Texas

1. Feet: Depth in feet below ground surface

2. GRO: Gasoline range organics

3. DRO: Diesel range organics

4. TPH: Total petroleum hydrocarbons (Sum of DRO + GRO)

5. mg/kg: Milligrams per kilogram6. <: Below method detection limit

7. ppm: Parts per million 8. ---: No data available

FIGURES



