Bill Richardson

Governor

Jon Goldstein Cabinet Secretary Jim Noel **Deputy Cabinet Secretary** **Mark Fesmire Division Director Oil Conservation Division**



June 11, 2010

Stevens & Johnson Operating Co. PO Box 2249 Wichita Falls, TX 76307-2249

Re:

Remediation Work Closure

Denton North of 82 Site 1RP#2559 Site Location: Sec 1 T15S R37E Closure Dated: February 26, 2010

The referenced remediation work submitted to New Mexico Oil Conservation Division (OCD) by Safety & Environmental Solutions, Inc. (SES) for Stevens & Johnson Operating Co. is hereby accepted for record.

Please be advised that OCD acceptance of this action does not relieve Stevens & Johnson Operating Co. liability should their operations fail to adequately investigate and remediate contaminants that threaten ground water, surface water, human health or the environment. Additionally, OCD acceptance does not relieve Stevens & Johnson Operating Co. of responsibility for compliance with any other federal, state, or local laws and/or regulations.

If you have any questions or need assistance call: (505) 393-6161, ext. 111, or email: larry.johnson@state.nm.us

Sincerely,

Larry Johnson NMOCD District 1 Environmental Engineer



RECEIVED

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

State of New Mexico Energy Minerals and Natural Resources

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

JUN 1 1 2010 Form C-141 Revised October 10, 2003

HOBBSONIA Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action						
	OPERA'	TOR	⊠' Init:	ial Report	TX	Final Repor
Name of Company Stephens & Johnson Operating Co.	Contact	Bob Gilmore				
Address P O Box 2249		No. 940-723-21	66			
Facility Name Denton North Wolfcamp Unit		Facility Type Water Supply Line				
			Lease 1	V.		
	ner Unknown	API		<u>vo.</u> 25, 052	Λ3	
NORTH OF 82' LOCAT	ION OF RE	LEASE HV	20.0	25.032	د.	
Unit Letter Section Township Range Feet from the N	lorth/South Line	Feet from the	East/West Line	County		
1 T15S R37E 2222	North 10 West Lea					
	North	10	West	Lea		
Latitude 033 01 3	4.9° NLongitud	le 103 UB	41,9 W			
NATII	RE OF REL	RASTE				
Type of Release Salt Water		Release Unknow	n NA Volume I	Recovered U	ıknow	n NA
Source of Release Salt Water Supply Line		our of Occurrence		Hour of Disc		
Was Immediate Notice Given?	If YES, To	Whom?				
Yes No X Not Requ	ired					
By Whom?	Date and H					
Was a Watercourse Reached?	If YES, Vo	lume Impacting t	he Watercourse			
☐ Yes 🄀 No	1					:
If a Watercourse was Impacted, Describe Fully *						
Describe Cause of Problem and Remedial Action Taken *		****				
Leak was from water supply line which developed several years ago	Leak was repaired	and returned to s	ervice			
Describe Area Affected and Cleanup Action Taken.*						
SESI environmental consultants determined vertical and horizontal e	xtent of contamina	tion Contaminate	ed soil was dug ou	t and replaced	d unde	r OCD
procedures				•		
	I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and					
	regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger					
public health or the environment. The acceptance of a C-141 report b						
should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other.						
federal, state, or local laws and/or regulations.						
OIL CONSERVATION DIVISION						
Kad July			-			
Signature: Sab Shug Approved by District Supervisor:			-			
Approved by District Supervisor:						
A CHICAGO A GIARAGEO						
Title: Engineer	Approval Date	Approval Date: Expiration Date:				
Family Address Anthropy Orders of	049					
E-mail Address: bgilmore@sjoc.net	Conditions of Approval:		Conditions of Approval:			

Phone:940-723-2166

* Attach Additional Sheets If Necessary

Date: 5-3-10

n LWJ (016258110 PLWJ (01628352



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor Joanna Prukop Cabinet Secretary Lori Wrotenbery
Director
Oil Conservation Division

June 16, 2003

Stevens & Johnson Operating Co. PO Box 2249 Wichita Falls, TX 76307-2249

Re:

Remediation Work Plan: Denton Field North of 82 Site Site Location: Sec 1 T15S R37E Plan Submittal Dated: May 8, 2003

The referenced Work Plan submitted to New Mexico Oil Conservation Division (OCD) by Safety & Environmental Solutions, Inc. (SES) for Stevens & Johnson Operating Co. is **hereby approved** with the following conditions:

- OCD will be given 48 hour notice prior to sampling events to witness and/or split samples
- Drilling to and sampling of groundwater will be prudent if deep chloride contamination is encountered above 250 mg/L or 250 ppm in boring samples
- Provide convex soft soil/sand pad under plastic barrier, pad top to protect from puncture
- Increase plastic liner from SES requested 20 mil to 30 mil

Please be advised that OCD approval of this plan does not relieve Stevens & Johnson Operating Coliability should their operations fail to adequately investigate and remediate contaminants that threaten ground water, surface water, human health or the environment. Additionally, OCD approval does not relieve Stevens & Johnson Operating Co. of responsibility for compliance with any other federal, state, or local laws and/or regulations.

If you have any questions or need assistance call: (505) 393-6161, ext. 111, or email: lwjohnson@state.nm.us or Paul Sheeley at: ext. 113, email: psheeley@state.nm.us

Sincerely,

Larry Johnson-Environmental Engineer

Cc:

Roger Anderson - Environmental Bureau Chief

Chris Williams - District I Supervisor

Bill Olson - Hydrologist

Paul Sheeley - Environmental Engineer

Bob Allen - Safety & Environmental Solutions, Inc.



P.O. Box 1613 703 E. Clinton Street Hobbs, New Mexico 88240 575/397-0510 Fax 575/393-4388 www.sesi-nm.com

Safety & Environmental Solutions, Inc.

February 26, 2010

Mr. Larry Johnson
Environmental Engineer
New Mexico Oil Conservation Division
1625 French Drive
Hobbs, New Mexico 88240

Mr. Larry Johnson:

This letter is a request for closure at the Stevens and Johnson, North of 82. All of the delineation activities completed for the subject area are listed below in chronological order.

Safety & Environmental Solutions, Inc. (SESI) was engaged by Stephens & Johnson Operating Company to perform a site assessment of the area located in Section 1, Township 15 South, and Range 37 East in Lea County, New Mexico. The subject area was impacted by the spillage of an undetermined amount of produced water from an injection line associated with production in the area on September 10, 2001. The remediation for this site was initiated in July 2003; however this site has been dormant for several years.

Surface and Ground Water

The nearest groundwater of record with the New Mexico State Engineer's Office is in Section 2 of Township 15 South, Range 37 East. According to measurements taken February 18, 1966, the depth to water in this well is 40 feet.

Monitor wells installed by SESI within 600 to 800 feet of the subject site have respective depths to water of 71.25' and 71.15'. The groundwater measurements were taken on January 11, 2010.

Soils

The soils in the area are predominantly sand and sandy loam.

Work Performed

July 17, 2003:

SESI was onsite to install Borehole #1. The borehole was drilled to 15' at which point the drilling rig malfunctioned and drilling was stopped. Samples were retrieved at 5, 10, and 15 feet.

July 24, 2003

SESI returned and drilled Borehole # 1 to a depth of 24 feet. Samples were retrieved at 18 and 22-24 feet. Borehole # 2 was drilled to a depth of 18 feet and samples were retrieved at 5, 10, 15, and 18 feet. Borehole #3 was drilled to a depth of 18 feet and samples were retrieved at 5, 10, 10-15, and 18 feet. Borehole #4 was drilled to a depth of 10 feet and samples were retrieved at 3, 5, and 10 feet.

All samples were properly packaged and preserved and sent under chain of custody to Cardinal Laboratories in Hobbs, New Mexico for analysis. The samples were analyzed for Chlorides (EPA method 4500-Cl⁻B).

Date	Sample ID	Chlorides (mg/kg)
7/17/03	BH #1 5'	8397
7/17/03	BH #1 10'	5918
7/17/03	BH #1 15'	3679
7/24/03	BH #1 18	6958
7/24/03	BH #1 22-24'	496
7/24/03	BH #2, 5'	3759
7/24/03	BH #2 10'	2719
7/24/03	BH #2 15'	144
7/24/03	BH #2 18'	, 96
7/24/03	BH #3 5'	1264
7/24/03	BH #3 10'	160
7/24/03	BH #3 15'	128
7/24/03	BH #3 18'	112
7/24/03	BH #4 3'	2447
7/24/03	BH #4 5'	960
7/24/03	BH #4 10'	144

The results of the analysis of the bottom hole samples from the boreholes indicate that contamination has migrated to a depth of 24' in Borehole #1 which was closest to the actual leak and a depth of 10' in Borehole #4 which was the greatest distance from the actual leak. The intermediate Boreholes 2 and 3 indicate migration to the depth of 15'. The results of this investigation indicate that chloride migration had not impacted the groundwater in the area of this leak site and it is recommended that the original Work Plan dated May 8, 2003 be followed to effect closure of this site.

April 28, 2006:

SESI was onsite to retrieve samples and map the excavation at the North of 82 Site. The excavation measures approximately 5,451 sq. ft. Samples were retrieved 0 to 6 inches in depth throughout the bottom and sides of the excavation. All samples were transported under Chain of Custody to Argon Laboratories of Hobbs, New Mexico for analysis. The samples were analyzed for Chlorides (EPA Method 300.00).

The results of the analysis are as follows:

Dâte	Sample ID	Chlorides (mg/kg)
4/28/06	A	23,000
4/28/06	В	16,000
4/28/06	С	950
4/28/06	D	19,000
4/28/06	E	1,400
4/28/06	F	170
4/28/06	G	4,400

The results of the sampling indicate the chloride levels to be elevated in the bottom and all of the sides of the excavation with the exception of the northeast sample.

May 12, 2009

SESI was onsite to retrieve samples. Samples were retrieved at a depth of six (6) feet throughout the bottom and sides of the excavation. All samples were transported under Chain of Custody to Ana-Lab of Kilgore Texas for analysis. The samples were analyzed for Chlorides (EPA Method 300.00).

The results of the analysis are as follows:

Date 250 Bit Comment	Sample ID	Chlorides (mg/kg)
5/12/09	#1	17,300
5/12/09	#2	1220
5/12/09	#3	218
5/12/09	#4	4,530
5/12/09	#5	15,700
5/12/09	#6	3,770
5/12/09	EW	4,140
5/12/09	SW #1	7,520
5/12/09	SW #2	6,200
5/12/09	SW #3	7,670
5/12/09	SW #4	30.5
5/12/09	NW #1	8,010
5/12/09	NW #2	14,800
5/12/09	NW #3	14,600
5/12/09	NW #4	2,600
5/12/09	WW	21,100

The results of the sampling indicated the chloride levels to be elevated in the bottom and all of the sides of the excavation with the exception of the south wall #3.

January 4, 2010:

SESI was onsite with Watson Construction to further excavate the area. The floor bottom was excavated an additional two (2) feet to a depth of seven (7) feet.

Samples were retrieved from the floor bottom of the excavation, as well as, the side walls to determine horizontal extent until chloride concentration indicated below 250 parts per million

(ppm). All grab samples were transported under Chain of Custody to Cardinal Laboratories in Hobbs, New Mexico for analysis. The samples were analyzed for Chlorides (EPA Method 4500-B).

The results of the analysis are as follows:

Date : Property of the second	Sample ID	Chlorides (mg/kg)
1/04/10	#1 7'bgs	144
1/04/10	#2 6'bgs	128
1/04/10	#3 7'bgs	32
1/04/10	#4 6'bgs	288
1/04/10	#5 6'bgs	48
1/04/10	#6 4'bgs	496
1/04/10	NVV #1	64
1/04/10	NW #2	96
1/04/10	NW #3	<16
1/04/10	NW #4	32
1/04/10	EW	624
1/04/10	SW #1	10,800
1/04/10	SW #2	288
1/04/10	SW #3	2,600
1/04/10	SW #4	1,310
1/04/10	WW	128

Sample SW #1 is the south wall at the fence line that separates the site from NM Highway 82 Right of Way. Mr. Larry Johnson (NMOCD) agreed that no additional excavation was required at the SW#1 due to the fence line.

As a result of the high chloride contamination on the south wall, the SW #3 and SW #4 areas were excavated an additional five (5) feet to determine vertical extent. SW #1 was not excavated any further due to the fence line. The samples were transported under Chain of Custody to Cardinal Laboratories in Hobbs, New Mexico for analysis. The samples were analyzed for Chlorides (EPA Method 4500-B).

The results of the analysis are as follows:

Date	Sample ID	Chlorides (mg/kg)
1/04/10	SW #3 (5')	112
1/04/10	SW #4 (5')	80

January 19, 2010:

SESI was onsite with Mr. Larry Johnson of New Mexico Oil Conservation Division (NMOCD) to discuss closure plan. Mr. Johnson requested the installation of a 40-mil liner at the bottom of the excavation on the west side running north and south.

Akome was onsite to install a 60'X65' 40-mil liner at a depth of seven (7) feet on the west side of the excavation. Topsoil was placed on top of liner to prevent tearing. The excavation was backfilled with caliche to a depth of three (3) feet then backfilled with top soil.

Approximately 2,758 yards of contaminated soils were excavated and transported to a New Mexico Oil Conservation Division (NMOCD) approved disposal facility. The location was backfilled with 3,156 yards of topsoil and contoured to its natural grade.

Conclusion

Remedial actions at this site have all been performed with the approval of, and in accordance with all New Mexico Oil Conservation Division (NMOCD) requirements. It is requested that the location be re-seeded to the landowner's specifications and that no further action will be required.

Please contact me should you have questions or require further information.

Thank you for your attention in this matter.

Sincerely,

Bob Allen CSP, REM President

ba/sr