1R - 427-13

APPROVALS

YEAR(S):

2013

Hansen, Edward J., EMNRD

From: Hansen, Edward J., EMNRD
Sent: Tuesday, April 23, 2013 10:13 AM
To: Hack Conder (hconder@riceswd.com)
Cc: Leking, Geoffrey R, EMNRD; Laura Pena (lpena@riceswd.com); Katie Jones <kjones@riceswd.com> (kjones@riceswd.com); Lara Weinheimer (lweinheimer@rice-ecs.com); Scott Curtis (scurtis@riceswd.com)
Subject: Remediation Plan (1R427-13) Termination - ROC EME K-11 Site

RE: Termination Request
for the Rice Operating Company's
EME K-11 Site
Unit Letter K, Section 11, T21S, R36E, NMPM, Lea County, New Mexico
Remediation Plan (1R427-13) Termination

Dear Mr. Conder:

The New Mexico Oil Conservation Division (OCD) has received Rice Operating Company's report and request to close the above-referenced site, dated February 15, 2013 (received February 19, 2013) and additional information of April 9, 2013. The reports are acceptable to the OCD.

The above-referenced report, submitted in accordance with 19.15.29 NMAC (Rule 29; formally, Rule 116), indicates that Rice Operating Company has met the requirements of 19.15.29 NMAC; therefore, the OCD approves the report and hereby notifies you that the remediation plan (1R427-13) is terminated in accordance with 19.15.29 NMAC.

Please be advised that OCD approval of this report does not relieve the owner/operator of responsibility should operations pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the owner/operator of responsibility for compliance with any OCD, federal, state, or local laws and/or regulations.

If you have any questions regarding this matter, please contact me at 505-476-3489.

Edward J. Hansen
Hydrologist
Environmental Bureau

Rice Environmental Consulting & Safety
P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

CERTIFIED MAIL
RETURN RECEIPT NO. 7007 2560 0000 4569 8449

RECEIVED
FEB 19 2013
Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

February 15th, 2013

Mr. Edward Hansen
New Mexico Energy, Minerals, & Natural Resources
Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

RE: **Termination Request**
Rice Operating Company – EME SWD System
EME K-11 (1R427-13): Unit Letter K, Sec. 11, T21S, R36E

Mr. Hansen:

ROC is the service provider (agent) for the EME SWD System and has no ownership of any portion of the pipeline, well, or facility. The system is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

Background and Previous Work

The site is located approximately 5.5 miles northwest of Eunice, New Mexico in Unit Letter K, Section 11, T21S, R36E as shown on the Site Location Map (Figure 1). Groundwater at this site is located approximately 197 +/- feet.

In 2003, ROC initiated work on the former EME K-11 junction box. Soil samples were collected at regular intervals creating a 33 ft x 30 ft x 14 ft deep excavation. Each sample was field tested for chlorides and hydrocarbons. Chloride field data numbers showed no vertical or lateral decline. Field hydrocarbon numbers were low throughout. To further investigate the depth of the chloride presence, a soil bore was initiated 10 feet west of the source on December 31st, 2003. Soil samples were collected at regular intervals and the 80 ft bgs sample was analyzed by a commercial laboratory. Laboratory analysis resulted in a chloride concentration of 2,559 mg/kg. The bore hole was plugged with drilling cuttings to the ground surface. The excavation was backfilled and contoured to the surrounding landscape and an identification plate was placed on the surface of the site to mark its location for future environmental considerations. NMOCD was notified of potential groundwater impact on January 9th, 2004 and a junction box disclosure report was submitted to NMOCD with all the 2003 junction box closures and disclosures.

Per the Investigation and Characterization Plan (ICP), six soil bores were drilled at the site on June 14-15th, 2012. Soil samples were collected at regular intervals and field tested for chloride. Organic vapors were measured using a PID. Representative samples

were analyzed by a commercial laboratory, resulting in low concentrations of TPH and chloride concentrations that decreased with depth.

A Corrective Action Plan (CAP) was submitted to the NMOCD on July 19th, 2012 and a CAP Addendum was submitted to the NMOCD on August 24th, 2012.

To determine what affect the residual chlorides may have had on the groundwater beneath the site, ROC personnel ran the U.S. Environmental Protection Agency Exposure Assessment Multimedia Model – Multimed (Version 1.50, 2005). The model predicted that the chlorides in the vadose zone will reach groundwater with a maximum concentration of 152.1 mg/L in 301 years. Therefore, the residual chlorides in the vadose zone will not impact groundwater above WQCC standards.

Based on the Multimed analysis, the CAP and Addendum proposed scraping the site (approximately 4,000 ft^2) to remove large rocks and debris. The site would be backfilled with clean soil, contoured to the surrounding location and seeded with a blend of native vegetation. NMOCD approved the CAP and Addendum on August 27th, 2012.

Completed Corrective Actions

Beginning September 14th, 2012, approximately 4,000 ft^2 of the site was scraped to a depth of approximately 6 inches bgs. 152 $yards^3$ of scraped soil was properly disposed of at an NMOCD approved facility. The site was backfilled with clean, imported soil and silt net fencing was installed surrounding the site. The area was then seeded with a blend of native vegetation. The site revegetation form and photos of these activities can be found in Appendix A.

ROC has completed the corrective actions, as approved by the NMOCD on August 24th, 2012. Therefore, ROC requests 'remediation termination' or similar closure status of the site.

RECS appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-9174 or me if you have any questions or wish to discuss the site.

Sincerely,

Lara Weinheimer
Project Scientist
RECS
(575) 441-0431

Attachments:

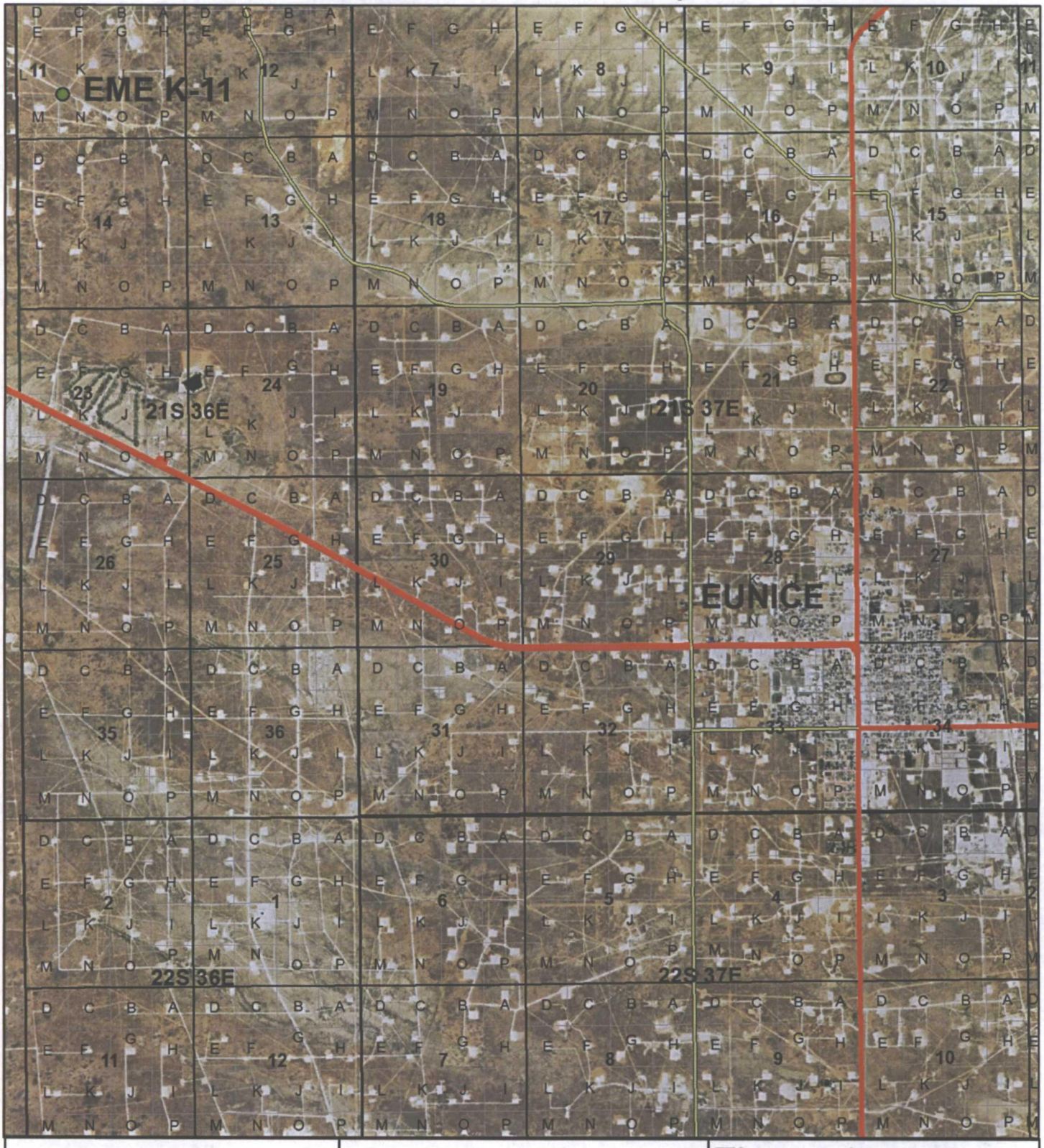
Figure 1 – Site Location Map
Appendix A – Revegetation Form and Photo Page

RECEIVED OCD
2013 FEB 19 P 3:25

Figures

RICE Environmental Consulting and Safety (RECS)
P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

Site Location Map



RICE ENVIRONMENTAL RECS CONSULTING & SAFETY, LLC

EME K-11

Legals: UL/K sec. 11
T-21-S R-36-E
LEA COUNTY, NM

NMOCD CASE #: 1R427-13

Figure 1

N
W E
S

0 0.375 0.75 1.5
Miles

Drawing date: 5-7-12
Drafted by: L. Weinheimer

Appendix A

Revegetation Form and Photo Page

RICE Environmental Consulting and Safety (RECS)
P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

PO Box 5630
Hobbs, NM 88241
Phone: (575) 393-4411
Fax: (575) 393-0293

REVEGETATION FORM

1. General Information

Site name: EME K-11						
U/L K	Section 11	Township 21S	Range 36E	County Lea	Latitude N 32°29'23.796"	Longitude W 103°14'24.012"
Contact Name: ZACHARY CONDER						
Email: zconder@rice-ecs.com						
Site size: Square feet: 4,000			Map detail of site attached ☐			
Additional information:						

2. Soils **Do not rip caliches subsoils; caliche rocks brought to the surface by ripping shall be removed.*

Salvaged from site ☐	Bioremediated ☐	Imported ☒	Blended ☐	Depth (in):
Texture:	Describe soil & subsoil:			
Soil prep methods:	Rip ☐ Depth(in):	Disc ☐ Depth (in):		Roller pack ☐
Date completed: 9/21/2012				

3. Bioremediation

Fertilizer ☐	Hay ☐	Other ☐
Type:		Describe:
Lbs/acre:		

4. Seeding **Attach seed bag tags to this form. Seed bag tags shall contain the site name and S-T-R.*

Custom seed mix ☒	Prescribed mix ☐	Seed mix name: 5 lbs. Blue Grama and 5 lbs. Lea County Mix Seeding date: 9/21/2012
Broadcast ☐ Method: Hand Broadcast and raked into soil		
Soil conditions during seeding: Dry ☒ Damp ☐ Wet ☐		
Photos attached ☐ Number of photos:	Observations:	

5. Certification I hereby certify that the information in this form and attachments is true and complete to the best of my knowledge and belief.

Name: Edgardo Baca	Title: Environmental Tech	Date: 1-8-13
Signature: Edgardo Baca		

EME K-11 (1R427-13)
Unit K, Section 11, T21S, R36E

site prior to scraping, facing north
6/28/2012

scraping the site
9/14/2012

scraping the site
9/14/2012

seeding the backfilled site, facing south
9/21/2012

raking in the seed, facing north
9/21/2012

site complete, facing north 9/21/2012

Hansen, Edward J., EMNRD

From: Katie Jones <kjones@riceswd.com>
Sent: Tuesday, April 09, 2013 3:39 PM
To: Hansen, Edward J., EMNRD
Cc: Hack Conder; Laura Pena
Subject: ROC - EME K-11 (1R427-13) Backfill Lab
Attachments: ROC - EME K-11 (1R427-13) Backfill Lab.pdf; ROC - EME K-11 (1R427-13) Backfill PID.pdf; EME K-11 (1R427-13) Termination Request 2.15.13.pdf

Mr. Hansen,

Attached is the lab result for the soil used to backfill the EME K-11 (1R427-13) site. The chloride concentration of the backfill material was <16 mg/kg and the field PID reading was 3.6 ppm. A Termination Request was previously submitted to the NMOCD on February 15, 2013. If you have any questions or require any additional information, please contact myself or Hack Conder.

Thank you.

Katie Jones
Environmental Project Manager
RICE *Operating Company*

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

March 20, 2013

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: EME K-11 (21S/36E)

Enclosed are the results of analyses for samples received by the laboratory on 03/20/13 13:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Rice Operating Company
Hack Conder
112 W. Taylor
Hobbs NM, 88240
Fax To: (575) 397-1471

Received:	03/20/2013	Sampling Date:	03/20/2013
Reported:	03/20/2013	Sampling Type:	Soil
Project Name:	EME K-11 (21S/36E)	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: 8 PT. SURFACE BACKFILL (H300674-01)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/20/2013	ND	432	108	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

RUSH

CARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Company Name: Rice		BILL TO	
Project Manager: Hack Conder		P.O. #:	
Address:		Company:	
City: Hobbs	State: NM Zip: 88240	Attn:	
Phone #:	Fax #:	Address:	
Project #:	Project Owner:	City:	
Project Name:		State:	Zip:
Project Location: EME K-11 (21S-36E)		Phone #:	
Sampler Name: Kyle Norman		Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST										
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS					
H300674																									
1	8 pt, surface Backfill	C	1			✓							3-20-13	12:45	✓										

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Relinquished By: Kyle	Date: 3-20-13 Time: 1:15	Received By: Jodi Henson	
Relinquished By:	Date: Time:	Received By:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)	

Phone Result:	☐ Yes	☑ No	Add'l Phone #:
Fax Result:	☐ Yes	☑ No	Add'l Fax #:

REMARKS:

email results: zconder@rice-ecs.com
Knorman@rice-ecs.com; lpena@riceswd.com
Kjones@riceswd.com; Bbaker@rice-ecs.com;
hconder@rice-ecs.com; Lweinheimer@rice-ecs.com

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

#26

RICE ENVIRONMENTAL CONSULTING & SAFETY

122 West Taylor Hobbs, NM 88240
PHONE: (505) 393-9174 FAX: (505) 397-1471
PID METER CALIBRATION & FIELD REPORT FORM

CK. MODEL NO.			
		MODEL: PGM 7300	SERIAL NO: 590-000508
	x	MODEL: PGM 7300	SERIAL NO: 590-000504
		MODEL: PGM 7320	SERIAL NO: 592-903318
		MODEL: PGM 7300	SERIAL NO: 590-000183

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO : 930360	EXPIRATION DATE: 5/24/2013
METER READING ACCURACY: 100 PPM	

ACCURACY : +/- 2%

COMPANY
Rice

SITE	UNIT	SECTION	TOWN SHIP	RANGE
EME K-11	K	11	21S	36E

SAMPLE ID	PID	SAMPLE ID	PID
8 pt. surface backfill	3.6		

I verify that I have calibrated the above instrument in accordance to the manufacture operation manual.

SIGNATURE: 

DATE: 3/20/2013