

# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

March 31, 2006

Jennifer Johnson  
RICE OPERATING COMPANY  
122 West Taylor  
Hobbs, NM 88240

Re: Work Plan Approval w/conditions: Soil Restoration Plan C-16 leak  
Site Location: UL-C Sec.16 T20S R37E  
Dated: March 10, 2006

Dear Ms. Johnson,

The New Mexico Oil Conservation Division (OCD) reviewed the plan submitted by RICE Operating Company and referenced above. The plan is **hereby approved** according to the information provided including the following conditions.

1. RICE shall dispose of asbestos containing materials according to EPA protocol.
2. RICE shall demonstrate that groundwater will not be impacted and submit analytical data indicating vadose zone impact vs. depth is decreasing.
3. RICE may remove contaminated material to disposal.
4. RICE shall ensure excavation above groundwater level will not provide a preferred pathway for contaminants to migrate vertically and impact groundwater or the capillary zone.
5. Please notify me 48-hr. before sampling this site.
6. Please submit a copy of the C-141 with each submittal.

If you have any questions or need assistance please write or call me at (505) 393-6161, x113 or <mailto:psheeeley@state.nm.us>

Sincerely,

Paul Sheeley-Environmental Engineer

Cc: Wayne Price - Environmental Bureau Chief  
Chris Williams - District I Supervisor  
Larry Johnson - Environmental Engineer  
Daniel Sanchez - Enforcement

# **RICE Operating Company**

122 West Taylor • Hobbs, New Mexico 88240  
Phone: (505)393-9174 • Fax: (505) 397-1471



March 10, 2006

Mr. Paul Sheeley  
New Mexico Energy, Minerals, & Natural Resources  
Oil Conservation Division  
French Drive  
Hobbs, New Mexico

**RE: INVESTIGATION & CHARACTERIZATION PLAN  
EME C-16 Accidental Discharge  
UL/C SEC 16 T20S R37E**

Mr. Sheeley:

Rice Operating Company (ROC) discovered an accidental discharge on the above mentioned site on December 12, 2005. An asbestos-cement pipeline cracked releasing 35 barrels of produced water. The 4 inch asbestos-cement pipeline was replaced with 4 ft of PVC pipeline as a permanent repair. Regional groundwater information indicates that the depth to groundwater is approximately 17 ft at this location. The surface area affected by this release is approximately 3700 sq ft or less than 10% of an acre.

For all environmental projects, ROC will choose a path forward that:

- protects public health,
- provides the greatest net environmental benefit,
- complies with NMOCD Rules, and
- is supported by good science.

Each site shall have three submissions or a combination of:

1. An Investigation and Characterization Plan (ICP) will accompany the C-141 (initial) form. This plan is a proposal for data gathering and site characterization and assessment. Highly impacted topsoil will be removed from the surface at this time and disposed of at a permitted facility.
2. Upon evaluating the data and results from the ICP, a recommended remedy will be submitted in a Corrective Action Plan (CAP). ROC will request concurrence or conditions from NMOCD with this submission.
3. Finally, after implementing the remedy, a closure report with final documentation will be submitted. This will include the C-141 (final) form. ROC will request concurrence or conditions from NMOCD with this submission.

ROC herein submits the enclosed ICP to address potential environmental concerns at the above-referenced site. ROC is the service provider (operator) 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 Partners, who provide all operating capital on a percentage ownership/usage basis.

NMOCD will be notified 48 hours in advance of any significant work. Thank you for your consideration concerning this matter.

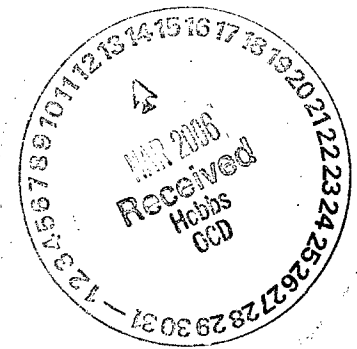
Rice Operating Company



Jennifer Johnson  
Environmental Technician

Cc: KFP, file, WP, DS

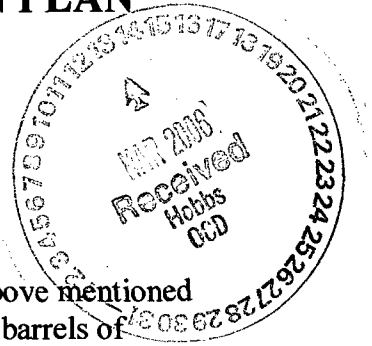
Enclosed: ICP, site map, driving directions,



# INVESTIGATION AND CHARACTERIZATION PLAN

## EME C-16 ACCIDENTAL DISCHARGE

### UL/C SEC 16 T20S R37E



#### Background and Previous Work

Rice Operating Company (ROC) discovered and accidental discharge on the above mentioned site on December 12, 2005. An asbestos-cement pipeline cracked releasing 35 barrels of produced water. The 4 inch asbestos-cement pipeline was replaced with 4 ft of PVC pipeline as a permanent repair. Regional groundwater information indicates that the depth to groundwater is approximately 17 ft at this location. The surface area affected by this release is approximately 3700 sq ft or less than 10% of an acre.

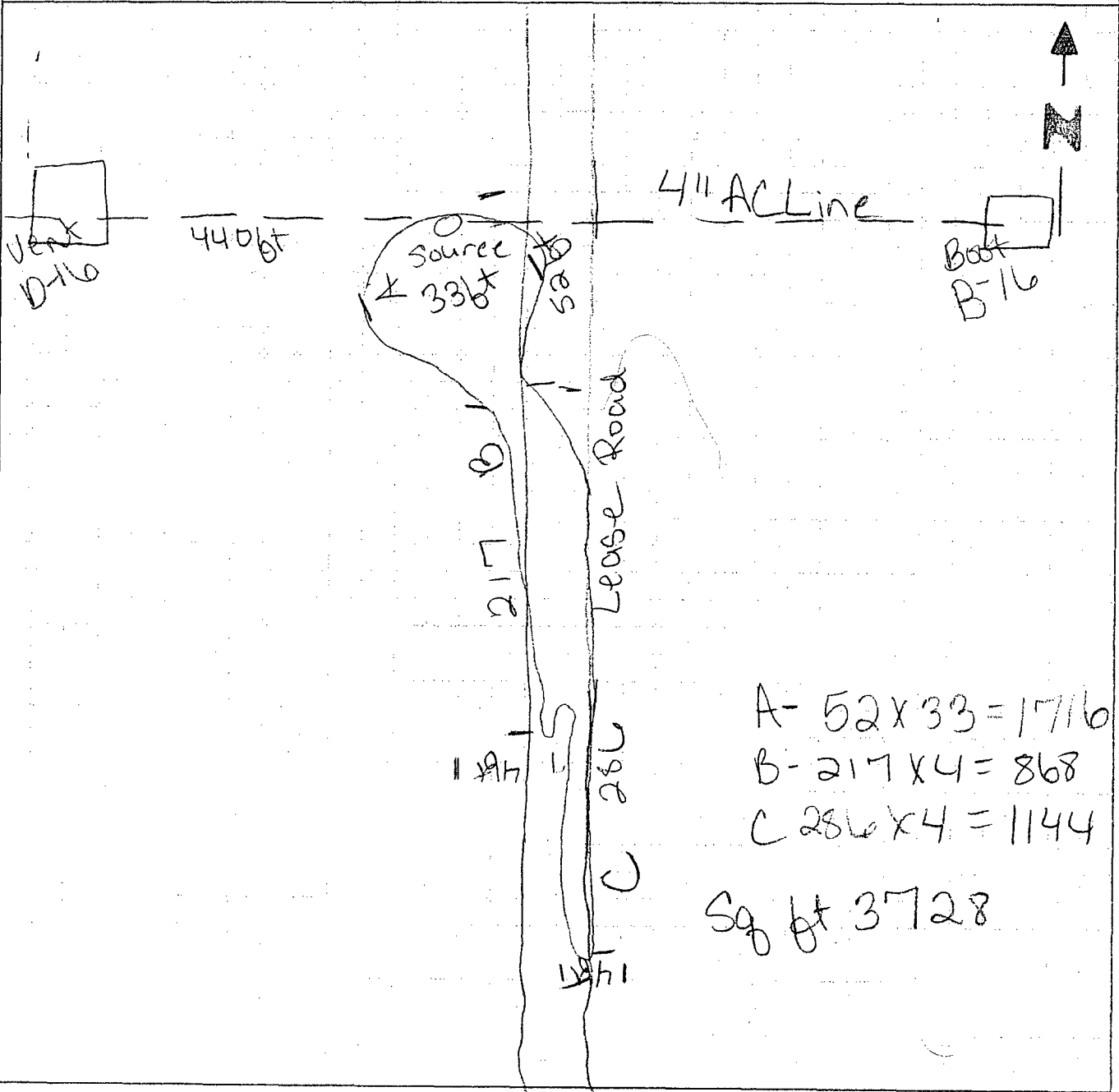
The initial C-141 form was submitted to the NMOCD District 1 in Hobbs on October 14, 2005. A work plan was submitted on December 08, 2005. The NMOCD denial of this work plan was received by ROC on February 28, 2006.

#### **Work Elements**

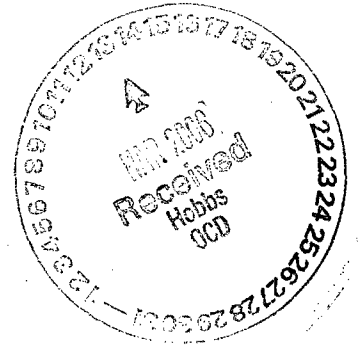
- Impacted topsoil approximately 6 inches over entire 3700 sq ft was removed and disposed of at an approved facility.
- A water well inventory will be performed to encompass a half mile radius around the release site. The inventory will include a review of water well records on the New Mexico Office of the State Engineer W.A.T.E.R.S. database and United States Geologic Survey (USGS) website. Any water wells denoted on the USGS 7.5 minute topographic quadrangle map within the search radius will be inspected. If viable wells are located, they will be evaluated for the possible incorporation of water level measurements and groundwater monitoring.
- Produced Water samples from the pipeline where the release occurred were taken.
- Perimeter and area of the affected surface has been defined using stakes and flagging. Perimeter samples will be taken to define the lateral extent of impact. Vertical delineation will also be conducted. These delineation activities may be performed with the following equipment but not limited to a hand auger, backhoe, and soil boring.
- Delineation results from this release site will be used to form an appropriate site specific remedy and will be submitted in a Corrective Action Plan (CAP).
- ROC will employ chloride field tests and PID screenings to monitor constituents of concern on the soil samples that will be collected at regular intervals.
- Appropriate and strategic samples will be submitted for laboratory analysis for TPH, BTEX, and Chlorides and as confirmation of field tests.
- NMOCD will be notified of any significant activities 48 hours in advance.

Following completion of the ICP, a CAP that details the site results of this ICP and includes the remedy recommendation will be submitted for NMOCD approval. ROC generally selects the remedy that offers the greatest environmental benefit while causing the least environmental impairment. When evaluating any proposed remedy or investigative work, ROC will confirm that there is a reasonable relationship between the benefits created by the proposed remedy or assessment and the economic and social costs.

cause of problem & how it was repaired. 4" AC line cracked  
Replaced with a section of PVC.



# EME C-16 LEAK



## DRIVING DIRECTIONS

GPS

32\*34.675N

103\*15.626W

FROM MONUMENT INTERSECTION OF  
HWY 8 AND JCT 322 GO SOUTH ON HWY 8  
2.9 MILES TURN TO THE EAST THROUGH  
CATTLE GUARD ROAD WILL Y GO EAST  
(LEFT) 1 ½ TENTHS 2nd LEASE ROAD PAST  
LOCATION TURN SOUTH GO 500 FT LEAK  
IS ON WEST SIDE OF ROAD.

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

2/7/04  
Form C-141  
Revised October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

**Release Notification and Corrective Action**

**OPERATOR**

☒ Initial Report ☐ Final Report

Name of Company: Rice Operating Company	Contact:
Address: 122 West Taylor	Telephone No.: 505-393-9174
Facility Name: EME	Facility Type: Salt Water Gathering System

Surface Owner: State leased to SW Cattle Co.	Mineral Owner:	Lease No.:
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**LOCATION OF RELEASE**

Unit Letter C	Section 16	Township 20S	Range 37E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
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Latitude: 32°34.671N Longitude: 103°15.537W

**NATURE OF RELEASE**

Type of Release: Produced Water with Oil	Volume of Release: 60 bbls	Volume Recovered: 30 bbls
Source of Release: Pipeline	Date and Hour of Occurrence: 1/23/06	Date and Hour of Discovery: 1/23/06 1:00 pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Left Paul Sheeley a message.	
By Whom? Jennifer Johnson	Date and Hour: 1/24/06 7:17 am	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse:	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* Coupling separated, replaced with two couplings and 5 ft of 4 inch PVC pipe.

Describe Area Affected and Cleanup Action Taken.\* Approximately 2142 sq ft affected. Delineation results and work plan to follow. Groundwater is approximately 17 ft bgs.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC 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 by the NMOC marked as "Final Report" does not relieve the operator of liability 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, NMOC 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.

Signature: <i>Jennifer A Johnson</i>		<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Jennifer Johnson		Approved by District Supervisor:	
Title: Environmental and Field Technician		Approval Date:	Expiration Date:
E-mail Address: jjriceswd@valornet.com		Conditions of Approval:	
Date: 1/24/06 Phone: 505-393-9174		Attached <input type="checkbox"/>	

\* Attach Additional Sheets If Necessary

Rice-19174  
incident - n PAC0603848463  
facility + PAC0603847975

EME C-16 2<sup>nd</sup> Leak  
UL/C Sec. 16 T 20S R37E

From the intersection of HWY 8 and 322 go south 2.9 miles and turn left go east .3 leak on right side of road 20 ft.



Approximately 17 ft

### Site Assessment Criteria (NMOCD)

**Depth to Ground Water**

(Vertical distance from  
contaminants to seasonal  
high water elevation of  
ground water)

Less than 50 feet (20 points)  
50 feet to 99 feet (10 points)  
Greater than 100 feet ( 0 points) 20

**Wellhead Protection Area**

(Less than 200 feet from a private  
domestic water source, or; less than  
1000 feet from all other water sources)

Yes (20 points)  
No ( 0 points) 0

**Distance to Surface Water Body:**

(Horizontal distance to perennial  
lakes, ponds, rivers, streams, creeks,  
irrigation canals and ditches)

Less than 200 feet (20 points)  
200 feet to 1000 feet (10 points)  
Greater than 1000 feet ( 0 points) 0

**RANKING SCORE (TOTAL POINTS):**

20

### Clean-up Target Concentrations for "Site Closure" (NMOCD)

IF RANKING SCORE IS:	>19	10-19	0-9
Benzene (ppm) *	10	10	10
BTEX (ppm) *	50	50	50
TPH (ppm) **	100	1000	5000

\* A field vapor headspace measurement of 100 ppm may be substituted for a laboratory analysis.

\*\* The contaminant concentration for TPH is the concentration above background levels.