AP- 84

ANNUAL MONITORING REPORT

YEAR(S): 2007 Texerra

March 31st, 2008

Mr. Edward Hansen

New Mexico Energy, Minerals, & Natural Resources Oil Conservation Division, Environmental Bureau 1220 S. St. Francis Drive Santa Fe, New Mexico 87504

RE: Annual Report

Rice Operating Company –EME SWD System C-16(2) Leak – NMOCD Case No. 1R0477 UL-C, Sec 16 T20S R37E

Sent via E-mail and U.S. Certified Mail: No. 7006 0100 0001 2438 3883

Dear Mr. Hansen:

This letter summarizes the results of investigative work completed by Texerra and Rice Operating Company (ROC) over the course of the past year in accordance with the Investigation and Characterization Plan and the subsequent Corrective Action Plan, both of which were approved by NMOCD.

ROC discovered an accidental discharge of produced water at the referenced location on January 23rd, 2006. The source of the release was an asbestos-cement pipeline segment which failed, releasing an estimated 60 bbls of produced water of which an estimated 30 bbls were recovered. The 4-inch diameter pipeline was replaced, thus precluding the threat of future releases and compounded impact.

In order to protect groundwater, approximately 60 cu yds of chloride-contaminated soil material from the upper 6 inches was subsequently removed. This material was taken to the Sundance Disposal facility in Eunice, NM in March, 2006. The site was re-graded to original contours using clean soil material as backfill. The surface area affected by this release was approximately 2,142 sq ft (less than 1/20th of an acre; Figure 2).

Near source and down gradient monitor wells were drilled in December, 2006. Soil cuttings indicated only slightly elevated chloride levels (all less than 500 ppm) at the all sampling depths to the water table surface. However, groundwater chloride concentrations have varied between 1,500 to approximately 2,500 ppm since the wells were installed (Figure 3).

Texerra

ROC submitted a Stage I Abatement Plan to NMOCD for this site on May 25th, 2007 (Figure 4) in response to NMOCD's request of March 26th (Figure 5). The key component of the proposed Plan is to evaluate the efficacy of reducing groundwater chloride mass through the limited extraction of water from the near-source monitor well, as is presently being done at Rice's Vacuum N-6-1 project (NMOCD Case No. 1R0470) near Buckeye, New Mexico (Figure 7). In the meantime ROC continues to monitor groundwater chloride and BTEX concentrations at the EME C16(2) site on a quarterly basis.

We look forward to NMOCD's review of the previously submitted Stage I Abatement Plan so that we may move forward with this measure.

Please contact either myself or Kristin Pope of ROC if you have any questions or would like to discuss any aspect of this project.

Thank you.

Sincerely,

L. Peter Galusky, Jr. Ph.D. Principal

Encl: Site maps, soil and groundwater data, OCD correspondence

Copy: Kristin Pope, Rice Operating Company

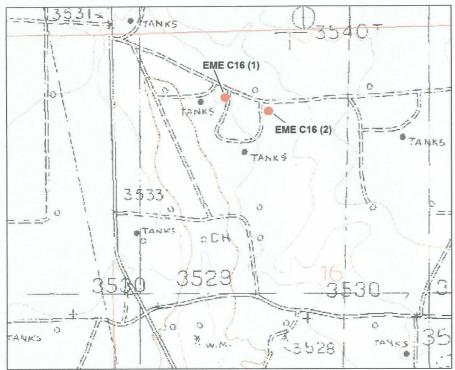


Figure 1- EME C16 (1&2) pipeline release locations. Not to scale.

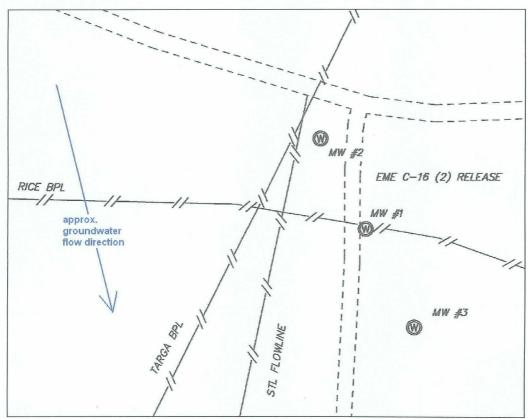


Figure 2 – EME C16(2) pipeline release monitor well locations. Not to scale.

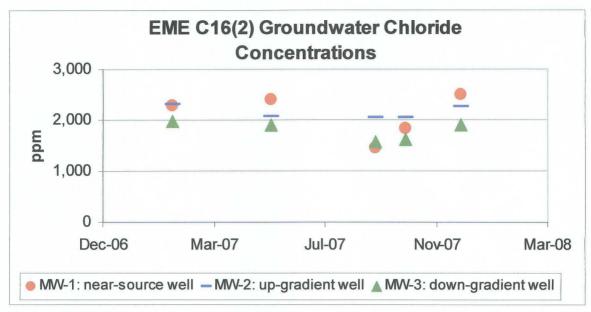


Figure 3 – EME C16(2) groundwater chloride concentrations.

Figure 4 – Record of submittal of Stage I Abatement Plan to OCD.

AT&T Yahoo! Mail - lpg@texerra.com Page 1 of 1 SWALL BUSINESS Print - Close Window Fri, 25 May 2007 14:13:20 -0700 (PDT) "L. Peter Gálusky, Jr. P.E." <[pg@texerra.com> Fram: Subject: Rice Operating Company - Submittal of Stage ! Abatement Plans "Edward I. Hansen" <edwardj.hansen@state.nm.us> To: "Kristin Pope" <kpope@riceswd.com>, "Caretyn Haynes" <chaynes@riceswd.com> cc: Dear Edward. Please find attached, in .pdf format, Stage I Abatement Plans for two Rice Operating Company projects: EME C16(1) and EME C16(2). I will forward hard copies of these in the mail next week. Thank you for your consideration. Sincerely, Pete G. L. Peter Galusky, Jr. Ph.D. Principal Техепа Energy Square 505 N. Big Spring, Suite 404 Midland, Texas 79701 E-mail: lpg@texerra.com Web: www.texerra.com Office Telephone/Fax: 877-534-9001 Anachments Files: EME_C_16_1__Stage_I_Abatement_Plan_submittal_letter_0S_25__.pdf (44k) EME_C16_1__Stage_1_Abatement_Plan.pdf (1.6M8) EME_C_16_2__Stage_I_Abatement_Plan_submittal_letter_05_25__.pdf {44k} EME_C16_2_Stage_1_Abatement_Plan.pdf (1.6ME) http://b4.mail.yahoo.com/ym/texerra.com/ShowLetter?box=Sent&MsgId=7600_0_304929... 3/13/2008

Figure 5 – Record of OCD request for Stage I Abatement Plan.



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL, NICHANDSON Granus Juanus Penkop Cabbet Sistemay Mark E. Fesnare, P.E. Liceter fül Construction Division

CERTIFIED MAIL RETURN RECEIPT NO: 2929 4432

March 26, 2007

Kristin Farris Pape Rise Operating Company 122 West Taylor Hobbs, New Mexico 83340

RE: REQUIREMENT TO SUBMIT ABATEMENT PLAN

Dear Ms. Pope:

The New Mexico Oil Conservation Division (OFD) has determined after naviewing your Notification of Groundwava: Impact for each of the following six sates:

- Rice EME Surch Phillips EOL Unit E., Senten 33, T198, B37E Lez (Jounny, New Maxico OCD Case #1R0427-17
- Rice EMP, A.2
 Unit A. Section 2, T20S, RASE
 Let (Jounty, New Mexico OCD Ceso 41R0#27-62
- Rice (Wile So., 2-2-)
 Unit A. Seption 2, TSOS, REGELIA, County, New Mexico
 OCO Case #180427-177
- 4) Rice 6O X-4
 Unit K, Soction A, T186, R36B
 Usa Crantty, New Maxico 1000 Case # 100ab0

Cil Carser vation Division # 1920 Sound 6: Farage Univer South Fe. New Masker 87300 Phone (303) 456-3466 — Pro (303) 456-7462 # http://www.nature.south.com/

Greun Jome Pope March 26, 2007 Page 1

- 5) Rice FME C-16 (1) Unit C. Section 16, 1208, R37E Lea County, New Mexico OCD Case #1, P0476
- Rice EME C.15 (2)
 Unit C. Section 16, T205, R37E
 Lea County, New Mexico
 OCD Case #1R0477

that the Rice Operating Company (ROC) may submit for each of the six vites a separate Stage 1. Abstract. Plan in accordance with OCD Rule 19 (19.15.1.19 NMAC) to investigate the greated water contamination of code of flore size. The Stage 1 Abstract Plans may be solometed to the OCD Banks Fe Office with a copy provided to the OCD Hobbs District Office and mass mass of all the requirements specified in OCD Rule 19 (19.15. . 19 NMAC), including, but not limited to, the public better and participation requirements specified in Rule 193. The Stage 1. Abstract: Plan is the sixty (SU) days from the receipt by ROC of this written regime.

ROC's Stage 1 Abatement Plans must specifically meet all of the requirements specified in OCD Rule 198.5, including, but not limited to, a site investigation work plan and monitoring program that will enable it to characterize the release using an appropriate number of isoconcentration maps and cross sections that depict the contamination dust has been released from the sites and to provide the obtainancessary to adoct and design an effective abatement option. ROC may, if it chooses, concurrently submit a Stage 2 Abatement Plan that add cases, appropriate protective abatement options.

ISOC should submit one paper copy and an electronic copy on CD for crelical the Plans and for all forms weekplans and/or expects for each of the Plans. Plans the source of include the our ear corresponding OCD Case # on each of the respondive Alexanderia Plans. An Abriencett Plan # will be assigned to each of the Plans are submitted to the OCD. If you have any questions, plans contect lidward I, thence of my staff at (505) 476-3439 or gaingedward haven facilities as

Sincercly.

Wayne Price

Environmental Bureau Chief

WP.EJH.ejk

Œ:

Chris Williams, GCD Hobbs District Supervisor

Larry Johnson, CCD Hobits

Texerra



Figure 6- Solar powered groundwater recovery system at Rice Vacuum SWD N-6-1 location.

¹ Recovered groundwater is used for Rice Operating Company SWD system maintenance.