

1R - 487

WORKPLANS

Date:

4-2-12

Hansen, Edward J., EMNRD

From: Katie Jones [kjones@riceswd.com]
Sent: Wednesday, April 11, 2012 3:53 PM
To: Hansen, Edward J., EMNRD
Cc: Hack Conder; Sharon Hall; Laura Pena
Subject: Hobbs N-6 (1R-487) CAP Addendum

Mr. Hansen,

The following is an Addendum to the Hobbs N-6 (1R-487) Corrective Action Plan (CAP) submitted to the NMOCD on April 2, 2012.

Page 2 and 3, Section: Amended Free Product Removal Corrective Action Plan. Blue lettering will be added to the paragraph.

“Amended Free Product Removal Corrective Action Plan

Operation of the air sparge system will be terminated. Free product removal will be accomplished by pumping of free product from MW-1. The well will initially be pumped once weekly. Based on the results of weekly pumping (product removal, product recovery, groundwater recovery) pumping intervals and rates may be adjusted. It is our intent to maximize product recovery and minimize groundwater recovery. ROC will keep a weekly log of product and groundwater recovery. Removed fluids will be stored on site in small above grade tanks, and will be transported via truck and properly disposed of at a permitted SWD well. This information will be tabulated and included in the Annual Groundwater Monitoring Reports. Biosparge 1, one of three biosparge wells currently contains emulsion as a result of air sparge activity. If, following termination of air sparge activity, emulsion continues to be present in this well it will be removed by pumping or absorbent socks.”

If you have any questions or require any additional information, please contact myself or Hack Conder at (575)393-9174.

Thank you.

Katie Jones
Environmental Project Manager
RICE *Operating Company*

Hansen, Edward J., EMNRD

From: Hansen, Edward J., EMNRD
Sent: Thursday, April 05, 2012 4:09 PM
To: Hack Conder
Subject: Remediation Plan (1R-487) Further Information Required

**RE: Corrective Action Plan for the Rice Operating Company's
Hobbs N-6 Pipeline Leak Site
Unit Letter N, Section 5 & 6, T19S, R38E, NMPM, Lea County, New Mexico
Remediation Plan (1R-487) Further Information Required**

Dear Mr. Conder:

The New Mexico Oil Conservation Division (OCD) has received corrective action plan for the above-referenced site (dated April 2, 2012). The plan indicates that additional information is required:

Please provide additional information regarding the disposition of the liquids that will be recovered at the site.

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

Edward J. Hansen
Hydrologist
Environmental Bureau



RECEIVED OCD
2012 APR -5 A 11:10

ARCADIS
1004 North Big Spring Street
Suite 300
Midland
Texas 79701
Tel 432.687.5400
Fax 432.687.5401
www.arcadis-us.com

CERTIFIED MAIL
RETURN RECEIPT NO. 7002 2410 0001 5813 3883

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

ENVIRONMENTAL

RE: CORRECTIVE ACTION PLAN
N-6 PIPELINE LEAK, WEST COUNTY ROAD SITE (1R-487)
HOBBS SWD SYSTEM
Unit N SEC. 5 & 6, T19S, R38E, LEA COUNTY, NEW MEXICO

Date:
April 2, 2012

Mr. Hansen:

Contact:
Sharon E. Hall

On behalf of Rice Operating Company (ROC), ARCADIS is submitting this Corrective Action Plan for the Hobbs Salt Water Disposal (SWD) System N-6 Release Site. The site is located immediately south of the intersection of Highway 62-180 and the South Loop of the Hobbs West County Road Bypass.

Phone:
432 687-5400

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

Email:
shall@arcadis-us.com

Groundwater Sampling

Our ref:
MT000821.0001

Monitoring and biosparge wells will continue to be sampled quarterly in accordance with NMOCD guidelines. Annual reports submitted to NMOCD by April 1 will summarize the analytical results from groundwater samples collected from the monitor wells in 2012 and depth to water, total depth of the well, volume of water in the wellbore and volume of water purged from the well.

Free Product Removal

In 1994, a leak was discovered in a buried SWD pipeline. An assessment program was completed and a free product recovery program initiated. The free product has

Imagine the result

historically been collected from monitor well 1 (MW-1), initially in 1996 in conjunction with groundwater recovery, and then beginning in 2000 with product recovery only.

A biosparge well designed to maximize in-situ biodegradation and minimize volatilization of hydrocarbons was installed at the site and became operational in August 2005. Four borings were drilled on November 8 and 9, 2006 in order to evaluate hydrocarbon occurrence in the vadose zone. Based on drilling observations a second biosparge well was installed approximately 30 feet east of the original biosparge well. The second biosparge well became operational in March 2007. In November of 2007, an additional eight soil borings (piezometers) were drilled and a third biosparge well was installed southeast of the pump house. These soil borings were located in areas between previous sampling points, outside of the previously identified core source area, and as close as possible to previous (2006) soil borings from which samples had been collected and tested for total petroleum hydrocarbons (TPH) and total organic compounds (TOC).

In November of 2010, the air sparge system at the site was tested by collection of soil gas samples during a cycled shut down. A similar test protocol was previously performed in May/June and September/October 2007, August/September 2008 and November 2009. The soil gas samples from these testing events were analyzed for methane, carbon dioxide, oxygen and benzene, toluene, ethylbenzene and xylenes (BTEX).

During 2011, phase separated hydrocarbon recovery was conducted through biweekly replacement of an absorbent sock placed in the well.

Amended Free Product Removal Corrective Action Plan

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ARCADIS

Mr. Edward Hansen
March 28, 2012

continues to be present in this well it will be removed by pumping or absorbent socks.

Thank you for consideration concerning this information. Should you have any questions regarding this submission, please do not hesitate to contact Hack Conder (575 393-9174) or me.

Very truly yours,

ARCADIS

Sharon E. Hall

Sharon E. Hall
Associate Vice President

cc: Hack Conder - ROC

Hansen, Edward J., EMNRD

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Sent: Thursday, April 05, 2012 4:09 PM
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Subject: Remediation Plan (1R-487) Further Information Required

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Edward J. Hansen
Hydrologist
Environmental Bureau