

AP -

44

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**STAGE 2  
REPORTS**

**DATE:**

3-18-10

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## Hansen, Edward J., EMNRD

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**From:** Reed, Timothy [Timothy.Reed@tetrattech.com]  
**Sent:** Thursday, March 18, 2010 12:50 PM  
**To:** Hansen, Edward J., EMNRD  
**Cc:** Katie Jones; Hack Conder; Kindley, Jeff  
**Subject:** ROC EME H-13 Termination Request

March 18, 2010

Mr. Hansen:

On behalf of Rice Operating Company (ROC), Tetra Tech submits the following Termination Request for the ROC EME H-13 (AP-44) site.

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 EME SWD system is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

In a conversation between the NMOCD and ROC on February 26, 2010, NMOCD requested that ROC submit a calculation of chloride mass. The chloride mass calculation was submitted in an email dated March 1, 2010, titled, "EME H-13 Termination Request Addendum."

In the email it was stated that "Groundwater quality at L-6 allows a minimal removal of water and a high removal of chloride from groundwater. Removed groundwater will be utilized for pipeline and well maintenance. Groundwater will be pumped at a rate of approximately 1 gallon per minute."

From March 6, 2010 to March 11, 2010, the EME L-6 well was pumped to remove 1,500 gallons of water in fulfillment of the remediation requirements for the EME H-13 site.

At this time, ROC requests that the NMOCD terminate further activities at this site. If you require any additional information or have any questions or comments concerning the assessment/termination request, please call me at (432) 682-4559 or Hack Conder of ROC at (575) 393-9174.

Thank you for your attention to this matter.

Tim Reed

**Tim Reed, P.G.** | Sr. Project Manager  
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## Hansen, Edward J., EMNRD

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**From:** Reed, Timothy [Timothy.Reed@tetrattech.com]  
**Sent:** Monday, March 01, 2010 9:27 AM  
**To:** Hansen, Edward J., EMNRD  
**Cc:** Katie Jones; Hack Conder  
**Subject:** EME H-13 (AP-44) Termination Request Addendum

March 1, 2010

Mr. Hansen:

On behalf of Rice Operating Company (ROC), Tetra Tech submits the following Termination Request Addendum for the ROC EME H-13 (AP-44) site. In a conversation between NMOCD and ROC on February 26, 2010, NMOCD requested that ROC submit a calculation of chloride mass. 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 EME SWD system is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

ROC discovered an accidental discharge at the above referenced site on July 3, 2002. According to the initial C-141, approximately 10 barrels of produced water were released and 5 barrels were recovered and disposed of in the EME SWD system. The 5 barrels of produced water lost had an approximate chloride concentration of 25,000 mg/L. If all 5 barrels of lost water were to impact the aquifer, the chloride mass would be:

$5 \text{ bbls} * 42 \text{ gal/bbl} * 3.7854 \text{ L/gal} * .025 \text{ kg/L chloride} = 19.87 \text{ kg.}$

We propose to remove the calculated mass by pumping groundwater from the EME L-6 boot site to maximize environmental benefit of the chloride mass removal effort. This site has a recovery well with a 4" casing (RW-1) that will allow for a high pumping rate. In November 2009, chloride concentrations of 11,200 mg/L were observed in RW-1.

Using 11,200 mg/L (.0112 kg/L) yields:

$19.87 \text{ kg} / .0112 \text{ kg/L} / 3.7854 \text{ L/gal} = 469 \text{ gallons.}$

Groundwater quality at L-6 allows a minimal removal of water and a high removal of chloride from ground water. Removed groundwater will be utilized for pipeline and well maintenance. Groundwater will be pumped at a rate of approximately 1 gallon per minute (gpm) for approximately 8 hours per day.

If you have any questions or comments, please do not hesitate to contact us or Hack Conder at Rice Operating Company.

Thank You,

Tim Reed

**Tim Reed, P.G.** | Sr. Project Manager  
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