

# TECHNICAL MEMORANDUM

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**To:** Nevada Environmental Response Trust

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**Cc:** Nevada Division of Environmental Protection  
United States Environmental Protection Agency

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**From:** Arul Ayyaswami and Dan Pastor

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**Date:** March 23, 2018

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**Subject:** Vacuum Enhanced Recovery Treatability Study Monthly Progress Update

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At the direction of the Nevada Environmental Response Trust (NERT or Trust), Tetra Tech, Inc. (Tetra Tech) has prepared this memorandum that summarizes Tetra Tech's progress made through February 2018 toward successfully implementing the Vacuum Enhanced Recovery (VER) Treatability Study as outlined in the VER Treatability Study Work Plan (Work Plan).

## Task Progress Update: February 2018

### Task M16 – Vacuum Enhanced Recovery Treatability Study

- Task Leader – Arul Ayyaswami
- Current Status
  - The VER test and post-VER test groundwater elevation monitoring for the deep extraction well, VER-01D, were completed from February 5 through February 23, 2018. Preliminary results from the VER testing for the deep extraction well, VER-01D, indicate an approximate 20% increase in groundwater extraction rates compared to conventional pumping. Evaluation of the results is ongoing.
  - Demobilization of VER equipment was initiated following the completion of the VER-01D testing.
- Schedule and Progress Updates
  - Final demobilization will be completed in March 2018.
  - The Draft VER Treatability Study Report is under development and will be submitted in June 2018.
- Health and Safety
  - There have been no health and safety incidents related to Task M16 through February 2018.

## CERTIFICATION

### VER Treatability Study Monthly Progress Update

**Nevada Environmental Response Trust Site  
(Former Tronox LLC Site)  
Henderson, Nevada**

#### Nevada Environmental Response Trust (NERT) Representative Certification

I certify that this document and all attachments submitted to the Division were prepared at the request of, or under the direction or supervision of NERT. Based on my own involvement and/or my inquiry of the person or persons who manage the systems(s) or those directly responsible for gathering the information or preparing the document, or the immediate supervisor of such person(s), the information submitted and provided herein is, to the best of my knowledge and belief, true, accurate, and complete in all material respects.

Office of the Nevada Environmental Response Trust

Le Petomane XXVII, not individually, but solely in its representative capacity as the Nevada Environmental Response Trust Trustee

*not individually, but solely as  
President*

**Signature:** Jay A. Steinberg, not individually, but solely in his representative capacity as President of the Nevada Environmental Response Trust Trustee

**Name:** Jay A. Steinberg, not individually, but solely in his representative capacity as President of the Nevada Environmental Response Trust Trustee

**Title:** Solely as President and not individually

**Company:** Le Petomane XXVII, Inc., not individually, but solely in its representative capacity as the Nevada Environmental Response Trust Trustee

**Date:** 3/22/18

## CERTIFICATION

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I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been prepared in a manner consistent with the current standards of the profession, and to the best of my knowledge, comply with all applicable federal, state, and local statutes, regulations, and ordinances. I hereby certify that all laboratory analytical data was generated by a laboratory certified by the NDEP for each constituent and media presented herein.

**Description of Services Provided:** Vacuum Enhanced Recovery Treatability Study Progress Update, Nevada Environmental Response Trust Site, Henderson, Nevada.



March 23, 2018

**Kyle Hansen, CEM**  
Field Operations Manager/Geologist  
Tetra Tech, Inc.

Date

Nevada CEM Certificate Number: 2167  
Nevada CEM Expiration Date: September 18, 2018