

TECHNICAL MEMORANDUM

To: Nevada Environmental Response Trust

Cc: Nevada Division of Environmental Protection

From: Dan Pastor and Dana Grady

Date: March 26, 2018

Subject: Seep Well Field Area Bioremediation Treatability Study Progress Update

At the direction of the Nevada Environmental Response Trust (NERT or Trust), Tetra Tech, Inc. (Tetra Tech) has prepared this memorandum which summarizes Tetra Tech's progress during February 2018 toward successfully implementing the Seep Well Field (SWF) Area Bioremediation Treatability Study.

Task Progress Update: February 2018

Task M11 – Seep Well Field Area Bioremediation Treatability Study (SWFTS)

- Task Leader – Dana Grady/Dan Pastor
- Current Status
 - The second injection event began on January 22, 2018 and was completed on February 10, 2018. During this event, a designed carbon substrate solution was injected into 16 of the 25 injection wells based on performance monitoring results following the first injection event. Approximately 270,800 gallons of distribution water were injected into the injection wells to enhance subsurface distribution within the injection well transects. The source of the distribution water and dilution water used during carbon injections was groundwater extracted from select 4-inch monitoring wells located upgradient of the injection well transects.
 - A monthly groundwater sampling event to evaluate the effects of the second injection event was performed during the week of February 19 – 23, 2018 and results are pending.
- Schedule and Progress Updates
 - This task remains on schedule.
 - The second injection event was completed on February 10, 2018.
 - The next groundwater sampling event is scheduled for the week of March 19 – 23, 2018.
 - The third injection event will likely be performed in June 2018 pending modification of the existing access agreement; exact timing of the third injection event will be dependent on the effectiveness monitoring results.

- Health and Safety
 - There were no safety incidents related to Task M11 during February 2018.

CERTIFICATION

Seep Well Field Area Bioremediation Treatability Study 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

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: Seep Well Field Area Bioremediation Treatability Study Progress Update, Nevada Environmental Response Trust Site, Henderson, Nevada



March 26, 2018

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

Date

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