

TECHNICAL MEMORANDUM

To: Nevada Environmental Response Trust

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

From: Chris Hayes

Date: February 11, 2022

Subject: Unit 4 Source Area In-Situ Bioremediation Treatability Study Monthly Progress Report

At the direction of the Nevada Environmental Response Trust (NERT or Trust), Tetra Tech, Inc. (Tetra Tech) has prepared this memorandum to summarize Tetra Tech's progress made during December 2021 toward successfully implementing the Unit 4 Source Area In-Situ Bioremediation (ISB) Treatability Study.

Task Progress Update: December 2021

Task M21 – Unit 4 Source Area ISB Treatability Study

- Current Status
 - Phase 2 of the Unit 4 Source Area ISB Treatability Study is ongoing. The following activities were completed during December 2021 as part of the design and implementation:
 - Step-drawdown pumping tests were completed on newly installed Area 2 pilot wells (namely, U4-E-06I, U4-E-06D, U4-E-10I, and U4-E-10D) on December 4, 2021. Results from the pumping tests are being evaluated.
 - Step-rate injection tests were completed on newly installed Area 2 pilot wells (U4-E-06I, U4-E-06D, U4-E-10I, and U4-E-10D) and select wells in Area 1 (U4-E-05I, U4-E-05D, U4-E-04I and U4-E-04D) on December 16, 2021. Results from the injections tests are being evaluated.
- Schedule and Progress Updates
 - Installation of injection/extraction and monitoring wells in Area 1 is scheduled to begin in January 2022. Prior to drilling activities, a geophysical survey will be completed for all proposed well locations.
 - A request to withdraw Water Appropriation Permit #87707E and a Water Appropriation Permit Application package for the Unit 4 Source Area In-Situ Bioremediation Treatability Study was submitted to the Nevada Division of Water Resources on 9/14/21.
 - The Area 2 pilot well data evaluation is scheduled to be completed in January 2022, with a summary of the data and recommendation on Area 2 path forward submitted to NDEP for review.

- Conversations with Borman Specialty Materials regarding a gate location and road requirements for the truck route from the Unit 4 building to the Unloading Area are ongoing. A decision on the gate location and road requirements is expected to be reached in January 2022.
- Health and Safety
 - There were no health and safety incidents related to Task M21 during December 2021.

CERTIFICATION

Unit 4 Source Area In-Situ Bioremediation Treatability Study Monthly Progress Report


**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

Signature:  Not Individually, but Solely as President of the Trustee, 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: 2/11/22

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: Prepared Unit 4 Source Area In-Situ Bioremediation Treatability Study Monthly Progress Report.



David S. Wilson, CEM

Principal Engineer

Tetra Tech, Inc.

Nevada CEM Certificate Number: 2385

Nevada CEM Expiration Date: September 19, 2022

February 11, 2022

Date