

# TECHNICAL MEMORANDUM

To:	Nevada Environmental Response Trust
Cc:	Nevada Division of Environmental Protection United States Environmental Protection Agency
From:	Chris Hayes
Date:	January 10, 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 November 2021 toward successfully implementing the Unit 4 Source Area In-Situ Bioremediation (ISB) Treatability Study.

## Task Progress Update: November 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 November 2021 as part of the design and implementation:
    - A 30-day power study of the proposed power source for the treatability study was completed on November 8, 2021. Results from the power study are being utilized in the electrical design.
    - Installation and development of the four pilot wells was completed on November 12, 2021.
    - Groundwater sampling of the four newly installed pilot wells was completed on November 16, 2021. Groundwater analytical results will be provided in future monthly progress reports as the data are received from the laboratory.
    - Aquifer testing of the four newly installed pilot wells to determine baseline hydraulic conditions began in November. Slug tests were completed on November 20, 2021, while the step-drawdown pumping tests and step-rate injection tests are ongoing.
- Schedule and Progress Updates
  - Step-drawdown pumping tests and step-rate injection tests are scheduled to be completed in December.
  - The Area 2 pilot well data evaluation is scheduled to be completed in December.
- Health and Safety
  - There were no health and safety incidents related to Task M21 during November 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

Not Individually, but Solely as President of the Trustee Signature: , not individually, e capacity as President of the Nevada Environmental Response Trust Trustee but solely in his Jay & Steinberg, not individually, but solely in his representative capacity as President of the Nevada Name:

**Name:** Jay A. Steinberg, not individually, but solely in his representative capacity as President of the Neva 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

1/10/22 Date:

## 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.

January 10, 2022

Date

**David S. Wilson, CEM** Principal Engineer Tetra Tech, Inc.

Nevada CEM Certificate Number: 2385 Nevada CEM Expiration Date: September 19, 2022