

MEMO

Date **June 22, 2018**
To **Nevada Environmental Response Trust**
From **John Pekala, Scott Warner, and Chris Ritchie**
Copy to **Nevada Division of Environmental Protection**
United States Environmental Protection Agency
Subject **In-Situ Bioelectrochemical Laboratory-Scale Treatability Study Monthly Progress Report**

Task Progress Update: May 2018

At the direction of the Nevada Environmental Response Trust (NERT or Trust), Ramboll US Corporation (Ramboll) has prepared this memorandum which summarizes Ramboll's progress during May 2018 toward successfully implementing the In-Situ Bioelectrochemical Laboratory-Scale Treatability Study.

Task M24 – In-Situ Bioelectrochemical Laboratory-Scale Treatability Study

- Task Leader – Scott Warner / Chris Ritchie
- Current Status
 - Site soil and groundwater samples have been collected and are stored for use in laboratory-scale studies underway at Colorado State University (CSU).
 - Baseline groundwater sample analyses have been performed at CSU for anions (including perchlorate, chlorate, and nitrate), cations, total organic carbon (TOC), total inorganic carbon (TIC), pH, electrical conductivity, total dissolved solids (TDS), and metals (Cr, As, Mn, and Fe). Preliminary data will be provided as they become available.
 - A divided electrochemical batch reactor has been constructed and instrumented. Membrane testing is underway and is expected to be completed by June 19.
- Schedule and Progress Updates
 - This task remains on schedule.
 - Batch testing using Site groundwater is planned to continue through the end of June.
 - Column testing will be initiated following batch testing. Allowing time for experimental design and column set-up, column testing is currently anticipated to begin mid July.
- Health and Safety
 - There were no safety incidents during May 2018.



In-Situ Bioelectrochemical Laboratory-Scale Treatability Study Progress Update

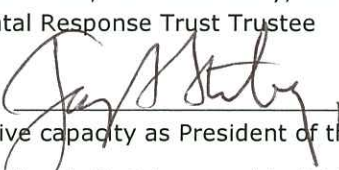
**Nevada Environmental Response Trust Site
(Former Tronox LLC Site)
Henderson, Nevada**

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

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

not individually but solely as President

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: June 20, 2018

In-Situ Bioelectrochemical Laboratory-Scale Treatability Study Progress Update

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

Responsible Certified Environmental Manager (CEM) for this project

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 In-Situ Bioelectrochemical Laboratory-Scale Treatability Study Progress Update, Nevada Environmental Response Trust Site, Henderson, Nevada



June 22, 2018

John M. Pekala, PG
Principal

Date

Certified Environmental Manager
Ramboll Environ US Corporation
CEM Certificate Number: 2347
CEM Expiration Date: September 20, 2018