

April 20, 2018

Dr. Weiquan Dong, PE  
Bureau of Corrective Actions, Special Projects Branch  
Nevada Division of Environmental Protection  
2030 E. Flamingo Rd., Suite 230  
Las Vegas, Nevada 89119

**Subject: Contingency Plan for Unit 4 Source Area In-Situ Bioremediation Treatability Study, Pre-Implementation Field Activities**

Dear Mr. Dong:

At the direction of the Nevada Environmental Response Trust (NERT or Trust), Tetra Tech, Inc. (Tetra Tech) has prepared this Contingency Plan to support pre-implementation activities for the Unit 4 Source Area In-Situ Bioremediation Treatability Study. The scope of work for these activities is detailed in the Unit 4 Source Area In-Situ Bioremediation Treatability Study Work Plan (Work Plan), dated February 5, 2018, and approved by the Nevada Division of Environmental Protection (NDEP) on February 21, 2018. Tetra Tech will install soil borings, infiltration testing areas, injection wells, extraction wells, and monitoring wells to support the pre-implementation activities. Investigation derived waste (IDW), including soil cuttings, excavated soil, concrete, asphalt, well development water, and decontamination water, will be managed in accordance with Section 4.2.1 of the Site Management Plan, Revision 3 (SMP), characterized in accordance with Section 4.2.2.1 of the SMP, and transported off site for disposal consistent with profiling and generating waste manifests.

Per the Work Plan, some of these activities will occur within 50 feet of a groundwater extraction treatment system (GWETS) component. The GWETS components that may be affected during pre-implementation activities include existing monitoring wells. As per Section 5.7 of the SMP, this Contingency Plan outlines protection measures to be implemented to prevent damage of any nearby monitoring wells.

### **Protection Measures**

Personnel and subcontractors will protect the GWETS components by using the following precautions and procedures during pre-implementation field activities:

- Cones, caution tape, or safety fence will be installed as a visual indicator and protective barrier around the monitoring wells before activities involving heavy equipment are performed in the proximity of the wells.
- Daily health and safety "tailgate" meetings will be held prior to the start of field work. During that time, the Health and Safety Plan (HASP) will be reviewed. Discussions of health and safety hazards and preventions will also be held at that time. The names and contact numbers for all Tetra Tech field staff and Tetra Tech subcontractors will be confirmed. Clear lines of communication will be established to ensure a swift and coordinated response to a potential release.
- A task-specific Activity Hazard Analysis (AHA) will be prepared and reviewed prior to beginning each new task. Hazards related to each step of a task will be identified, including working in proximity to existing GWETS components. Procedures needed to mitigate those hazards will be identified and implemented.

- Equipment transport routes will be established to avoid an encounter with exposed monitoring wells. Drivers and operators will be well-informed of the hazards prior to operating equipment at the facility.
- The roll-off disposal bins for storing the soil cuttings will be staged a minimum of 100 feet away from any existing monitoring wells.
- Work areas will be delineated as necessary to avoid unauthorized entry into the work area.
- Staging areas and parking areas will be identified with cones, delineators, caution tape, or safety fence.
- A designated spotter will be used during movement of heavy machinery. A policy of no vehicle backing without performing a 360-degree inspection and spotter guidance will be enforced.

**Response Procedures**

The construction personnel will be informed of the following response procedures in the event of a release:

- The immediate action taken in response of a release of untreated groundwater during the pre-implementation field activities will be to shut down and contain any uncontrolled flow.
- If Tetra Tech’s activities result in the release of untreated groundwater, the release will be reported to the NDEP 24-Hour Spill Notification Line, if required by NAC 445A.345 to 445A.348.

Please contact us at (303) 447-1823 if you have any questions. Tetra Tech appreciates the opportunity to provide this Contingency Plan.

Sincerely,

Tetra Tech, Inc.



Dan Pastor  
Project Manager



Kyle Hansen  
Field Operations Manager

cc: BMI Compliance Coordinator, NDEP, BCA, Las Vegas

ec: James Dotchin, NDEP  
James Carlton Parker, NDEP  
Nevada Environmental Response Trust  
Tanya O’Neill, Foley & Lardner LLP  
John Pekala, Ramboll

## CERTIFICATION

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### Contingency Plan for Unit 4 Source Area In-Situ Bioremediation Treatability Study

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:** 4/19/18

## 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.

**Description of Services Provided:** Prepared Contingency Plan for Unit 4 Source Area In-Situ Bioremediation Treatability Study.



April 20, 2018

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

Date

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