

**Via Electronic Mail**

Dr. Weiquan Dong, PE  
Bureau of Industrial Site Cleanup  
Nevada Division of Environmental Protection  
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Las Vegas, Nevada 89119

**SMP-REQUIRED NOTIFICATIONS AND CONTINGENCY PLAN FOR  
TRENCHING AS PART OF THE BARRIER WALL INTEGRITY EVALUATION  
NEVADA ENVIRONMENTAL RESPONSE TRUST SITE  
HENDERSON, NEVADA**

Dear Dr. Dong:

July 30, 2018

On behalf of the Nevada Environmental Response Trust ("NERT" or the "Trust"), Ramboll US Corporation (Ramboll) is pleased to present this notification and Contingency Plan for upcoming trenching work to be performed as part of the barrier wall integrity evaluation in progress at the NERT site in Henderson, Nevada. The work will be conducted by Ramboll and subcontractors and is scheduled to take place in late July to mid-August 2018. This document has been prepared in accordance with the Site Management Plan (SMP), Revision 4, dated March 22, 2018 ("SMP"; Ramboll US Corporation, 2018) and approved by NDEP on March 29, 2018. The Trust has been advised of and approves this document. Approval of this document by the Nevada Division of Environmental Protection (NDEP) is required prior to initiating the work described herein.

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This document addresses the following notifications and requirements of the SMP:

- Section 4.7 describes notifications and procedures to follow in the event of an emergency project related to an accidental spill or release.
- Section 5.3 requires notification to and approval from NDEP and the Trust for work to be performed within 50 feet of any on-site GWETS component or monitoring well.
- Section 5.6 requires notification to and approval from NDEP, the Trust and the GWETS operator if access to an on-site monitoring well or GWETS component is restricted.
- Section 5.7 requires submittal of a contingency plan to NDEP and the Trust for approval, describing actions to be taken in case of accidental release of untreated groundwater due to damage to any GWETS component.

## **BACKGROUND INFORMATION**

The previously completed small-scale ground penetrating radar (GPR) and electromagnetic (EM) survey did not produce sufficient results to identify the location of the barrier wall. Subsequent air vacuum (air knife) excavations and Cone Penetrometer Testing (CPT) probes did not identify the top of the barrier wall. It is now proposed to excavate three limited-extent trenches transecting the estimated location of the wall to identify the uppermost portion of the wall (Figure 1).

This work will be conducted in general accordance with the approved Barrier Wall Integrity Field Evaluation Work Plan developed as part of the NERT Remedial Investigation and Feasibility Study. Although the original plan did not include excavations, these activities are an extension of the ongoing effort to locate the precise location of the top of the barrier wall. The work will follow the NDEP-approved Sampling and Analysis Plan, Revision 1 (SAP) for the site. The SAP is comprised of the Field Sampling Plan ("FSP"; ENVIRON 2014a), Health and Safety Plan ("HASP"; ENVIRON 2014b), and the Quality Assurance Project Plan ("QAPP"; Ramboll Environ 2017).

## **ANTICIPATED ACTIVITIES**

Three limited-extent trenches will be excavated perpendicular (north-south) to the estimated location of the barrier wall to expose the top of the wall, identify the bentonite slurry mixture, and survey the locations of the barrier wall. The trenches are anticipated to be up to 50 feet long, 20 feet deep, and only as wide as needed (typically only as wide as the bucket of a backhoe). Ramboll will apply stabilized Lake Mead water from the on-site water supply daily to the ground surface at the location of the proposed excavation five times prior to excavation. This will serve to control dust during the initial portions of the excavation and should hydrate some of the bentonite in the soil slurry, which may make the barrier wall easier to identify during excavation. Ramboll will work directly with Envirogen Technologies, Inc. (ETI), the GWETS operator, to evaluate each location for potential subsurface utilities prior to trenching. Ramboll will also utilize air vacuum (air knife) technology, as needed, to "daylight" underground components of the GWETS system to ensure an accurate utility locate. The subsurface work will also follow the SMP, accordingly.

## **CONTINGENCY PLAN**

Per Sections 5.3 and 5.7 of the SMP, this document serves as notification of work to be performed within 50 feet of on-site GWETS components or monitoring wells and a Contingency Plan to NDEP and the Trust regarding field activities that have the potential for release of untreated groundwater. The purpose of the Contingency Plan is to describe the action to be take in case of accidental release of untreated groundwater while performing activities described herein.

## **Precautions**

Ramboll and subcontractor personnel will implement the following precautions and procedures during implementation of the field activities:

- Daily health and safety "tailgate" meetings will be held prior to the start of field work. In addition to discussions of health and safety hazards and prevention, the names and mobile phone numbers for all field staff and subcontractors will be confirmed. Clear lines of communication will be established each day to ensure a swift and coordinated response to a release.

- ETI will be advised of work that may impact their operations (i.e. work within 50 feet of any GWETS component).
- Ramboll will work directly with ETI to evaluate each potential trench location prior to beginning trenching activities.
- Trenching that will occur near the GWETS system components will be preceded by utility locating using air knife technology to “daylight” underground components of the system before excavation work proceeds.

### **Spill Response Procedures**

- The primary response action for a release of untreated groundwater during field activities will be to shut down and contain any uncontrolled flow. Pumping, vacuum and containment equipment will be available as needed. However, based on the depth of planned excavation groundwater will not likely be encountered.
- A spill response kit will be readily available during field activities and utilized in the event of a release of untreated groundwater.
- As described in the SMP, if release of untreated groundwater occurs, Ramboll will immediately notify Steve Clough of the Trust at (702) 960-4309, who will then notify Weiquan Dong of NDEP at (702) 486-2850, extension 252. If any GWETS components are shut down due to damage from the release of groundwater, Ramboll will provide NDEP, the Trust and ETI with a written explanation for the shutdown.
- The release of untreated groundwater due to field activities will be reported to the NDEP 24-hour Spill Notification line, if required by NAC 445A.345 to 445A.348.

### **EMERGENCY PROJECTS**

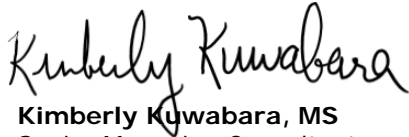
In the event of accidental spill or release that could qualify as an emergency project, Ramboll will prepare an Emergency Project notification for approval by the Trust and NDEP. Upon approval of the Emergency Project status by NDEP, a work plan for cleanup will be prepared and submitted in general accordance with Section 4.7 of the SMP.

### **REQUEST FOR APPROVAL**

These notifications and Contingency Plan provide information required by the SMP for implementation of trenching work to be performed as part of the barrier wall integrity evaluation at the NERT site. Your approval of the notifications and Contingency Plan is requested and appreciated.

We would appreciate your prompt review of this document. Please contact Kimberly Kuwabara at (510) 420-2525 or [kkuwabara@ramboll.com](mailto:kkuwabara@ramboll.com) if you have any comments or questions concerning the notifications or Contingency Plan.

Sincerely,



**Kimberly Kuwabara, MS**  
Senior Managing Consultant

CEM #2353, expires 3/20/2019



**John M. Pekala, PG**  
Principal

CEM #2347, expires 9/20/2018

Ec: James Dotchin, NDEP-BISC, Nevada Environmental Response Trust  
Tanya O'Neill, Foley & Lardner LLP  
Wendy Prescott, ETI

**ATTACHMENTS:**

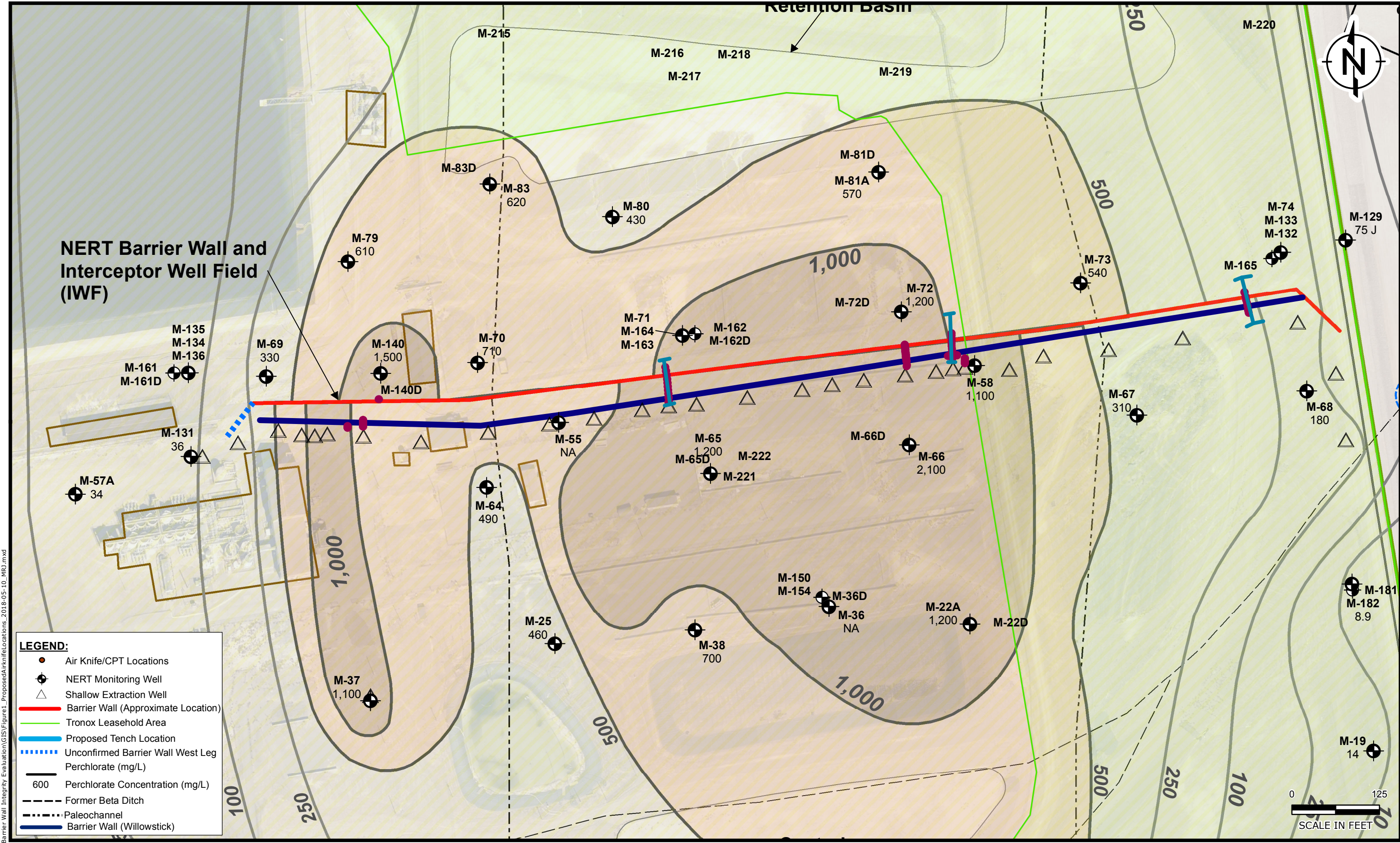
Figure 1- Proposed Trench Locations

**REFERENCES:**

- ENVIRON, 2014a. Field Sampling Plan, Revision 1; Nevada Environmental Response Trust Site; Henderson, Nevada. July 18. NDEP approved August 1, 2014.
- ENVIRON, 2014b. Health and Safety Plan for Remedial Investigation and General Site Activities, Revision 1; Nevada Environmental Response Trust Site; Henderson, Nevada. July 18. NDEP approved August 1, 2014.
- Ramboll ENVIRON, 2017. Quality Assurance Project Plan, Revision 2; Nevada Environmental Response Trust Site; Henderson, Nevada. October 26. NDEP approved November 8, 2017.
- Ramboll US Corporation, 2018. Site Management Plan (SMP), Revision 4; Nevada Environmental Response Trust Site; Henderson, Nevada. March 22. NDEP approved March 29, 2018.

**FIGURES**





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**Proposed Trench Locations**  
 Nevada Environmental Response Trust Site  
 Henderson, Nevada

**FIGURE 1**  
 PROJECT: 1690006943-033



SMP-Required Notifications and Contingency Plan for Trenching as Part of the  
Barrier Wall Integrity Evaluation  
Nevada Environmental Response Trust Site  
Henderson, Nevada

**SMP-Required Notifications and Contingency Plan for Trenching as  
Part of the Barrier Wall Integrity Evaluation**

**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 system(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, Inc., not individually, but solely in its representative capacity as the Nevada Environmental Response Trust Trustee

**Signature:** Jay A. Steinberg, 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:** 7/31/18



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(Former Tronox LLC Site)  
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### **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 provided 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.



July 30, 2018

**John M. Pekala, PG**  
**Senior Manager**

Date

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

The following individuals provided input to this document:

Kimberly Kuwabara

