

OFFICE OF THE NEVADA ENVIRONMENTAL RESPONSE TRUST TRUSTEE

Le Petomane XXVII, Inc., Not Individually, But Solely as the Nevada Environmental Response Trust Trustee
35 East Wacker Drive - Suite 690
Chicago, Illinois 60601
Tel: (702) 960-4309

March 19, 2020

Dr. Weiquan Dong, P.E.
Bureau of Industrial Site Cleanup
Nevada Division of Environmental Protection
2030 E. Flamingo Rd, Suite 230
Las Vegas NV 89119

RE: Phase 3 Remedial Investigation Modification No. 8, Revision 1
Nevada Environmental Response Trust
Henderson, Nevada

Dear Dr. Dong:

The Nevada Environmental Response Trust (NERT) is pleased to present the revised Phase 3 Remedial Investigation (RI) Modification No. 8 for Nevada Division of Environmental Protection (NDEP) review. This revised RI modification addresses NDEP comments in your February 3, 2020 letter. As requested, an annotated response to comments is also attached to this letter. All data obtained as a result of the proposed effort will be evaluated in the forthcoming RI Report for OU-3 and will aid in determining the nature of perchlorate mass flux increases observed in 2019 at Northshore Road.

If you have any questions or concerns regarding this matter, feel to contact me at (702) 960-4309 or at steve.clough@nert-trust.com.

Office of the Nevada Environmental Response Trust



Stephen R. Clough, P.G., CEM
Remediation Director
CEM Certification Number: 2399, exp. 3/24/21

Cc (via NERT Sharefile Distribution):

Jeff Kinder, NDEP, Deputy Administrator
Frederick Perdomo, NDEP, Deputy Administrator
James Dotchin, NDEP, Chief, Bureau of Industrial Site Cleanup
Carlton Parker, NDEP, Bureau of Industrial Site Cleanup
Alan Pineda, NDEP, Bureau of Industrial Site Cleanup
Christa Smaling, NDEP, Bureau of Industrial Site Cleanup
Alison Fong, U.S. Environmental Protection Agency, Region 9
Mark Duffy, U.S. Environmental Protection Agency, Region 9
Jay Steinberg, as President of the Nevada Environmental Response Trust Trustee and not individually
Andrew Steinberg, as Vice President of the Nevada Environmental Response Trust Trustee and not individually
Brian Loffman, Le Petomane, Inc.
Tanya C. O'Neill, Foley and Lardner, LLP

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Allan DeLorme, Ramboll
John Pekala, Ramboll
Kim Kuwabara, Ramboll
Dan Pastor, Tetra Tech
David Bohmann, Tetra Tech

Cc (via NERT Stakeholder Sharefile Distribution):

Betty Kuo, Metropolitan Water District of Southern California
Brenda Pohlmann, City of Henderson
Carol Nagai, Metropolitan Water District of Southern California
Dave Johnson, LV Valley Water District
David Parker, Central Arizona Project
Eric Fordham, Geopentech
Jill Teraoka, Metropolitan Water District of Southern California
Kevin Fisher, LV Valley Water District
Marcia Scully, Metropolitan Water District of Southern California
Maria Lopez, Metropolitan Water District of Southern California
Mauricio Santos, Metropolitan Water District of Southern California
Mickey Chaudhuri, Metropolitan Water District of Southern California
Orestes Morfin, Central Arizona Project
Peggy Roefer, Colorado River Commission
Steven Anderson, LV Valley Water District
Todd Tietjen, Southern Nevada Water Authority

Cc (via NERT BMI Companies Sharefile Distribution):

Anna Springsteen, Neptune Inc.
Kirk Stowers, Broadbent Inc.
Kristen Lockhart, Neptune Inc.
Kurt Fehling, The Fehling Group
Patti Meeks, Neptune Inc.
Paul Black, Neptune Inc.
Paul S. Hackenberry, Hackenberry Associates
John Edgcomb, Edgcomb Law Group
Andrew Barnes, Geosyntec
Brian Waggle, Hargis + Associates
Chinny Esakkiperumal, Olin Corporation
Chuck Elmendorf, Stauffer
Curt Richards, Olin Corporation
Dave Share, Olin Corporation
Ebrahim Juma, Clean Water Team
Ed Modiano, de maximus
Gary Carter, Endeavour LLC
George Crouse, Syngenta
Jeff Gibson, Endeavour LLC
Joanne Otani, Joanne M. Otani LLC
Joe Kelly, Montrose Chemical
Joe Leedy, Clean Water Team
Kelly McIntosh, GEI Consultants
Kevin Lombardozzi, Valhi
Kyle Gadley, Geosyntec
Lee C. Farris, Landwell
Mark Paris, Landwell
Michael Bogle, Womble Carlyle Sandridge & Rice, LLP
Michael Long, Hargis + Associates
Nick Pogoncheff, PES Environmental, Inc.

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Ranajit Sahu, BRC
Richard Pfarrer, TIMET
Rick Kellogg, BRC
John Holmstrom, EMD

NDEP Comment	Response to Comment
Deliverable Comments	
<p>1. One of this modification goals is to determine the perchlorate plume extent in northern bank of the Las Vegas Wash. The new wells proposed are not well justified if they will be appropriate locations to be determined the northern extent of the perchlorate plume. NDEP suggests that NERT study all existing data of the groundwater table elevations and perchlorate concentrations and draw possible contours of groundwater table elevations and perchlorate concentrations. New wells should be placed to potential perchlorate plume extent that is based on either the BMI Regional Goals and Directives (NDEP, 2016) or 18 ppb that the Nevada Division of Environmental Protection has established as a provisional action level for Nevada.</p>	<p>The elevation changes in ground surface and hydraulic gradient between the USGS well (USGS-SE) and the north side of the Las Vegas Wash (LVW) have been further evaluated based on current knowledge of conditions on the north side of the wash and the results of these evaluations have been discussed and illustrated in the Modification No. 8 Technical Memorandum to provide additional justification for the planned drilling/well locations on the north side of the LVW. The positions for the N-1 through N-7 investigation locations have been selected to provide the additional data necessary to understand hydraulic gradients, groundwater flow directions, and perchlorate concentrations north of the LVW.</p>
<p>2. "Nested groundwater monitoring wells on the south side of the LVW adjacent to the Three Kids Weir are needed to better understand the geology, hydrology, and contaminant transport in this area." Was recommended in the Data Gap Investigation - Phase II Groundwater Quality Assessment (AECOM, November, 2019). NDEP suggests NERT address this recommendation in this modification.</p>	<p>Additional deeper well NERT3.60S1-D, to be screened from 63 to 78 ft below ground surface (bgs), has been added to the Modification No. 8 scope of work. This new well will be adjacent to the Three Kids Weir and will form a cluster with existing well NERT3.60S1, which is screened from 35 to 55 ft bgs. This will provide nearly 100 percent screened coverage from the top of the water table (approximately 35 ft bgs) to competent bedrock (approximately 78 ft bgs) at this location and will provide additional information regarding geology, hydrogeology, and contaminant transport near the Three Kids Weir.</p>
<p>3. NDEP suggests that NERT run particle tracking from upper gradient high groundwater perchlorate concentration areas of the proposed transects and estimate the perchlorate mass flux crossing the transects (S-1 to S-7) with Phase 6 model and justify if these transects are needed.</p>	<p>To assist the positioning of the S-1 through S-7 drilling locations, Ramboll conducted a groundwater particle tracking evaluation between Galleria Drive and the LVW using the Phase 6 Model. An additional figure (Figure 3) was added to the Modification No. 8 Technical Memorandum to present the results of the particle tracking evaluation showing the hypothetical flow paths of particles released along Galleria Drive. The results of this evaluation, as discussed in the Technical Memorandum, illustrate that the S-1 through S-7 drilling locations are well positioned to provide the data necessary to fulfill the objectives of the proposed scope of work. The locations of S-6 and S-7 are particularly well situated to evaluate groundwater conditions along the projected paleochannel identified beneath the Weston Hills neighborhood.</p>