OFFICE OF THE NEVADA ENVIRONMENTAL RESPONSE TRUST TRUSTEE

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January 7, 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: Revised Unit Buildings 4 and 5 Source Area Characterization Report
Nevada Environmental Response Trust
Henderson, Nevada

Dear Dr. Dong:

The Nevada Environmental Response Trust (NERT) is pleased to present the Revised Unit Buildings 4 and 5 Source Area Characterization Report for Nevada Division of Environmental Protection (NDEP) review. This document has been revised to address NDEP's comments provided in your November 7, 2019 letter. As requested an annotated response-to-comments is also provided. Ultimately the data in this report, as well as the forthcoming Remedial Investigation (RI) Reports, will be used to define the nature and horizontal and vertical extent of contamination across the NERT RI Study Area and ultimately support the selection of appropriate remedial action alternatives that achieve the Remedial Action Objectives established for OU-1 and OU-2.

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

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

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NDEP Comment	Response to Comment
*1. **Executive Summary, Contaminant Distribution in Soil, first paragraph, first sentence —** The text states that "perchlorate was observed...at concentrations that exceeded the Leaching-based Basic Comparison Level (LBCL) of 0.0155 milligrams per kilogram (mg/Kg) (NDEP, 2017). However, NDEP's July 2017 BCL Table lists a DAF 1 LBCL of 0.0185 mg/kg and DAF 20 LBCL of 0.371 mg/kg for perchlorate. Please correct this discrepancy.*	The leaching-based soil screening level was calculated with the methodology of the 2017 NDEP LBCL calculation table using a groundwater screening level of 0.015 mg/L, which is the federal Interim Drinking Water Health Advisory, federal Preliminary Remediation Goal (PRG), and groundwater screening level used in NERT's ongoing Remedial Investigation (RI). The text has been revised with the correct reference to the screening level.
2. ***Executive Summary, Contaminant Distribution in Groundwater, first paragraph, first sentence** — The text states that "perchlorate exceeded the groundwater Basic Comparison Level (BCL) of 0.015 milligrams per liter (mg/L)." However, NDEP's July 2017 BCL Table lists 0.0234 mg/L as the BCL for perchlorate. Please correct this discrepancy.*	A groundwater screening level of 0.015 mg/L was selected as this is the federal Interim Drinking Water Health Advisory, federal PRG, and groundwater screening level used in NERT's ongoing Remedial Investigation. The text has been revised with the correct reference to the screening level.
*3. **Section 3.2.8 Investigation-Derived Waste Management—**The second to last bullet point in this section does not identify the USEPA Method used for TCLP VOC analysis.*	The USEPA Method for VOCs has been added in the text.
*4. **Section 4.2 Soil Sampling Results, and Section 4.4 Groundwater Sampling Results —** The text in the first paragraph of each of these sections states that "for purposes of defining the COPCs that are present in this source area an exceedance frequency of 10% was selected." What basis was used for the selection of the 10% threshold?*	The primary objectives outlined in the work plan were to characterize the nature and extent, and mass of perchlorate and hexavalent chromium in soil and groundwater within the investigation area. Although other chemicals were eventually summarized in the Source Area Investigation Report, the selection of the 10% threshold was chosen to screen out chemicals that were sporadically detected within the investigation area, and retain focus on the original project objectives. The first paragraph in Section 4.2 states "Any constituent present, but not detected above the LBCL greater than 10% of the time, is reported in Appendices F and G but not discussed in the report since the focus was to identify the constituents that pose the greatest threat to groundwater contamination at OU-1, OU-2, and OU-3."
*5. **Table 4 LBCL Exceedances, Section 4.2.1.1 Perchlorate in Soil, and Appendix F Analytical Summary Tables** —The DAF 1 and DAF 20 LBCLs for perchlorate in Table 4, Section 4.2.1.1, and Appendix F do not match the respective LBCLs in NDEP's July 2017 BCL Table. Please correct this discrepancy, and update the LBCL Exceedances for perchlorate in Table 4 if those values are affected by this correction.*	The leaching-based soil screening level was calculated with the methodology of the 2017 NDEP LBCL calculation table using a groundwater screening level of 0.015 mg/L, NERT's RI groundwater screening level, which is the federal Interim Drinking Water Health Advisory, and federal PRG. The table has been revised with the correct reference to the screening level.

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*6. **Table 4 LBCL Exceedances, and Section 4.2.1.5 Nitrate in Soil —** For nitrate, the DAF 1 and DAF 20 LBCLs in Table 4, and the DAF 20 LBCL in Section 4.2.1.5 do not match the respective LBCLs in NDEP's July 2017 BCL Table. Please correct this discrepancy, and update the LBCL Exceedances for nitrate in Table 4 if those values are affected by this correction.*	Table 4 and Section 4.2.1.5 have been updated with the requested LBCL values for Nitrate.
*7. **Table 4 LBCL Exceedances, Section 4.2.1.7 Iron in Soil, and Section 4.2.1.8 Manganese in Soil** —Table 4 lists LBCL values for Iron and Manganese, but Section 4.2.1.7 and 4.2.1.8 identify the same values as BCLs. Please clarify whether the values are BCLs or LBCLs, and ensure that the values being used match those in NDEP's July 2017 BCL Table.*	Sections 4.2.1.7 and 4.2.1.8 have been revised to refer to these values as LBCLs for consistency with Table 4. The LBCLs for Iron and Manganese have been calculated with the methodology of the 2017 NDEP LBCL calculation table using their respective 2017 groundwater BCLs.
*8. **Table 9 BCL Exceedances in Groundwater from Permanent Wells —** Table 9 lists 0.0015 mg/L as the BCL for perchlorate. However, NDEP's July 2017 BCL Table lists 0.0234 mg/L as the BCL for perchlorate. Please correct this discrepancy, and update the BCL Exceedances for perchlorate in Table 9 if that value is affected by this correction.*	NERT's RI groundwater screening level of 0.015 mg/L was selected as this is the federal Interim Drinking Water Health Advisory and federal PRG. The text has been revised with the correct reference to the screening level.
*9. **Table 11 BCL Exceedances in Groundwater from Temporary Wells** - Table 11 lists 0.015 mg/L as the BCL for perchlorate. However, NDEP's July 2017 BCL Table lists 0.0234 mg/L as the BCL for perchlorate. Please correct this discrepancy, and update the BCL Exceedances for perchlorate in Table 11 if that value is affected by this correction.*	NERT's RI groundwater screening level of 0.015 mg/L was selected as this is the federal Interim Drinking Water Health Advisory and federal PRG. The table has been revised with the correct reference to the screening level.
*10. **Section 4.4.3.1 Perchlorate in Groundwater, first sentence** - The text states that "Perchlorate exceeded the groundwater BCL of 0.015 (mg/L) throughout most of the Investigation Area." However, NDEP's July 2017 BCL Table lists 0.0234 mg/L as the BCL for perchlorate. Please correct this discrepancy.*	NERT's RI groundwater screening level of 0.015 mg/L was selected as this is the federal Interim Drinking Water Health Advisory and federal PRG. Section 4.4.3.1 has been revised with the correct reference to the screening level.
*11. **Section 4.5.2.2 Chlorate in Groundwater, first paragraph, last sentence** - Change text from "G-39 and G-40" to "H-39 and H-40."*	Section 4.5.2.2 has been updated.
*12. **Section 4.5.2.4 Hexavalent Chromium in Groundwater, first paragraph, first sentence** - Change text from "G-46 to G-50" to "H-46 to H-50."*	Section 4.5.2.4 has been updated.

NDEP Comment	Response to Comment
*13. **Executive Summary Constituent of Concern Mass Estimates Table, Sections 4.5.1 and 4.5.2 COPC Plume Configuration in Soil/Groundwater, and Table 13 COPC Mass Estimates** - The mass estimate values (both Nominal and Statistical Range) presented for each analyte should be the same throughout the report; values for some analytes (i.e. TDS) are noticeably different between the identified Tables/Sections. Please double-check all values for each analyte, and make corrections where necessary to ensure consistency throughout the report.*	The mass estimate values presented in the Executive Summary Constituent of Concern Mass Estimates Table, Sections 4.5.1 and 4.5.2, and Table 13 have been revised to be consistent.