

# Nevada Environmental Response Trust Site

## Annual 2022 Update

### Fact Sheet #12

HENDERSON, NEVADA

Updated January 2023

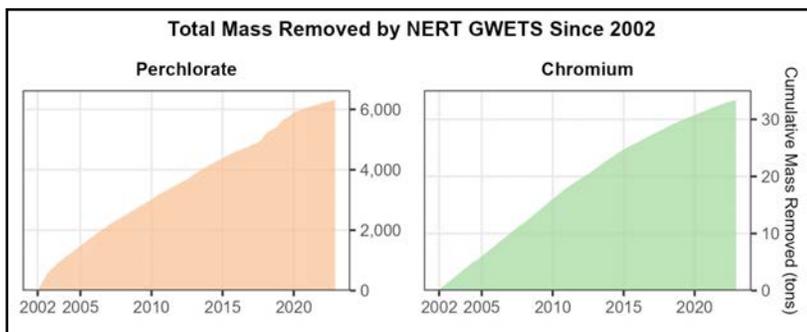
Una versión en español de este documento también está disponible en el sitio web [www.NERT-Trust.com](http://www.NERT-Trust.com) o al contactar a James Dotchin (JD) por teléfono (702-668-3914) o por correo electrónico ([jdotchin@ndep.nv.gov](mailto:jdotchin@ndep.nv.gov)).

**Overview** — The Nevada Division of Environmental Protection (NDEP) and the United States Environmental Protection Agency (USEPA) oversee cleanup activities at the Nevada Environmental Response Trust (NERT) Site. The NERT Site is part of the Black Mountain Industrial (BMI) Complex in Henderson, Nevada. The NERT, also called the Trust, was created in 2011 as part of Tronox Inc.'s bankruptcy and the NERT Site was conveyed to the Trust at that time. The Trust does not conduct any business at the NERT Site; its primary purpose is to implement environmental cleanup activities to address contamination from historic operations at the NERT Site that occurred prior to the Trust's formation.

#### Key Facts:

- NDEP has been sharing its progress on the cleanup with the community since 2007; this fact sheet gives the community an update on activities performed in 2022.
- The cleanup of groundwater contaminated by former operations at the NERT Site began in 1987 and continues today. Approximately 235,000 pounds of perchlorate contamination were removed from the environment in 2022; since treatment began, the total amount of perchlorate removed is approximately 12.7 million pounds.
- **Groundwater is not a source of drinking water in the City of Henderson.**
- The groundwater extraction and treatment system (GWETS) has reduced the amount of perchlorate contamination from the NERT Site entering the Las Vegas Wash, which flows into Lake Mead, by more than 90% relative to 2000 levels, increasing the overall water quality of Lake Mead and all downstream users of the Colorado River.
- Planned investigations regarding the nature and extent of contamination are complete.
- Six key documents evaluating area investigations were submitted by NERT over the past 18 months representing over 9,000 pages of material.
- Various groundwater treatment options are currently being tested to determine the best long-term solutions.

**Cleanup at the NERT Site** — Historical operations at the NERT Site, which has been used for various industrial operations since 1942, contaminated the soil and underlying groundwater with four primary chemicals. Perchlorate and chlorate – the most widespread of the four – were historically manufactured at the NERT Site. These chemicals are often used to produce rocket fuel, missiles, fireworks, flares, and explosives. Two additional chemicals – hexavalent chromium and chloroform – while not manufactured at the NERT Site, have been detected in lesser quantities at the NERT Site. Some of this contamination has moved off-site in groundwater, as far north as the Las Vegas Wash. Process wastewater from historical operations also migrated northeast of the NERT Site through unlined ditches into unlined ponds. The unlined ditches were not used for process wastewater after 1976 and the unlined off-site ponds have been closed. The Trust continues to operate a groundwater extraction and treatment system (GWETS) which has reduced contamination to the Las Vegas Wash from the NERT Site by more than 90% relative to 2000 levels.



NERT is evaluating the contamination in an established area called the NERT Remedial Investigation Study Area (Study Area). This Study Area includes the NERT Site and areas to the north, east, and northeast of the NERT Site. The Study Area is divided into three sub-areas termed “operable units” or OUs, which are shown on the figure included in the mailer. Each of the three OUs has its own set of cleanup goals, with the ultimate goal being to mitigate or minimize the movement of contaminated groundwater from the Study Area to the Las Vegas Wash to be protective of Lake Mead and the Colorado River.



Groundwater Treatment System at the NERT Site

**Progress Towards Meeting Cleanup Goals** — Cleanup at the NERT Site follows the environmental rules of the USEPA and the State of Nevada. NERT is progressing through the cleanup process using the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as CERCLA or Superfund. It is designed to identify, investigate, and clean up sites to protect the public and the environment. To meet cleanup goals, the contamination in all three of NERT’s OUs is being defined through an investigation, after which an engineering evaluation of cleanup options (called a Feasibility Study) will be completed. Final remedy will be determined by NDEP after NERT’s completion of the investigations and engineering evaluations. It is currently anticipated that public comment will be solicited on the final remedy in late 2025.

Important tasks achieved by NERT in 2022 included:

- 1 Of the six key documents submitted to NDEP within the last 18 months, NDEP already provided its approval of one in 2022. The remaining five were reviewed by NDEP, and NERT is currently revising the documents to address NDEP’s comments.
- 2 Completion of NDEP-directed indoor air evaluation in the Pittman neighborhood.
- 3 Completion of the soil, soil gas, surface water, and groundwater investigation in OU-3.
- 4 Completion of the Las Vegas Wash field investigation for the OU-3 ecological risk assessment.
- 5 Initiated, continued, and/or completed the field testing of several treatment technologies in 10 Treatability and Pilot Studies that will be evaluated in the Feasibility Study to determine the best cleanup methods.

**Risk Assessment Findings** — NERT’s risk assessments in OU-1 and OU-2 concluded that risks due to exposure to NERT contaminants are within the acceptable range established by NDEP and USEPA for the Site for all receptors (e.g., residents, workers, birds, mammals, or plants). In addition, the results of the NDEP-directed indoor air investigation for chloroform in the Pittman Neighborhood conducted in 2022 confirmed the same with respect to residents in OU-2. The results demonstrated that chloroform concentrations in indoor air are well below thresholds established by NDEP and USEPA. For more information, please see NDEP’s website at: <https://bit.ly/3W2pqx5>. NERT will be conducting risk assessments in OU-3 in 2023 with submittal to NDEP anticipated in 2024.

**Additional information** — Additional information about the NERT Site, local drinking water, and other investigations within the Black Mountain Industrial (BMI) Complex is accessible by scanning the QR code with your smart phone’s camera or the following link: <https://bit.ly/33HzDcZ>



**Investigation Findings** — The investigation of the Study Area focuses on contamination in groundwater that has moved from the NERT Site toward and into the Las Vegas Wash. Through this eight-year program, more than 53,000 analyses were performed on approximately 8,500 samples, ensuring NERT has a comprehensive understanding of the environmental conditions within the Study Area. NERT and NDEP are currently working to finalize the revised Remedial Investigation Report for OU-1 and OU-2. This report details the nature (i.e., what chemicals) and extent (i.e., where the chemicals are) of the contamination from the NERT Site within the boundaries of OU-1 and OU-2. NERT’s planned investigation of contamination in OU-3 is complete. The investigations evaluated potential contamination in soil, soil gas, groundwater, surface water, and sediment, as well as potential exposure to key contaminants to ecological receptors (e.g. plants and animals) in the Las Vegas Wash. A remedial investigation report, which details the findings of the investigations within the boundaries of OU-3, is anticipated to be submitted in late 2023.

**Treatability and Pilot Study Results** — NERT is in the process of field testing several potential technologies to reduce contamination in soil and groundwater. To date, 10 studies have either been completed or are currently in progress. Preliminary results from these studies have demonstrated the ability of certain remedial technologies to dramatically reduce contaminant concentrations and prevent further migration of contaminants. These studies are expected to be completed in 2024.



Injection and Extraction System Equipment for a NERT Treatability Study



NEVADA DIVISION OF  
**ENVIRONMENTAL  
PROTECTION**

**If you have any questions**, please contact the Community Involvement Coordinator at NDEP:

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# Nevada Environmental Response Trust (NERT) Remedial Investigation (RI) Study Area 2022 Fact Sheet Distribution Area

