

Fact Sheet #11

Nevada Environmental Response Trust Site

Annual 2021 Update

HENDERSON, NEVADA

Updated February 2022

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

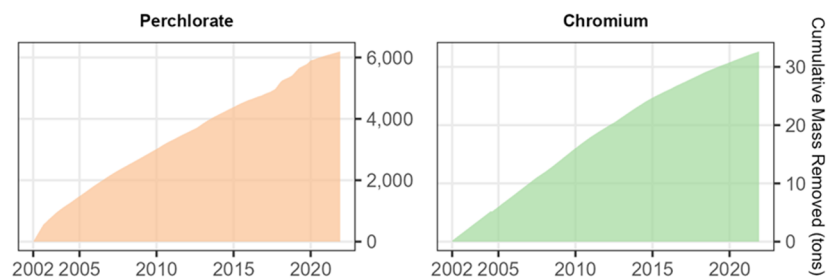
Overview — The Nevada Division of Environmental Protection (NDEP) and the United States Environmental Protection Agency (USEPA) oversee all cleanup activities at the Nevada Environmental Response Trust (NERT) Site. The NERT Site is part of the Black Mountain Industrial (BMI) Complex in Henderson, Nevada. 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.

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.

Key Facts:

- Groundwater is not a source of drinking water in the City of Henderson.
- 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 2021.
- The cleanup of groundwater contaminated by former operations at the NERT Site began in 1987 and continues today. Additional investigations are still being performed.
- Since operation of a groundwater extraction and treatment system (GWETS) began at the NERT Site, the amount of perchlorate contamination from the NERT Site entering the Las Vegas Wash has been reduced by more than 90% relative to 2000 levels.
- 2021 marked the 22nd year of near-continuous operation of the GWETS. Approximately 283,000 pounds of perchlorate were removed from the environment in the last year; since treatment began, the total amount of perchlorate removed is approximately 12.4 million pounds.
- NERT submitted six milestone documents to NDEP in 2021, including remedial investigation and human health and ecological risk assessment reports, which are currently under NDEP review.
- Various groundwater treatment options are currently being tested to determine the best long-term solutions.

Total Mass Removed by NERT GWETS Since 2002



NERT is investigating 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, the Colorado River, and all downstream interests.



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 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 2025.

- 1 NERT achieved several important milestones in 2021: Submittal of the following milestone CERCLA documents, all of which are currently under NDEP review:
 - Remedial Investigation Report for OU-1 and OU-2;
 - OU-1 Soil Baseline Health Risk Assessment (BHRA) Report;
 - OU-1 Soil Gas and Groundwater BHRA Report;
 - OU-2 Soil Gas and Groundwater BHRA Report;
 - OU-1 Refined Screening-Level Ecological Risk Assessment (SLERA) Report; and
 - OU-2 SLERA Report.
- 2 95% completion of the soil, surface water, and groundwater investigation in OU-3, with 100% investigation completion anticipated in March 2022.
- 3 Initiated, continued, and completed the testing of several treatment technologies that will be evaluated in the Feasibility Study to determine the best cleanup methods.

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 seven-year program, more than 50,000 analyses were performed on approximately 7,000 samples, ensuring NERT has a comprehensive understanding of the environmental conditions within the Study Area. The Remedial Investigation Report for OU-1 and OU-2 was submitted to NDEP in July 2021. 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.


The main findings of the RI Report for OU-1 and OU-2 include the following:

- The nature and extent of soil and groundwater contamination from historic operations at the NERT Site have been identified in both OU-1 and OU-2.
- The investigation has determined the direction and rate of groundwater flow within OU-1 and OU-2.
- Releases to groundwater originating from the NERT Site (OU-1) are completely captured by the existing GWETS and do not reach the Las Vegas Wash. However, groundwater contamination already present in the eastern portions of OU-2 and OU-3 resulting from historical contaminant migration via ditches and the historical pond system continues to flow towards the Las Vegas Wash and will be addressed as part of the final remedy.
- Chemicals migrating into OU-1 and OU-2 from other sites for which NERT is not responsible have been defined.

NERT’s investigation of contamination in OU-3 is approximately 95% complete, with field investigation activities expected to be finished by March 2022. A remedial investigation report which details the findings of the investigations within the boundaries of OU-3 is anticipated to be submitted in late 2022.

Risk Assessment Findings — NERT’s risk assessments in OU-1 and OU-2 concluded that there are no unacceptable risks to any receptor (e.g., residents, workers, birds, mammals, or plants). Out of an abundance of caution and consistent with guidance from USEPA, NDEP is requiring NERT to perform a limited indoor air investigation for chloroform in the Pittman Neighborhood solely to confirm the results of the vapor intrusion modeling conducted in the OU-2 human health risk assessment as an additional line of evidence confirming NERT’s finding that there are no unacceptable risks to residents. The limited indoor air investigation efforts began in December 2021 and will continue in 2022. For more information, please see NDEP’s website at: <https://bit.ly/2WKflw1>.

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>



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

James (JD) Dotchin, Chief Environmental Programs
Bureau of Industrial Site Cleanup, NDEP
375 E. Warm Springs Road, Suite 200, Las Vegas, NV 89119
Phone: 702-668-3914, Email: jdotchin@ndep.nv.gov

Nevada Environmental Response Trust (NERT) Remedial Investigation (RI) Study Area 2021 Fact Sheet Distribution Area

