



NEVADA DIVISION OF
**ENVIRONMENTAL
PROTECTION**

STATE OF NEVADA
Department of Conservation & Natural Resources

Brian Sandoval, Governor
Bradley Crowell, Director
Greg Lovato, Administrator

December 1, 2018

Dear Resident:

① **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 (702-486-2850 x 235) o por correo electrónico (jdotchin@ndep.nv.gov).

I am writing to you because you live near an area being investigated by the Nevada Division of Environmental Protection (NDEP). You are not at risk, but I want to inform you about our ongoing work and respond to concerns you may have. Clean-up of the environment is part of NDEP's mission to preserve and enhance the environment of the State in order to protect public health, sustain healthy ecosystems, and contribute to a vibrant economy.

We are investigating how pollutants from property formerly owned by Tronox and Kerr-McGee have affected the Las Vegas Wash and nearby soil and water. NERT — short for the Nevada Environmental Response Trust — now owns the former Tronox/Kerr-McGee property (NERT Site) and is in charge of the investigation.

The inspection covers three main areas:

- The NERT Site
- Unincorporated parts of Clark County
- Land in Henderson between the NERT Site and the Las Vegas Wash

See the back of this packet for a map of these areas.

The main chemical we are concerned about is perchlorate, which was made at the NERT Site before 1998. Perchlorate is used to produce rocket fuel, missiles, fireworks, flares, and explosives. Another chemical of concern is chromium, which was also used on the NERT Site.

I have attached a list of frequently asked questions (FAQ) with details about these chemicals and the history of the NERT Site. These questions were asked during prior community outreach surveys and meetings. I have also included a fact sheet that describes the NERT Site and our plan for cleaning it up.

Lastly, I want to personally thank you if you completed our questionnaire or attended one of our public meetings last year. My colleagues and I appreciate your input, questions, and concerns.

If you have any questions about our investigation or questions not answered in this packet, please contact me at **(702) 486-2850 x 235** or jdotchin@ndep.nv.gov. For concerns related to your health, I encourage you to see your health care professional.

Sincerely,

James (JD) Dotchin
Chief Environmental Programs
Bureau of Industrial Site Cleanup
Nevada Division of Environmental Protection

Learn more about the site

View official files at our office:

NDEP Las Vegas Office
2030 E. Flamingo Rd. Suite 230
Las Vegas, NV 89119

Contact Christa Smaling at 702-486-2850 x 254 or csmaling@ndep.nv.gov to schedule a file review. Please tell us a day in advance if you want to review files at our office.

Read about our efforts online:

- www.NERT-Trust.com
- ndep.nv.gov/environmental-cleanup/site-cleanup-program/active-cleanup-sites/bmi-complex/nevada-environmental-response-trust-nerf

For info about other, unrelated cleanups within the Black Mountain Industrial complex:

- ndep.nv.gov/environmental-cleanup/site-cleanup-program/active-cleanup-sites/bmi-complex

Computers are available, free of charge, for public use at all Henderson libraries:

- James I. Gibson Library — 100 W. Lake Mead Parkway
- Paseo Verde Library — 280 S. Green Valley Parkway
- Green Valley Library — 2797 N. Green Valley Parkway
- Heritage Park Senior Center Library — 300 S. Racetrack Road

Fact Sheet

Nevada Environmental Response Trust Site

November 2018

HENDERSON, NEVADA

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Cleanup Process at the Nevada Environmental Response Trust (NERT) Site

The Nevada Division of Environmental Protection (NDEP) and the United States Environmental Protection Agency (EPA) manage all cleanup and investigation activities at the NERT Site. The NERT Site is part of the Black Mountain Industrial Complex in Henderson, Nevada. NERT was created in 2011 as part of Tronox Inc.'s bankruptcy. Today, NERT owns the Site and handles efforts to clean up contamination caused by operations before 2011.

Cleanup efforts at the NERT Site follow the environmental rules of the EPA. These requirements are part of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). It is designed to identify, investigate, and clean up sites to protect the public and the environment. The CERCLA cleanup process is shown in the figure on the right and is summarized below.

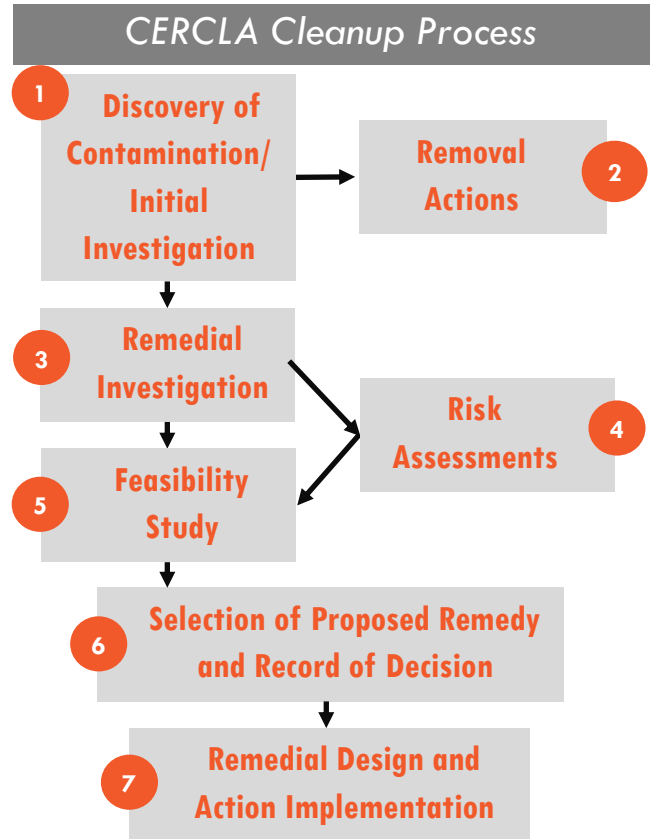
Overview — Historical operations at the NERT Site contaminated the soil and underlying groundwater with chemicals. Groundwater in Henderson is not a source of public drinking water (see the FAQ document in this packet). Perchlorate — the main contaminant — was historically manufactured at the site. Perchlorate is often used to produce rocket fuel, missiles, fireworks, flares, and explosives. Hexavalent chromium, which was also used on the site, is another contaminant of concern. Some of this contamination moved off-site, as far north as the Las Vegas Wash.

NERT is investigating contamination in an established study area — called the NERT Remedial Investigation Study Area. This study area includes the NERT Site and areas to the north and northeast of the site (See the map included in this packet). NERT has three main goals:

1. Keep contamination from leaving the NERT Site
2. Address contamination at the NERT Site
3. Address contamination that has previously moved off-site

1 Discovery of Contamination/Initial Investigation —

Historical operations at the NERT Site made a chemical called perchlorate. Perchlorate is often used in rocket fuel. These operations affected soil and groundwater beneath the property. Wastewater from the industrial operations moved northeast of the site through unlined ditches into unlined disposal ponds. Since then, the NERT Site and surrounding area have been part of many environmental investigations:



- **Late 1970s:** EPA, NDEP, and Clark County examined how Black Mountain Industrial operations might have affected the environment.
- **Early 1980s:** Officials discovered groundwater contaminated with hexavalent chromium.
- **1997:** Contamination from the NERT Site was first discovered near the Las Vegas Wash.

2 Removal Actions — Since the early 1980s, contamination on and around the site has been significantly reduced. Treatment of hexavalent chromium began in mid-1987, continues today and has eliminated over 23 tons of chromium from the environment. Treatment of perchlorate has occurred regularly since 1999, resulting in the removal from the environment of around 4,900 tons of perchlorate and significantly reduced the amount of contamination entering the Las Vegas Wash. During 2010 and 2011, officials removed around 568,000 cubic yards of contaminated soil from the NERT Site. Outside of the NERT Site, other responsible parties have removed large amounts of soil after extensive soil sampling.

These first removal actions are not the final remedy, but they did greatly reduce risks at and around the Site. As a result, there are no immediate health risks to the public or environment near the NERT Site. The same is true for the Cadence development, which NDEP cleared for safe development.

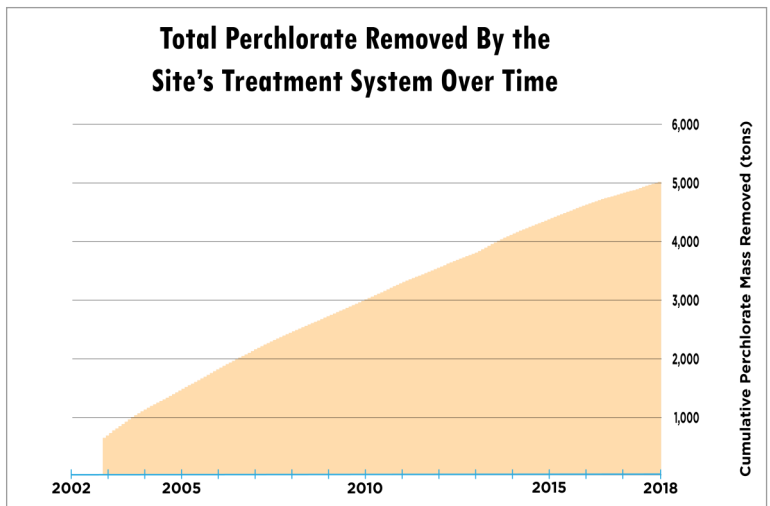
3 Remedial Investigation — In late 2014, NERT began a broad environmental study, called a Remedial Investigation. The investigation builds on earlier studies and will give NERT an understanding of the extent of the contamination. NERT has been drilling below the ground, installing groundwater wells, and collecting samples of the soil, groundwater, and surface water. None of these efforts will occur on private property, and officials will be careful not to disturb residents in nearby neighborhoods. When the investigation is over, all information will be published in Remedial Investigation reports which are scheduled for submittal in early 2019 and another in mid-2020.

4 Risk Assessments — Human health and ecological risk assessments help officials measure health risks to the public and environment. NERT is preparing risk assessments using data from the investigations to find the best cleanup solution. The risk assessments will be performed immediately following completion of the Remedial Investigation reports and are scheduled for submittal in mid-2019 and late 2020.

5 Feasibility Study — A Feasibility Study will help NERT find the best tools and technologies for addressing soil and groundwater contamination. In the end, it will help officials propose a final remedy for the NERT study area. Several treatability and pilot studies are already underway. As with the Remedial Investigation reports, two Feasibility Study reports will be prepared for the NERT study area and will be submitted in early 2021 and late 2021.

6 Selection of Proposed Remedy and Record of Decision — Following the Feasibility Study, NERT will create reports that explain the proposed remedy. The public will be able to review and comment on these reports. After addressing comments, officials will approve documents that describe the final remedy. Officials call these documents Records of Decision, or RODs. The final remedy will likely address the contamination by combining technologies, monitoring, and administrative actions (e.g., deed restrictions). Two RODs will be prepared for the NERT study area and are scheduled for completion in 2022.

7 Remedial Design and Remedial Action Implementation — After officials issue the RODs, NERT will put the approved final remedy into action. Depending on the remedy, NERT will make this happen through engineering and design efforts, construction, and administrative actions. The final remedy is scheduled to start in late 2024.



Where can I find more information about the NERT Site?

A summary of important information and milestone documents can be found at www.NERT-Trust.com and <http://ndep.nv.gov/environmental-cleanup/site-cleanup-program/active-cleanup-sites/bmi-complex/nevada-environmental-response-trust-nert>.

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

James (JD) Dotchin
Chief of Environmental Programs
Nevada Division of Environmental Protection
2030 E. Flamingo Road, Suite 230
Las Vegas, NV 89119
(702) 486-2850 x235
jdotchin@ndep.nv.gov

Where can I find more information about other investigations within the Black Mountain Industrial (BMI) Complex?

NDEP is overseeing additional remedial programs implemented by the Basic Remediation Company, Titanium Metals Corporation, Pioneer Americas, LLC d/b/a Olin Chlor Alkali Products, Stauffer, & Montrose, and Endeavour, LLC (PEPCON/AMPAC) within portions of the NERT RI Study Area and other areas of Henderson.

Background information and key documents are available via NDEP's website at <http://ndep.nv.gov/environmental-cleanup/site-cleanup-program/active-cleanup-sites/bmi-complex>.



Nevada Environmental Response Trust Remedial Investigation FAQ Sheet

November 2018

Officials continue to investigate an area in Henderson that is a source of historic contamination. This document answers common questions about the Remedial Investigation by the Nevada Environmental Response Trust (NERT). Many of these questions were asked in community interviews and surveys and at prior community meetings.

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1. What is NERT?

NERT is short for the Nevada Environmental Response Trust and was established in 2011. NERT's goal is to manage and clean up contamination related to historic chemical plants on property formerly owned by Tronox Inc. This property is now owned by NERT and is called the "NERT Site."

NERT is not a business, and all its decisions are made to successfully clean up the NERT Site. All work performed by NERT is managed and overseen by the Nevada Division of Environmental Protection (NDEP) and the U.S. Environmental Protection Agency (EPA).

2. What is the purpose of the NERT Remedial Investigation?

The purpose is to fully investigate contamination at and around the NERT Site. The main contaminant is a chemical called perchlorate. NERT will use this information to do three things:

1. Keep contamination from leaving the NERT Site
2. Address contamination at the NERT Site
3. Address contamination that has previously moved off-site

3. What is the source of the contamination?

Investigators first detected perchlorate in the Lower Colorado River in 1997. They traced the contamination up the Las Vegas Wash to the NERT Site and a second area to the southwest called the PEPCON Site. Factories at both sites historically produced perchlorate. Perchlorate is used to make rocket fuels, missiles, fireworks, flares, and explosives.

Fast facts.

- ✓ You and your family are **not at risk**
- ✓ Perchlorate is a chemical used in rockets, fireworks, and explosives
- ✓ NERT continues to study the area to find the best cleanup remedy

NERT is not responsible for cleanup efforts at the PEPCON Site. Visit our website to learn more about the PEPCON Site cleanup:

- ndep.nv.gov/environmental-cleanup/site-cleanup-program/active-cleanup-sites/bmi-complex/american-pacific-ampac

4. Is my water safe to drink?

Yes — **your water is safe**. Drinking water for Henderson and the Las Vegas Valley comes primarily from Lake Mead, not groundwater, and **meets all safe drinking water standards**. Your drinking water is regularly tested, and water quality reports are accessible to the public.

Based on guidance from EPA, the State of Nevada has determined that water is safe to drink if it has less than 18 parts per billion (ppb) of perchlorate. On average, drinking water in the Las Vegas Valley only has 0.7 ppb of perchlorate.

Another contaminant that NERT is addressing is hexavalent chromium. EPA has determined that water is safe to use if it has 100 ppb or less of total chromium. On average, water in the Las Vegas Valley only has 0.27 ppb of total chromium. There is no EPA standard for hexavalent chromium, but total chromium adds both trivalent and hexavalent chromium together. The average hexavalent chromium level in the Las Vegas Valley is 0.20 ppb.

You can learn more about the quality of your water in the Las Vegas Valley Water District 2018 Water Quality Report:

- www.lvwwd.com/assets/pdf/water-quality-report-las-vegas-valley-current.pdf
- www.lvwwd.com/assets/pdf/water-quality-summary-las-vegas-valley.pdf

5. Are my family members or pets who live near the NERT Site at risk?

No — **you, your family, and your pets are not at risk**. The contamination is underground and dissolved in groundwater, which isn't the source of drinking water anywhere in greater Henderson. Studies also show that at least the top 10 feet of soil in residential areas around the site are free of contamination. The average depth to the groundwater in your neighborhood is 25 feet below the ground, well below the surface.

6. Is it safe for humans and animals to play in their yard near the NERT Site?

Yes — **you and your family may safely play in your yard**. Studies show that at least the top 10 feet of soil in the residential areas around the site is no different from soil elsewhere in the Las Vegas Valley. All soils meet health safety standards. The perchlorate and other contaminants being investigated in the area are dissolved in groundwater, which on average is 25 feet below the ground.

7. Can I grow and eat my own vegetables?

Yes — **it's safe to grow food in your garden**. Soil in your yard is similar to soil found across the Las Vegas Valley, which meets health safety standards.

8. Has there been a soil or groundwater study near my home, and will there be more in the future?

Not necessarily. Depending on where you live, there may have been or may be future studies near your home:

- **Neighborhoods within** the NERT RI Study Area (see blue area on the included map) may be part of a study. NDEP has already taken samples around the area and has plans to sample soil and groundwater again.
- **Neighborhoods outside** the NERT RI Study Area will not be part of a study. Only land in the study area is part of the NERT investigation. NDEP sent this information packet to all residents within a mile of the study area.

- If your home is **in the Cadence development**, your neighborhood has been investigated closely in a previous study. From this study, NDEP determined that the area is a safe, risk-free place to build a residential community. The NERT investigation does not affect this decision.

You may find the results of past and future investigations in your neighborhood in two upcoming remedial investigation reports, which will be available at www.NERT-Trust.com in early 2019 and 2020.

If you would like to know if there has been an investigation in your neighborhood, you may review the Administrative Record. The Administrative Record is available for review in the NDEP Las Vegas office located at 2030 E. Flamingo Rd, Suite 230, Las Vegas, NV, 89119. Key documents are also available online:

- ndep.nv.gov/environmental-cleanup/site-cleanup-program/active-cleanup-sites/bmi-complex/nevada-environmental-response-trust-nert
- www.NERT-Trust.com

9. Is there an air risk inside or outside of my home?

The air in and outside your home poses no immediate risk. Most contaminants being investigated in the study area have no effect on the air inside or outside your home. All investigations to date have not identified indoor or outdoor air risks. As part of the current NERT investigation, NDEP is collecting additional samples to confirm previous investigations. There are no health concerns in the Cadence development related to the NERT investigation.

Air emissions from operations at the NERT Site, including dust, are regulated and permitted by the Clark County Department of Air Quality. Activities conducted by NDEP at the NERT Site comply with all Clark County air regulations. The current site tenant conducts industrial operations on a portion of the NERT Site. Air emissions from these operations are the responsibility of the tenant and are permitted separately by the county. For more information on the tenant's air permits, please contact Mr. Richard Beckstead, Permitting Manager, Clark County Department of Air Quality, at 702-455-1669.

10. Do developers have information to inform potential buyers?

Yes, developers in the study area have been given access to information about these issues.

11. Will this contamination or cleanup efforts affect my property values?

Because NDEP staff are not experts in property values and real estate, we recommend that you contact a real estate expert to discuss these issues. NDEP is a Nevada government agency that focuses on environmental matters.

12. Is perchlorate from the NERT Site getting into the Las Vegas Wash or Lake Mead?

Yes, but **perchlorate levels have dropped by over 95%** since it was first discovered in 1997. Based on EPA guidance, the state of Nevada has determined that 18 ppb of perchlorate in drinking water is a safe level for all uses. The average perchlorate level in the Las Vegas Valley drinking water is a fraction of that — only 0.7 ppb.

You can learn more about the quality of your water in the Las Vegas Valley Water District 2018 Water Quality Report:

- www.lvwd.com/assets/pdf/water-quality-report-las-vegas-valley-current.pdf
- www.lvwd.com/assets/pdf/water-quality-summary-las-vegas-valley.pdf

13. What is the timing for the NERT investigation and cleanup?

We will continue to investigate groundwater, soil, soil gas, and surface water through 2019. NERT will submit the results of these investigations to officials in two reports in early 2019 and mid-2020. We will use our findings to begin feasibility studies in 2021. These studies will help NERT determine the best strategies and technologies to

address soil and groundwater contamination coming from the site. By 2022, officials will decide on a final remedy and anticipates NERT starting the final cleanup by late 2024. You can track NERT's progress at www.NERT-Trust.com.

14. Is all of this information public knowledge?

Yes — all information about the NERT investigation is available to the public. NERT held its third community meeting about the investigation in June 2017. NERT will continue to hold community meetings as the project continues.

15. Are there other investigations or contamination in Henderson?

Yes — NDEP is overseeing the cleanup efforts of several other organizations in the area:

- Basic Remediation Company
- Titanium Metals Corporation
- Pioneer Americas, LLC d/b/a Olin Chlor Alkali Products, Stauffer, & Montrose
- Endeavour, LLC (formerly PEPCON/AMPAC)

These efforts address contamination in parts of the NERT study area and other areas of Henderson. See the final section below on how to find more information about these programs. While NERT is only responsible for the impacts related to historic operations at the NERT Site, all of NERT's actions are coordinated through NDEP. NDEP oversees all cleanup programs within the Henderson area.

Questions and More Information

If you have additional questions or concerns, contact James Dotchin – NDEP Chief Environmental Programs, Bureau of Industrial Site Cleanup at **(702) 486-2850 x235** or jdotchin@ndep.nv.gov.

View official files at our office:

NDEP Las Vegas Office
2030 E. Flamingo Rd. Suite 230
Las Vegas, NV 89119

Contact Christa Smaling at 702-486-2850 x 254 or csmaling@ndep.nv.gov to schedule a file review. Please tell us a day in advance if you want to review files at our office.

For further details about NERT history, investigations, remedial efforts, and current activities:

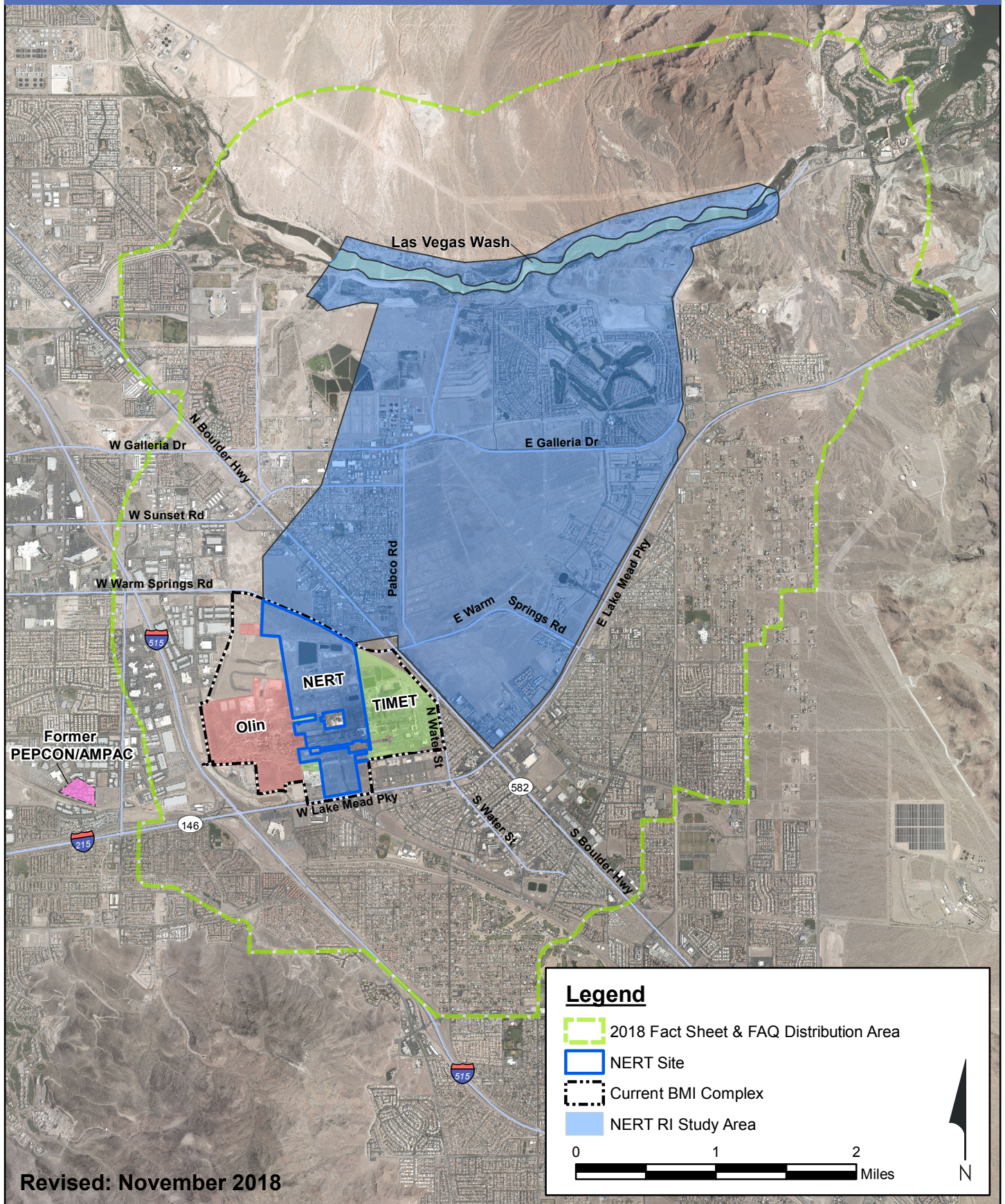
- www.NERT-Trust.com
- ndep.nv.gov/environmental-cleanup/site-cleanup-program/active-cleanup-sites/bmi-complex/nevada-environmental-response-trust-nert.

For info about other cleanups within the Black Mountain Industrial complex, visit ndep.nv.gov/environmental-cleanup/site-cleanup-program/active-cleanup-sites/bmi-complex.

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Nevada Environmental Response Trust (NERT) Remedial Investigation (RI) Study Area 2018 Fact Sheet & FAQ Distribution Area



Revised: November 2018