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NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
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STATE OF NEVADA
Department of Conservation & Natural Resources
DIVISION OF ENVIRONMENTAL PROTECTION

Brian Sandoval, Governor
Leo M. Drozdoff, P.E., Director
Colleen Cripps, Ph.D., Administrator

May 30, 2014

Re: **Community Information and Community Involvement Plan**
Nevada Environmental Response Trust Site (formerly Tronox Site and Kerr-McGee Site)

Dear Resident:

You are receiving this correspondence because you live in the area surrounding the Nevada Environmental Response Trust Site (formerly known as the Tronox Site and Kerr-McGee Site), 560 West Lake Mead Parkway, which is located in an unincorporated section of Clark County, Nevada and is surrounded by the City of Henderson. Attached is a Fact Sheet with some background information on the Site.

If you have any questions regarding the Community Information or the Site in general, please to contact James Dotchin of the Nevada Division of Environmental Protection, at (702) 486-2850 or jdotchin@ndep.nv.gov. Documents related to the Nevada Environmental Response Trust Site can be viewed during normal business hours at NDEP's Las Vegas office, 2030 E. Flamingo Rd. Suite 230, Las Vegas NV 89119. File reviews generally require one business day notice. Please contact Christa Smaling at 702-486-2850 x 254 or csmaling@ndep.nv.gov to schedule a file review. A second project document repository is located at the James I. Gibson Library at 100 W. Lake Mead Parkway in Henderson, Nevada. In addition, significant milestone documents may be viewed online at:
http://ndep.nv.gov/bmi/ tronox.htm

Thank you for your time and we look forward to hearing from you.

Sincerely,

James (JD) Dotchin
Nevada Division of Environmental Protection
Supervisor Special Projects Branch
Bureau of Corrective Actions
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Las Vegas, NV. 89119
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Enclosures

Nevada Environmental Response Trust Site Fact Sheet

The Nevada Environmental Response Trust (the "NERT") Site, which was previously known as the Tronox LLC ("Tronox"), formerly Kerr-McGee Chemical LLC, Henderson Facility, is located within the Black Mountain Industrial ("BMI") complex near Henderson, Nevada. The Site is approximately 346 acres in size and is located 13 miles southeast of Las Vegas, Nevada in an unincorporated section of Clark County, Nevada. It is completely surrounded by the incorporated area comprising the City of Henderson ("COH").

Site Location

Site History

The BMI complex has been the site of industrial operations since 1942 and was originally sited and operated by the U.S. government as a magnesium production plant in support of the World War II effort. Following the war, a portion of the complex was leased by Western Electrochemical Company ("WECCO"). By August 1952, WECCO had purchased several portions of the complex, including six of the large unit buildings, and produced manganese dioxide, sodium chlorate and various perchlorates. In addition, in the early 1950s, pursuant to a contract with the U.S. Navy, WECCO constructed and operated a plant to produce ammonium perchlorate on land purchased by the Navy. In 1956, WECCO merged with American Potash and Chemical Company ("AP&CC") and continued to operate the processes, with the Navy's continued involvement in the ammonium perchlorate process. In 1962, AP&CC purchased the ammonium perchlorate plant from the Navy, but continued to supply the Navy, and its contractors, material from the operating process. AP&CC merged with Kerr-McGee Corporation ("Kerr-McGee") in 1967. This merger included boron production processes in California, which were moved to Henderson and began operation in the early 1970s. These included elemental boron, boron trichloride and boron tribromide. In 1994, the boron tribromide process was shut down and dismantled. In 1997, the sodium chlorate process was shut down and in 1998, production of commercial ammonium perchlorate ended as well. The ammonium perchlorate production equipment was used to reclaim perchlorate from on-site materials until early 2002, when the equipment was permanently shut down. In 2005, Kerr-McGee Chemical LLC's name was changed to Tronox LLC ("Tronox"), and in 2009 Tronox filed for bankruptcy. NERT was established as part of Tronox's reorganization and in February 2011 became the owner of the property that was previously owned by Tronox. Tronox leases back a portion of the Site from NERT for production of manganese dioxide, boron trichloride

and elemental boron. Tronox has also recently renovated Unit Building 4 for its Advanced Battery Material ("ABM") production process.

Site Investigation and Remediation

In response to the 1972 Federal Water Pollution Control Act, also known as the Clean Water Act ("CWA"), Kerr-McGee modified its manufacturing processes and constructed lined surface impoundments to recycle and evaporate industrial wastewater. The facility achieved zero-discharge status in 1976 regarding industrial wastewater management, and in February 1977, Kerr-McGee obtained a National Pollutant Discharge Elimination System ("NPDES") permit under the CWA authorizing up to 4 million gallons per day discharge of non-contact cooling water to Las Vegas Wash. A groundwater investigation was initiated by Tronox in July 1981 to comply with the federal Resource Conservation and Recovery Act ("RCRA") standards for monitoring the existing on-site impoundments. In December 1983, the Nevada Division of Environmental Protection ("NDEP") requested that Tronox investigate the extent of chromium impact in the groundwater beneath the facility.

A Consent Order between Tronox and NDEP, prepared in September 1986, required additional groundwater characterization and the implementation of response activities to address chromium in the groundwater. As a result of the 1986 Consent Order, monitoring wells, groundwater interceptor wells, a groundwater treatment system for chromium reduction, and two treated-groundwater injection trenches were installed, and the treatment of hexavalent chromium in groundwater began in mid-1987. This treatment is on-going today although the injection trenches are not currently utilized.

In April 1991, Tronox was one of six companies that entered into a Consent Agreement with NDEP to conduct environmental studies to assess site-specific environmental conditions resulting from past and present industrial operations and waste disposal practices. The six companies that entered into the Consent Agreement included those past or present entities that conducted business within the BMI complex. The Consent Agreement specified that, among other things, the companies identify, document or address soil, surface water, groundwater or air impacts and document measures that have been taken to address environmental impacts from their respective sites.

In April 1993, in compliance with the 1991 Consent Agreement, Tronox submitted the Phase I Environmental Conditions Assessment ("ECA") to NDEP. The purpose of the ECA was to identify and document site-specific environmental impacts resulting from past or present industrial activities. The Phase I ECA included an assessment of the geologic and hydrologic setting, as well as historical manufacturing activities. In 1994, NDEP issued a letter of understanding ("LOU") that identified 69 data gap areas which needed additional information, either in the form of additional document research or field sampling of site conditions. Subsequent to the issuance of the LOU, an additional potential source area, the former U.S. Vanadium site, was identified during planning for the 2009 Phase B Source Investigation. Although not formally designated as an LOU, the U.S. Vanadium site is referred to as LOU 70.

During the mid to late 1990s, Tronox collected additional data to fill the data gaps identified in the LOU. This was done by investigating past operator records as well as through field sampling. Results of this work are described in a Phase II Written Response to the LOU, a Phase II ECA, and a Supplemental Phase II ECA, the latter two of which were reports describing the results of field sampling of groundwater and soils. Through this effort, potential environmental impacts associated with the 69 LOU areas were evaluated.

In 1997, perchlorate was discovered in the vicinity of the Las Vegas Wash and this aspect of the ECA was placed on a response fast-track. Impact characterization and treatment methodology evaluation were on-going in the late 1990s, along with the installation of a seep water collection system adjacent to the Las Vegas Wash to mitigate the discharge of perchlorate. In November 1999, Tronox began operation of a temporary ion exchange ("IX") treatment system to treat perchlorate-impacted groundwater. Also in 1999, Tronox and NDEP entered into a Consent Agreement, which defined additional response requirements and looked forward to a treatment process that would replace the temporary IX treatment system. After considerable research and process development, a replacement treatment technology was developed. In October 2001 Tronox and NDEP entered into an Administrative Order on Consent ("AOC") that defined the replacement treatment process, which required Tronox to install additional extraction well systems and construct an on-site groundwater treatment facility. The groundwater extraction and treatment system ("GWETS") has operated continuously at the Site since 2002. The current groundwater treatment facility includes granular activated, biological fluidized bed reactors, as well as a ferrous sulfate system. Following treatment, all extracted water is discharged to Las Vegas Wash under a National Pollutant Discharge Elimination System permit. Semi-annual and annual remedial performance reports covering performance data for both the chromium and perchlorate remediation programs are submitted to NDEP each year.

In 2004, a list of Site-related chemicals was developed based upon investigations associated with operations at the Site. This list included raw materials, process chemicals, and intermediates, as well as products of all current and previous manufacturers at the Site. In 2005, a Conceptual Site Model ("CSM") was prepared for the Site, which consolidated information gathered regarding environmental impact, both known and potential.

Tronox implemented two soil sampling programs (known as Phase A and B Source Investigations) that were completed in 2006 and 2009, respectively. These investigations identified a number of constituents in excess of state Basic Comparison Level ("BCL") criteria within the upper 10 feet of soil, including dioxin toxic equivalents ("TEQ"), hexachlorobenzene, other semivolatile organic compounds, polychlorinated biphenyls ("PCBs"), asbestos, metals, organochlorine pesticides, and perchlorate. In an order dated December 14, 2009, NDEP directed Tronox to remove all soil containing chemicals of potential concern in excess of worker BCLs (or modified risk-based goals agreed upon by NDEP) from the Site by the end of 2010. Tronox began the soil removal project in August 2010, but it was not completed when the Site was transferred to NERT on February 14, 2011. Although NERT is not regulated under any of the Kerr-McGee/Tronox consent agreements or administrative orders on consent, NERT completed the interim soil removal program in November 2011, consistent with an Interim Consent Agreement between NDEP and NERT effective as of February 14, 2011.

For the purposes of soil remediation activities, the main contaminated portions of the Site were divided into the five separate remediation zones ("RZ") listed below:

- RZ-A: an area on the southern portion of the Site
- RZ-B: the area around the Unit buildings
- RZ-C: the ammonia perchlorate production area, Koch Materials area, pond and diesel storage tank area, and manganese tailings area

- RZ-D: the Trade Effluent ponds and ammonium perchlorate pad/drum recycling area (including the hazardous waste landfill)
- RZ-E: the Beta Ditch

Soil sampling in RZ-A did not identify soils exceeding NDEP cleanup criteria, and therefore excavation activities were not planned in this area. A Human Health Risk Assessment prepared for RZ-A concluded that COPC concentrations remaining in soil did not result in unacceptable risks and has been approved by NDEP. Tronox's consultant prepared a workplan describing a strategy for excavating chemically impacted soil within the upper 10 feet of soil in areas RZ-B through E, to the extent such soils were accessible. These response activities commenced during 2010. As of January 1, 2012, approximately 930,000 tons of contaminated soil had been excavated. An interim soil removal action completion report was prepared for all five remediation zones in January 2012 and revised in September 2012. Certain impacted soils within the remediation zones that cannot be excavated due to physical constraints or other access issues were designated as Excavation Control Areas ("ECAs") and are addressed through the Site Management Plan ("SMP"), Revision 1, dated October 2013. The SMP describes procedures to address the known remaining environmental conditions at the Site, as well as contingency actions to be taken if previously unknown environmental conditions are encountered.

Recent groundwater monitoring results indicate significant capture and ongoing reduction of the perchlorate and hexavalent chromium plumes. Perchlorate concentrations in Las Vegas Wash have declined by more than 90% over the last 10 years of groundwater capture system operation. The GWETS continues to operate.

In 2012, NERT developed a Remedial Investigation/Feasibility Study ("RI/FS") Work Plan to address soil and groundwater contamination at the Site pursuant to the Interim Consent Agreement. The RI/FS will be conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). A revised work plan, incorporating comments received from NDEP and other stakeholders, was submitted to NDEP in January 2014.

In accordance with the approved Community Involvement Plan (CIP), project documents are available to the public in a document repository at the NDEP office located at 2030 E. Flamingo Road, Suite 230, Las Vegas, Nevada. A second project document repository is located at the James I. Gibson Library at 100 W. Lake Mead Parkway in Henderson, Nevada.

A project milestone schedule covering the overall progress of current and future site activities is available on the NDEP web site (http://ndep.nv.gov/bmi/tronox.htm).