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Prepared by
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Emeryville, California

Date
September 25, 2018

SCREENING LEVEL ECOLOGICAL RISK ASSESSMENT WORK PLAN FOR OPERABLE UNIT 2

REVISION 1

NEVADA ENVIRONMENTAL RESPONSE TRUST SITE

HENDERSON, NEVADA

Screening Level Ecological Risk Assessment Work Plan for Operable Unit 2, Revision 1

Nevada Environmental Response Trust
(Former Tronox LLC Site)
Henderson, Nevada

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I certify that this document and all attachments submitted to the Division were prepared at the request of, or under the direction or supervision of the Trust. Based on my own involvement and/or my inquiry of the person or persons who manage the system(s) or those directly responsible for gathering the information or preparing the document, or the immediate supervisor of such person(s), the information submitted and provided herein is, to the best of my knowledge and belief, true, accurate, and complete in all material respects.

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Screening Level Ecological Risk Assessment Work Plan for Operable Unit 2, Revision 1

Nevada Environmental Response Trust
(Former Tronox LLC Site)
Henderson, Nevada

Responsible Certified Environmental Manager (CEM) for this project

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and, to the best of my knowledge, comply with all applicable federal, state and local statutes, regulations and ordinances.

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Screening Level Ecological Risk Assessment
Work Plan for Operable Unit 2
Nevada Environmental Response Trust
Henderson, Nevada

Date	**September 25, 2018**
Prepared by	**Ramboll US Corporation**
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ACRONYMS AND ABBREVIATIONS

AP&CC	American Potash and Chemical Company
ATSDR	Agency for Toxic Substances and Disease Registry
BERA	baseline ecological risk assessment
bgs	below ground surface
BHRA	baseline human health risk assessment
BMI	Black Mountain Industrial
BRC	Basic Remediation Company
CAMU	Corrective Action Management Unit
CEM	certified environmental manager
COPEC	chemical of potential ecological concern
CSM	conceptual site model
Eco-SSL	Ecological Soil Screening Level
ENVIRON	ENVIRON International Corporation
EPC	exposure point concentration
ERA	ecological risk assessment
ERAGS	Ecological Risk Assessment Guidance for Superfund
ESA	Endangered Species Act
ESV	ecological screening value
ft	foot or feet
HQ	hazard quotient
LANL	Los Alamos National Laboratory
LOU	letter of understanding
LVW	Las Vegas Wash
NDEP	Nevada Division of Environmental Protection
NERT	Nevada Environmental Response Trust
NFA	no further action
NOAA	National Oceanic and Atmospheric Administration
Northgate	Northgate Environmental Management, Inc.
OU	operable unit
ORNL	Oak Ridge National Laboratory
PCOPEC	preliminary chemical of potential ecological concern
Ramboll	Ramboll US Corporation
Ramboll Environ	Ramboll Environ US Corporation
RI	remedial investigation
RI/FS	remedial investigation/feasibility study
RZ	remediation zones
Site	NERT Site
SLERA	screening-level ecological risk assessment
SMDP	scientific management decision point
SOP	Standard Operating Procedure
SQuiRT	NOAA Screening Quick Reference Tables
SRC	site-related chemical
TAC	Texas Administrative Code

ACRONYMS AND ABBREVIATIONS

TCEQ	Texas Commission of Environmental Quality
TDD	total daily dose
Tronox	Tronox LLC
TRV	Toxicity Reference Value
Trust	Nevada Environmental Response Trust
UCL	upper confidence limit
USEPA	United States Environmental Protection Agency
WECCO	Western Electrochemical Company

1.0 INTRODUCTION

This screening-level ecological risk assessment work plan (SLERA Work Plan) was prepared by Ramboll US Corporation[1] (Ramboll) on behalf of the Nevada Environmental Response Trust (the Trust or NERT) for Operable Unit 2 (OU-2) adjacent to the NERT Site (the Site) located in Henderson, Nevada (Figure 1-1). The OU-2 SLERA will be conducted as part of the Trust's Remedial Investigation/Feasibility Study (RI/FS) and concurrently with the OU-1 Refined SLERA which began in 2014. The OU-2 SLERA is necessary to evaluate whether activities at the NERT Site (OU-1) pose a potential risk to ecological receptors in OU-2, which is adjacent to and downgradient of OU-1. Specific information regarding OU-1 and the OU-1 Refined SLERA is provided in the Refined Screening Level Ecological Risk Assessment Work Plan, Revision 2 (Ramboll Environ 2015) which was prepared prior to establishment of the three Operable Units that make up the NERT RI Study Area.

The NERT RI Study Area is divided into three OUs as follows and shown in Figure 1-2:

- OU-1: Includes the NERT Site.
- OU-2: Includes the Eastside Sub-Area and a portion of the NERT Off-Site Study area south (i.e., upgradient) of the mid-plume containment boundary line[2].
- OU-3: Includes the Northeast Sub-Area, the Downgradient Study Area, and the portion of the NERT Off-Site Study Area north (i.e., downgradient) of the mid-plume containment boundary line.

The NERT Site (OU-1), which was previously known as the Tronox LLC (Tronox) Site and the Kerr-McGee Chemical LLC (Kerr-McGee) Site, is located within the Black Mountain Industrial (BMI) Complex in unincorporated Clark County and surrounded by the City of Henderson, Nevada. This OU-2 SLERA Work Plan defines the approach to be used in the screening evaluation of risk, including the steps involved in the SLERA and how the results will be used to inform decisions about OU-2 from an ecological perspective. Data and information from previous investigations will be used for the OU-2 SLERA as described in Section 2. No additional field sampling is planned for OU-2 for the purposes of assessing ecological risk in the SLERA.

A SLERA provides high confidence that any potentially adverse impact(s) to ecological receptors resulting from exposure to contaminants are not overlooked or eliminated from consideration in investigations of ecological risk. As such, the SLERA is intentionally highly protective, and will identify constituents that clearly pose no threat to biota and eliminate those constituents from further assessment in the ecological risk assessment process. For constituents that are not eliminated from further risk evaluation, site-specific evaluations may be needed to accurately clarify and characterize risks and to provide adequate information for risk management decisions.

Following completion of the human health and ecological risk assessments for the OUs, NERT will utilize the information from the Remedial Investigation Reports and risk assessment to determine where remediation is necessary. The forthcoming Feasibility Studies will evaluate

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[1] On 1 May 2015, ENVIRON officially joined the Ramboll Global Practice Environment & Health and Global Practice Water. Ramboll and ENVIRON have integrated their Environment & Health services into a new Global Practice.

[2] The mid-plume containment boundary line is the boundary between OU-2 and OU-3 and represents the Remedial Action Objective (RAO) for OU-2 of mid-plume containment and mass removal.

the applicable remedial technologies and assemble a number of remedial action alternatives designed to meet the Remedial Action Objectives. Following approval of the Feasibility Studies, NDEP will prepare the Proposed Plan summarizing the proposed remedial action alternatives and provide it for public comment. After the close of the public comment period, NDEP will review and respond to public comments and issue a Record of Decision identifying the selected remedial action alternatives.

1.1 NERT Site History

The following text summarizes information contained in the Remedial Investigation and Feasibility Study Work Plan (RI/FS Work Plan; ENVIRON 2014a). The NERT Site and surroundings are shown in Figure 1-3. The BMI Complex (including the NERT Site/OU-1) was initially developed by the United States (U.S.) Government (under the Defense Plant Corporation) as a magnesium production facility during World War II. Some parts of the NERT RI Study Area are still industrialized, and others have been used for the discharge of a variety of industrial and municipal wastewater effluents. Some areas of the NERT Site and surrounding BMI Complex have been abandoned or are currently vacant, while other areas have been converted to retail or commercial use.

Following World War II, a portion of the area was leased by Western Electrochemical Company (WECCO). By August 1952, WECCO had purchased several portions of the area (referred to as the BMI Complex) and produced manganese dioxide, sodium chlorate, potassium 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 contractor's material from the operating process. AP&CC merged with Kerr-McGee in 1967. Kerr-McGee began production of boron products (elemental boron, boron trichloride, and boron tribromide) at the NERT Site in 1972.

During the 1970s, the United States Environmental Protection Agency (USEPA), the State of Nevada, and Clark County investigated potential environmental impacts from operations conducted within the BMI Complex, including atmospheric emissions, groundwater and surface water discharges, and soil impacts (E&E 1982). From 1971 to 1976, Kerr-McGee modified their manufacturing process and constructed lined surface impoundments to recycle and evaporate industrial wastewater. In 1976, the facility achieved zero discharge status regarding industrial wastewater management.

In 1980, the USEPA requested specific information from the BMI companies regarding their manufacturing processes and their waste management practices. Investigations of chromium-impacted groundwater began in late 1983. Treatment of hexavalent chromium in the groundwater began in mid-1987 and is on-going today. In 1994, the Nevada Division of Environmental Protection (NDEP issued a Letter of Understanding (LOU) that identified 69 specific areas or items of interest and indicated the level of environmental investigation they wanted Kerr-McGee to conduct. A detailed discussion of the specific areas or items of interest identified in the LOU and a list of the products made, years of production, and approximate waste volumes for WECCO, AP&CC and Tronox are found in a Conceptual Site Model (CSM) document prepared by ENSR (ENSR 2005).

Boron tribromide production was discontinued in 1994. 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. In 2009, Tronox filed for Chapter 11 bankruptcy. The Trust took title to the NERT Site in early 2011, as a result of the settlement of Tronox's bankruptcy proceeding. Tronox currently has a long-term lease for approximately 114 acres of the Site, where it continues its manganese dioxide, boron trichloride, and elemental boron manufacturing operations.

1.2 Overview of OU-2

OU-2 lies between OU-1 (the NERT Site) and OU-3 (downgradient of the mid-plume containment boundary line and the Las Vegas Wash [LVW]). OU-2 consists of the Eastside Sub-Area and the southern portion (upgradient of the mid-plume containment boundary line) of the NERT Off-Site Study Area, as shown Figure 1-2. The evaluation of OU-2 from an ecological perspective follows numerous investigations conducted to evaluate the nature, extent, and movement of contaminants from OU-1 to downgradient and cross-gradient areas.

1.2.1 Eastside Sub-Area

The Eastside Sub-Area is approximately 1,983 acres and located in the southeastern quadrant of the Las Vegas Valley within the boundaries of the City of Henderson. The Eastside Sub-Area is located east of Pabco Road, west of Lake Mead Parkway, northeast of N. Boulder Highway, and south of Galleria Drive. The majority of the Eastside Sub-Area was historically part of the BMI Common Areas, portions of which were used for wastewater disposal by chemical producers at the neighboring BMI Complex. Much of the Eastside Sub-Area is currently vacant, and it is no longer associated with any operations within the BMI Complex. The southern portion of the Eastside Sub-Area is currently occupied by a number of commercial businesses. The majority of the Eastside Sub-Area is being redeveloped as a mixed-use, master-planned community named Cadence. Development of the Cadence community began in the east-southeastern section of the Eastside Sub-Area. Currently, approximately 25 percent of the Eastside Sub-Area is developed with occupied residential structures or residential structures that are under construction.

Large portions of the Eastside Sub-Area have been the subject of numerous regulatory actions and environmental investigations. Starting in 1999, Basic Remediation Company (BRC), working under the oversight of the NDEP, assessed and remediated waste disposal ponds within the former BMI Common Areas. In 2006**,** BRC and other companies within the BMI Complex executed a settlement agreement defining the framework for characterization and remediation of the BMI Common Areas and defined steps by which the remedial actions should be performed (NDEP 2006). An aerial overview of BRC's project area, which was defined as part of the Administrative Order of Consent issued by NDEP in 2006 (AOC3), is provided in Figure 1-4.

In 2008, upon NDEP approval of BRC's permit applications, the contaminated soils were excavated and placed in a BRC-owned lined, capped and monitored landfill or Corrective Action Management Unit (CAMU). The landfill is located in an industrial area within Clark County, approximately 2.5 miles from the former BMI Common Areas on property owned by BRC. The CAMU received the last of the remediation wastes in 2014 and was closed in 2015. The clean-up of the impacted areas conformed to USEPA and Nevada State standards for the intended land use. Details of the clean-up plan can be found in BRC's NDEP-approved *Corrective Action Plan,* and online at www.landwellco.com. As each section of the project area was cleaned up, closure reports, no further action (NFA) documents and baseline human health risk assessments (BHRAs) were prepared that describe that any remaining shallow soil contamination was minimal and does not pose unacceptable risks for the intended residential use. Figure 1-4 highlights the areas within OU-2 that received NFAs. NDEP's NFA determinations were restricted to the upper 10 feet of the soil horizon and were consistent with proposed future land uses. As contact with surface soil is the primary concern for ecological receptors within the Eastside Sub-Area, and surface soils have been remediated, NDEP's NFA determinations and closure documentation are sufficient to conclude that no additional evaluation is warranted for the Eastside Sub-Area.

1.2.2 Southern Portion of the NERT Off-Site Study Area

The remaining portion of OU-2 that will be evaluated as part of the OU-2 SLERA is the portion of the NERT Off-Site Study Area located upgradient of the mid-plume contaminant boundary. The NERT Off-Site Study Area boundaries are shown in Figure 1-2. The southern portion of the NERT Off-Site Study Area (the portion located in OU-2) is bordered to the south by Warm Springs Road, to the east by Pabco Road, to the north by a line just north of Galleria Drive, and to the west by the western border of the RI Study Area.

The southern portion of the NERT Off-Site Study Area has been the subject of subsurface investigations related to the downgradient migration of contaminants originating from the NERT Site (OU-1) but was mostly vacant by the early 1950s with scattered structures located north and south of what is now North Boulder Highway. By the early 1980s, much of the NERT Off-Site Study Area had been developed with a combination of commercial and residential structures. The southern portion of the NERT Off-Site Study Area continues to be used primarily for residential housing, known as the Pittman Neighborhood, with commercial and light industrial operations adjacent to major roadways.

1.3 SLERA Objectives and Approach

The objective of the OU-2 SLERA is to assess whether chemicals released during historical manufacturing activities in and around OU-1 have the potential to pose risks to ecological resources within OU-2. The SLERA will be conducted consistent with the following USEPA ecological risk assessment (ERA) guidance documents:

- Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments (ERAGS) (USEPA 1997).
- Guidelines for Ecological Risk Assessment (USEPA 1998).
- Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities (USEPA 1999).
- ECO-Update: Role of Screening-level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments (USEPA 2001). http://www.epa.gov/oswer/riskassessment/ecoup/pdf/slera0601.pdf.

- Region 4 Ecological Risk Assessment Bulletins - Supplement to RAGS. USEPA. 2001b[3]. http://www.epa.gov/region4/waste/ots/ecolbul.htm.
- NDEP guidance: Screening Level Ecological Risk Assessment Guidelines for the BMI Complex, Henderson, Nevada (NDEP 2006).
- Generic Ecological Assessment Endpoints (GEAEs) for Ecological Risk Assessment (USEPA 2003).
- Weight of Evidence in Ecological Risk Assessment (USEPA 2016).

A SLERA consists of Steps 1 and 2 of USEPA's eight-step ecological risk assessment (ERA) process as listed below and shown in Figure 1-5. The screening steps are detailed in Section 3.

- Step 1: Screening-Level Problem Formulation and Ecological Effects Evaluation
- Step 2: Screening-Level Preliminary Exposure Estimate and Risk Calculation

A SLERA differs from a refined SLERA (as is being performed for OU-1) in that a refined SLERA consists of Steps 1-3a of USEPA's eight-step ERA process. Step 3a allows for the refinement of the highly conservative assumptions used in Steps 1 and 2. For instance, average COPEC concentrations are used in Step 3a versus maximum COPEC concentrations used in Steps 1 and 2.

The USEPA process requires scientific management decision points (SMDPs) following certain steps, as shown on Figure 1-5. The SMDPs represent critical steps in the ERA process where NERT and its beneficiaries input and decision-making can occur. The following types of decisions are typically considered at a SMDP:

- Whether the available data is adequate to conclude that historical industrial activities do not pose an unacceptable ecological risk to ecological receptors in the NERT Offsite Study Area, and, therefore, there is no need for further action on the basis of ecological risk.
    - For the NERT Off-Site Study Area, historical chemical concentration data will be compared to ecological screening values (ESVs).
    - For the Eastside Sub-Area, no additional review is warranted based on NDEP's NFA determinations and closure documentation which are sufficient to conclude that potential risk to ecological receptors is *de minimis*.
- Whether the available information is not adequate to make a decision, whereupon the ERA process should continue.
- Whether the available information indicates a potential for an adverse ecological effect, and a more thorough assessment or remediation is warranted.

In the event that the information used in the SLERA is inadequate or concentrations of certain chemicals exceed ESVs, it may be recommended that the ERA advance to a more comprehensive evaluation that begins with a refined screening Step 3a (Figure 1-6).

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[3] The 2001b Region 4 Ecological Risk Assessment Bulletins - Supplement to RAGS supersedes the November 1995 version.

However, at this time, these additional steps, as follows, are not included in the SLERA Work Plan:

- Step 3a: Refinement of Step 2 – SLERA Exposure Estimates and Risk Calculations
- Step 3b: Refinement of Measurement Endpoints for the baseline ecological risk assessment (BERA)
- Step 4: Study Design and Data Quality Objectives Process
- Step 5: Verification of Field Sampling Design
- Step 6: Site Investigation and Data Analysis
- Step 7: Risk Characterization
- Step 8: Risk Management

Steps 3-8 consider more site-specific conditions, and are only necessary for those constituents that could not be ruled out in the SLERA. Therefore, although still conservative and protective, Steps 3-8 present a more realistic assessment of potential ecological risks than the screening scenario.

1.3.1 Ecological Risk Scenarios

SLERA Steps 1-2 represent conservative analyses designed to examine potential risks in an overly protective fashion. Conservative risk values and assumptions will be used consistent with USEPA guidance (USEPA 1997, 1998). The purpose of the SLERA (Steps 1-2) is to either determine that there is a high probability of no ecologically significant risk, or to identify a need to proceed to Step 3a to conduct further evaluation (USEPA 1997).

The screening scenario (Steps 1 - 2) involves the following assumptions:

- The maximum concentrations in the abiotic media will be used to quantify risk to ecological receptors. Therefore, the receptors of concern will be assumed to be exposed to only the maximum concentrations within OU-2 rather than the actual range of concentrations.
- Conservative ESVs will be used. The receptors of concern will be assumed to be as sensitive to the constituents as the most sensitive organisms.
- It will be assumed that the ecological receptors spend their entire life within the boundaries of OU-2 where the maximum concentration was detected, even if that area contains no habitat for that particular receptor.

If the results of the SLERA indicate the need for a more refined evaluation, site-specific work plans and other documents would be developed consistent with the USEPA process, as appropriate, and budget approvals would be obtained from NDEP to perform the work.

1.4 Work Plan Organization

The remainder of this SLERA Work Plan is organized as follows:

- Section 2.0 – Step 1: Screening-Level Problem Formulation and Ecological Effects Evaluation
- Section 3.0 – Step 2: Screening-Level Exposure Estimate and Risk Calculation
- Section 4.0 – Schedule

- Section 5.0 – References

2.0 STEP 1: SCREENING-LEVEL PROBLEM FORMULATION AND ECOLOGICAL EFFECTS EVALUATION

Step 1 of the SLERA includes performing the screening-level problem formulation and the ecological effects evaluation, both of which are described in this Section. The objective of Step 1 is to determine if viable ecological habitat exists in OU-2 for ecological receptors to have direct exposure or food chain exposure to Site-related chemicals. In this step, the environmental surroundings, receptor species/assemblages, habitat/cover types, and relevant environmental and biotic transfer mechanisms in OU-2 will be described and evaluated. This section includes an ecological habitat characterization that is based on a compilation of existing information (e.g., Site history, maps, aerial photographs, natural resource databases) and reconnaissance findings to identify wildlife and vegetative communities within OU-2. The screening-level problem formulation part of Step 1 is presented in Section 3.1, and the screening-level ecological effects evaluation part of Step 1 is presented in Section 3.2

2.1 Screening-Level Problem Formulation

The overall purpose of the screening-level problem formulation is to describe the environmental setting at, and adjacent to, OU-2 and to provide a preliminary evaluation of ecological exposure pathways and assessment endpoints. The screening-level problem formulation provides the framework for the screening step and the methods for analyzing/characterizing risks (USEPA 1998).

The screening-level problem formulation produces two outputs: 1) assessment endpoints that reflect the management and ecosystem attributes the endpoints are meant to protect; and 2) an ecological CSM that describes the relationships between stressors and the assessment endpoints.

2.1.1 Environmental Setting

This section describes the regional ecology, climate, geology, and local hydrogeology in and around OU-2.

2.1.1.1 Regional Ecology

Figures 2-1 and 2-2 illustrate the regional ecosystem distribution and the predominant ecosystem types, respectively, in the vicinity of the NERT RI Study Area. Figure 2-3 illustrates the distribution of vegetation in Clark County and the extent of urbanization in the vicinity of the NERT RI Study Area. The ecosystem type in this region of southern Nevada is Mojave Desert scrub (Clark County Department of Comprehensive Planning 2000). The Mojave Desert scrub ecosystem includes creosote-bur sage and Mojave mixed scrub vegetation communities, invasive, transitional grasslands, as well as large tracts of urban development; and small areas of barren land; and agricultural development.

The USEPA ecological checklist that was completed during the OU-2 reconnaissance conducted on April 2 and 3, 2018 is provided in Appendix A. A photographic log of OU-2 and surroundings is provided in Appendix C. The checklist includes the following types of information:

- Historical activities in the OU-2 area relevant to potential ecological risk
- Land use / topography / urbanization

- Habitats, vegetation types and biological communities
- Surface water features (if any) including lakes, ponds, streams, wetlands, etc. and the potential presence of benthic invertebrates
- The wildlife community (fish, birds, mammals) that may be present in the vicinity of OU-2.
- The presence or absence of ecologically sensitive areas
- OU-1 and OU-2 are located in a very arid region with few natural surface water bodies. The only surface water present within OU-2 are man-made ponds associated with residential developments.

2.1.1.2 Climate

The climate of the Las Vegas Valley is arid with mild winters and dry hot summers. Average annual precipitation as measured in Las Vegas between 1971 and 2000 was 4.49 inches (ENVIRON 2014a). Precipitation generally occurs during two periods, December through March and July through September. Winter storms generally produce low intensity rainfall over a large area. Summer storms generally produce high intensity rainfalls over a smaller area for a short duration. These violent summer thunderstorms account for most of the documented floods in the Las Vegas area. Winds frequently blow from the south or northwest at a mean velocity of approximately 9 miles per hour (mph); however, velocities in excess of 50 mph are not atypical when weather fronts move through the area. During these windy events, dust, sand, and soil at the ground surface can become airborne and may travel several miles. Temperatures can rise to 120°F in the summer, and the average relative humidity is approximately 20%. The mean annual evaporation from lake and reservoir surfaces ranges from 60 to 82 inches per year (Shevenell 1996).

2.1.1.3 Geology

The following subsections describe the regional geology, local geology, and local hydrogeology.

Regional Geology

OU-2 occupies a topographic and structural basin trending northwest-southeast and extending approximately 55 miles from near Indian Springs on the north to Railroad Pass on the south. The valley is bounded by the Las Vegas Range, Sheep Range, and Desert Range to the north; by Frenchman and Sunrise Mountains to the east; by the McCullough Range and River Mountains to the south and southeast; and the Spring Mountains to the west. The mountain ranges bounding the east, north, and west sides of the valley consist primarily of Paleozoic and Mesozoic sedimentary rocks (limestones, sandstones, siltstones, and fanglomerates), whereas the mountains on the south and southeast consist primarily of Tertiary volcanic rocks (basalts, rhyolites, andesites, and related rocks) that overlie Precambrian metamorphic and granitic rocks (ENSR 2007; Ramboll Environ 2016).

Within the Las Vegas Valley, eroded Tertiary and Quaternary sedimentary and volcanic rocks comprise the unconsolidated basin deposits, which can be approximately 13,000 feet thick (ENSR 2007). The valley floor consists of fluvial, paludal (swamp), playa, and lacustrine deposits surrounded by more steeply sloping alluvial fan aprons derived from erosion of the surrounding mountains. Generally, the deposits grade finer with increasing distance from their source and with decreasing elevation. The structure within the Quaternary and

Tertiary-aged basin fill is characterized by a series of generally north-south trending fault scarps.

Local Geology

The local geology and hydrogeology are defined by data collected from more than 2,000 borings and wells that have been installed in the area. The following descriptions are summarized from the Technical Memorandum, Remedial Investigation Data Evaluation (Ramboll Environ 2016) and the RI/FS Work Plan Addendum, Phase 3 Remedial Investigation (Ramboll Environ 2017)

Alluvium.

OU-1 and OU-2 are located on Quaternary alluvial deposits (Qal) that slope north toward Las Vegas Wash. The alluvium consists of a reddish-brown heterogeneous mixture of well-graded sand and gravel with lesser amounts of silt, clay, and caliche. Clasts within the alluvium are primarily composed of volcanic material. Boulders and cobbles are common. Due to the mode of deposition, no distinct beds or units are continuous over the area.

A major feature of the alluvial deposits is the stream-deposited sands and gravels that were laid down within paleochannels eroded into the surface of the Muddy Creek Formation during infrequent flood runoff periods. These deposits vary in thickness and are narrow and generally linear. These generally uniform sand and gravel deposits exhibit higher permeability than the adjacent, well-graded deposits. In general, these paleochannels trend northeastward.

The thickness of the alluvial deposits ranges from less than 1 foot to more than 50 feet beneath OU-1. Soil types identified in on-site soil borings include poorly sorted gravel, silty gravel, poorly sorted sand, well sorted sand, and silty sand. The thickness of the alluvium, as well as the top of the underlying Muddy Creek Formation, was mapped to locate these paleochannels as they are typically incised into the Muddy Creek Formation.

Transitional (or reworked) Muddy Creek Formation.

Where present, Transitional Muddy Creek Formation (xMCf) is encountered at the base of the alluvium. The Transitional Muddy Creek Formation consists of reworked sediments derived from the Muddy Creek Formation, which is described below. Therefore, the xMCf appears similar to the Muddy Creek Formation, but it consists of reworked, less consolidated and indurated sediments.

Muddy Creek Formation.

The Muddy Creek Formation of Pleistocene age occurs in the Las Vegas Valley as valley-fill deposits that are coarse-grained near mountain fronts and become progressively finer-grained toward the center of the valley. Locally, the Muddy Creek Formation reaches thicknesses greater than 1,000 feet in Las Vegas Valley. At the BMI complex facilities, the upper portion of this unit has been investigated to depths of approximately 300-400 feet, and the term “Upper Muddy Creek Formation” (or UMCf) has been used to describe the upper part of the formation. Where encountered beneath OU-1, the UMCf is composed of at least two thicker units of fine-grained sediments of clay and silt (the first and second fine-grained facies) interbedded with at least two thinner units of coarse-grained sediments of sand, silt, and gravel (the first and second coarse-grained facies). Except for the southernmost 1,000 feet adjacent to Lake Mead Parkway, the first fine-grained facies (UMCf-fg1) separates the first coarse-grained facies (UMCf-cg1) from the overlying

Quaternary alluvium. Within the southern 1,000 feet of OU-1, the Muddy Creek Formation's UMCf-fg1 pinches out along a roughly west-northwesterly trending line.

Locally, the Muddy Creek Formation represents deposition in an alluvial apron environment from the Spring Mountains to the west, grading into fluvial, paludal (swamp), playa, and lacustrine environments further out into the valley center. At OU-1, the Muddy Creek Formation does not crop out but instead subcrops beneath a veneer of Quaternary alluvium. Since OU-1 is located closer to the mountains, the upper portion of the UMCf-fg1 unit tends to have zones of sandy silt/silty fine sand as well as a greater number of thin, discontinuous layers of silty sand than in the OU-2 downgradient plume area, which is farther from the mountains and more toward the interior of the depositional basin.

2.1.1.4 Local Hydrogeology

Alluvial Aquifer. The first groundwater encountered within OU-2 occurs more than 30 feet (ft) below ground surface (bgs) along Warm Springs Road on the southern portion of OU-2, and is at, or near, the ground surface at Las Vegas Wash within OU-3 to the north. The average depth to groundwater in the NERT Off-Site Study Area is approximately 25 ft bgs, with a trend decreasing downgradient from OU-2 to the LVW within OU-3.

In OU-2 north of the Site beyond Boulder Highway, shallow groundwater is generally encountered between four and 30 feet bgs, becoming shallower as it approaches the Las Vegas Wash. The groundwater gradient averages 0.015 to 0.02 ft/ft south of the Athens Road well field (AWF), flattening to 0.007 to 0.010 ft/ft north of the well field. The groundwater flow direction in OU-2 is generally to the north-northeast. Within OU-2, this generally uniform flow pattern may be modified locally by subsurface alluvial channels cut into the underlying UMCf (paleochannels), and by depressions created by the groundwater extraction wells at the Athens Road groundwater extraction well field. Perchlorate and other contaminants found in groundwater in this area migrated from the NERT Site through subsurface transport in shallow groundwater (Ramboll Environ 2017a). The current perchlorate groundwater plume is illustrated in Figure 2-4.

Surface Water. Surface topography generally slopes north towards the LVW. Flow occurs as infrequent storm runoff that drains across the alluvial apron in shallow washes. Las Vegas Wash is a tributary to Lake Mead and it is the only channel through which the valley's excess water flows to the lake. The water flowing through Las Vegas Wash comprises less than two percent of the water that flows into Lake Mead and consists of urban runoff, shallow groundwater, storm water, and releases from the valley's three water reclamation facilities (Southern Nevada Water Authority 2004).

2.1.2 Ecological Exposure Media at the Site

In an ERA, ecologically relevant media typically include surface water, sediment (i.e., the upper six inches), and surface soil (i.e., the upper foot of the soil column) where the majority of biological activity occurs (TCEQ 2014). Data from 0 to 1 foot will be used but will be supplemented with additional data to provide a more robust surface soil dataset. These include data from 0 to 2.5 feet (ENSR 2007) and surface soil data from BEC (2007)[4].

Groundwater becomes relevant in an ERA only at the groundwater and surface water transition zone (i.e., the interface; USEPA 2008). While impacted groundwater is present

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[4] Data from BEC Parcels A-B have a start depth of 0 ft, but the end depth of the samples is not defined. These samples are referred to by BEC as "surface soil" samples (BEC 2007).

within OU-2, as shown in Figure 2-4, there is no groundwater to surface water connection within OU-2. Surface water features within OU-2 are man-made ponds in the master-planned community. These ponds are in areas where contaminated soils (up to 10 ft bgs) were removed in support of residential development. The details of the soil removal actions will be provided in the SLERA report. Therefore, surface soils are the only exposure media that will be evaluated in the SLERA.

The maximum concentration of each chemical from the available surface soil data will be used in the SLERA. For chemicals that exceed the screening criteria, attention will be given to the spatial distribution of the chemical in OU-2, including the depth interval.

2.1.3 Preliminary Chemicals of Potential Ecological Concern

Preliminary chemicals of potential ecological concern (PCOPECs) are defined as any chemical that was used or manufactured on the NERT Site (OU-1) that may have migrated downgradient to OU-2. The chemical classes that were analyzed in soil from previous investigations in OU-2 that may be evaluated in the SLERA are shown in Table 2-1. PCOPECs are distinguished from chemicals of potential concern (COPECs), which are the chemicals that will be included in the SLERA. For example, PCOPECs that may have been used at OU-1 but were not detected in surface soil will not be included in the SLERA.

2.1.3.1 SLERA Data Set and Data Evaluation

Data and information from previous investigations will be used for the OU-2 SLERA. The data from Tronox, Kerr-McGee and Basic Environmental Company (BEC) for the portion of the NERT Off-Site Study Area within OU-2 and the closure reports from BRC for the Eastside Sub-Area described in Section 2 will be used in the SLERA. No additional field sampling is planned for OU-2 for the purposes of assessing ecological risk in the SLERA.

Data to be used for the OU-2 SLERA

Data from previous studies, including Kerr-McGee 1998, ENSR 2007, and BEC 2007, in the NERT Off-Site Study Area within OU-2 will be used for the SLERA. Each of these studies are described below. In some instances, the existing surface soil data is from depths other than the preferred 0 to 1-foot interval and extends to 2.5 feet. The datasets will be evaluated to determine a final dataset for the SLERA. Only surface soil data from the three studies will be used in the SLERA as ecological receptors are typically exposed to only the surface soil. For those PCOPECs that are not detected, one-half the detection limit will be used in the screening evaluation. If ESVs are below the detection limit for a particular PCOPEC, then the chemical will be retained for further evaluation in the risk assessment process. The chemical classes analyzed by ENSR (2007), Kerr-McGee (1998) and BEC (2007) are provided in Table 2-1.

Tronox 2007

Tronox, under the direction of NDEP, conducted an investigation in 2006 to characterize the soil and groundwater conditions at the then “Tronox” facility located within the BMI Complex (ENSR 2007). The investigation extended from the NERT Site north toward Boulder Highway and included a total of 27 soil borings. The selection of the soil and groundwater sample locations were guided by information from past site investigations (ENSR 2005), information on chemical use at the Site, and LOUs as identified by NDEP (NDEP 1994). The samples taken between Warm Springs Road and Boulder Highway, also referred to as Parcels A and B, will be used in the SLERA. ENSR, on behalf of Tronox, collected four near surface soil samples in this area between November 1 and 21, 2006, as shown in Figure 2-5 (ENSR

2007). The rationale for each of the boring locations is provided in Table 2-2. The Tronox dataset that will be used for the SLERA to characterize potential risk to ecological receptors within the NERT Off-Site Study Area is provided in Table 2-3.

Kerr-McGee 1998

Sampling location PC-70 is at the north end of the NERT Off-Site Study Area, as shown in Figure 2-5. A surface soil sample was collected at this location by Kerr-McGee as part of a hydrogeological investigation at the Pittman Lateral Test Site in September 1998 that involved the installation of a groundwater monitoring well (PC-70; Kerr-McGee 1998). Prior to construction of well PC-70, a soil boring was drilled at the site in September 1998. The purpose of the soil boring was to determine the lithology of the alluvial sediments at the well site as first step in designing the well. The soil was tested for a variety of pesticides, SVOCs, VOCs, PCBs, and dioxins. The rationale for soil sampling at PC-70 is provided in Table 2-2. The Kerr-McGee dataset that will be used for the SLERA to characterize potential risk to ecological receptors within the NERT Off-Site Study Area is provided in Table 2-3.

BEC 2006-2007

BEC conducted a soil characterization analysis of Parcels A and B in 2006-2007. Parcels A and B are in the southern portion of the NERT Off-Site Study Area in OU-2, located north of Warm Springs Road, approximately 1/4 mile west of the intersection with Boulder Highway (Figure 2-6).[5]

Parcels A and B were formerly owned by Tronox and are comprised primarily of vacant land. According to BEC (2007), other historic uses/disposals on or near these parcels may have occurred. A previous investigation by BEC noted the presence of certain debris, gravel, fill and concrete/asphalt piles, an abandoned baghouse of unknown origin, and multiple five-gallon pails of what appeared to be oil located on the parcels. Given the vicinity of BMI Complex industrial companies, it is also possible that the parcels or portions of the parcels could have been indirectly impacted by BMI operations.

The objective of the BEC field investigation was to identify and characterize the distribution of Site-related chemicals in the vicinity of the future potential land use features (e.g., warehouses, commercial office buildings) and historical site features (e.g., debris piles, burn areas, etc.). Surface and shallow subsurface samples were collected as depth-discrete soil matrix samples. Sample locations were selected to both evaluate potential future land use exposures and to characterize potential source areas on the parcels. The sample locations provide spatial coverage of the parcels (Figures 2-7 and 2-8). The BEC report indicated the sampling start depth was 0 feet but an “end depth” was not reported. The samples are specifically referred to by BEC as “surface soil” samples. The rationale for selecting the sample locations was to ensure adequate spatial coverage to obtain data that is representative of the parcels, that specific locations within the parcels that were potentially impacted were sampled, and that the sampled concentrations could be meaningfully used in subsequent risk assessments, if needed. Ultimately, the purpose of this sampling was to support the NFA determinations for Parcels A and B. The BEC dataset that will be used for

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[5] The Parcel B boundary designated by BEC and Tronox in the early to mid-2000s was different than that designated more recently by NERT, following the sale of the eastern portions of Parcel B by Tronox to other parties in 2008-2010.

the SLERA to characterize potential risk to ecological receptors within the NERT Off-Site Study Area is provided in Table 2-4.

The dataset that will used for the OU-2 NERT Off-Site Study Area that consists of data from Kerr-McGee (1998), ENSR (2007), and BEC (2007) is collectively referred to as the OU-2 SLERA soil dataset.

Data Usability

The primary objective of the data usability evaluation is to identify appropriate data for use in the SLERA. Ramboll will adopt the methodology described in the BHRA Work Plan for this evaluation (Ramboll Environ 2017b). All relevant OU-2 data will be evaluated in accordance with the NDEP Supplemental Guidance for Assessing Data Usability for Environmental Investigations at the BMI Facility in Henderson, NV (NDEP 2010), which is based on USEPA's Guidance for Data Usability in Risk Assessment (Parts A and B) (USEPA 1992a,b)

Data Handling

For samples with primary and field duplicate results, both samples will be treated as independent samples and both will be included in all data analyses, regardless of whether one or both are not detected. This is considered appropriate because field duplicate samples represent a discrete and unique measurement of soil chemical conditions proximal to the primary sample (unlike split samples). According to NDEP (2006), this approach is appropriate if the variation between field duplicates and their primary samples does not appear very different than the variation between samples in a given area or exposure unit. The field duplicates will be compared to the primary sample during the course of the data evaluation and a determination will be made regarding whether it is reasonable to treat field duplicates as independent samples consistent with NDEP guidance (NDEP 2006).

2.1.3.2 Evaluation of Site Concentrations Relative to Background Conditions

Some chemicals (particularly naturally-occurring metals) may be present in environmental media but unrelated to Site releases. Background chemicals fall into two broad categories: those that are naturally occurring and those that are present due to anthropogenic sources (USEPA 2001). Metals often occur naturally in soil and geological formations. Weathering and dissolution of underlying soil may be a means of transporting metals into surrounding soils and water. Background chemicals may come from a variety of anthropogenic sources such as road runoff, atmospheric deposition, washout by rainfall (or precipitation scavenging), and surface flow of chemicals from upstream sources unrelated to activities at the Site.

USEPA (1989, 1992a, b) guidance allows for the elimination of chemicals from further quantitative evaluation if detected levels are not elevated above naturally occurring levels. Typically, for purposes of selecting COPECs for risk assessment, COPECs are defined as chemicals that are elevated above naturally occurring levels based on statistical analyses. Generally, this approach is applicable to metals and radionuclides (USEPA 1989). The comparison of applicable soil concentrations within the OU-2 SLERA soil dataset to background levels will be conducted using the existing soils background data sets presented in the BRC/TIMET regional background data set (BRC/TIMET 2007). Specifically, as recommended by Neptune (2017), the 95 McCullough samples collected as part of the BRC/TIMET background study will be used in the background evaluation as OU-2 is located north of the NERT Site and north of the McCullough Range on alluvial soils generated from McCullough Range substrate. Since statistical analysis showed no significant difference in background data across different depth intervals up to 10 feet bgs and to ensure adequate sample size, the background data from 0-10 feet bgs will be compared to the OU-2 SLERA soil data collected from within the top 0 to 2.5 feet.

Consistent with the methodology used in the 2017 COPC/DU report for the OU-1 soil BHRA (Ramboll Environ 2017c) and various recent health risk assessments (HRAs) for parcels being sold by the Trust (Ramboll 2018), and approved by NDEP, radionuclides will be assessed first by comparing the background dataset to the OU-2 SLERA dataset and then by calculating cumulative hazard quotients (HQs; the ratio between concentration and ecological screening level) for all radionuclides for both the OU-2 SLERA dataset and the background data set. If the cumulative HQs for the OU-2 SLERA dataset are not significantly different than the background dataset, all the radionuclides will be excluded as COPECs.

2.1.4 Description of Potentially Exposed Receptors

The identification of the categories of receptors most likely affected by Site activities helps focus the SLERA. A site reconnaissance provides information on potential wildlife and habitats present at OU-2. The Clark County, Nevada Species Account Manual (Clark County Department of Comprehensive Planning 2003) provides information on Clark County's Multiple Species Habitat Conservation Plan and summarizes the appearance, occurrence, life histories and habitat preferences of a wide variety of species within Clark County, Nevada. Information from this document, the Peterson Field Guides and the April 2018 OU-2 reconnaissance, was used to identify potentially exposed receptors.

The United States Fish and Wildlife Service and NDEP are the federal and state agencies, respectively, responsible for monitoring and managing at-risk and protected species. Species with threatened or endangered listing status in Clark County are provided in Table 3-1. Based on the April 2018 OU-2 site reconnaissance, there is no critical habitat on or in the immediate vicinity surrounding OU-2[6].

2.1.5 Identification of Potentially Complete Exposure Pathways

A complete exposure pathway is one in which chemicals can be traced or expected to travel from the source to a receptor (USEPA 1997).

A complete exposure pathway has five parts:

1. A source of chemical constituents
2. An environmental medium and transport mechanism (such as historical runoff that impacted surrounding soils)
3. A point of exposure (such as surface soil)
4. A route of exposure (such as a receptor touching, drinking, or eating contaminated sediment)
5. A population of receptors (such as a community of benthic invertebrates).

The exposure pathway is considered complete and potentially capable of causing unacceptable risks only when all five parts are present.

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[6] Critical habitat is a term defined and used in the Endangered Species Act (ESA). It is a specific geographic area that contains features essential to the conservation of an endangered or threatened species and that may require special management and protection (USFWS 2014).

A CSM is intended to provide a clear description of how ecological receptors may come into contact with COPECs via release mechanisms and exposure to soil and/or associated food items. The CSM for OU-2 is provided in Figure 2-9 and identifies contaminant sources, release mechanisms, exposure media, exposure routes, and ecological receptors that will be evaluated in the SLERA, based on a current understanding of environmental conditions in OU-2. This information will be used as necessary to understand potentially complete ecological exposure pathways from soil for each receptor group in OU-2. These may include areas where surface soil contamination has previously been addressed and where historical releases from potential source areas were documented or inferred from field investigations.

The following are possible complete exposure pathways that will be evaluated in the SLERA:

- Direct contact of terrestrial invertebrates to COPECs in surface soil; and
- Root uptake of surface soil COPECs by terrestrial plants.
- Exposure of terrestrial birds and mammals to COPECs through the incidental ingestion of soil and ingestion of food items.

Areas of OU-2 considered to be inaccessible or highly unlikely to attract wildlife will not be considered in the SLERA as there would be no complete exposure pathway from source to receptor in these locations. Much of the residential areas represent such cases. Based on the April 2-3 site reconnaissance, the residential areas do not contain significant attractive features for wildlife as these areas are covered by buildings and pavement and therefore sensitive wildlife would not preferentially forage or nest there

2.1.6 Identification of Generic Assessment and Measurement Endpoints

Ecological risk endpoints define ecological attributes that are to be protected (assessment endpoints) and measurable characteristics of those attributes (measurement endpoints). Assessment endpoints most often relate to attributes of biological populations or communities and focus the risk assessment on particular components of the ecosystem that are potentially at risk (USEPA 1997; 2003). Assessment endpoints describe an entity (e.g., fish-eating birds) and an attribute of that entity (e.g., survival rate). A measurement endpoint is a measurable ecological characteristic and/or response to a stressor and provides a method of quantifying potential effects on the receptors potentially at risk (USEPA 1998).

Because of the complexity of natural systems, it is generally not possible to directly assess the potential impacts to all ecological receptors present within an area. Therefore, receptor species (e.g., bald eagle) or species groups (e.g., fish) are often selected as surrogates to evaluate potential risks to larger components of the ecological community, or guilds (e.g., piscivorous birds), represented in the assessment endpoints (e.g., survival and reproduction of piscivorous birds).

Appropriate assessment endpoints for the SLERA include those receptors that may be affected by COPECs that migrated from the Site to OU-2 and for which complete exposure pathways exist. Ecological receptors are selected for their potential exposure, ecological significance, economic importance, societal relevance, or cultural significance. The most conservative ESV for a particular chemical from all ESVs available are used during the screening thereby ensuring that all receptors are protected. As such, the measure of potential effect (or measurement endpoint) is the comparison of soil concentrations against most sensitive ESV among soil invertebrates, plants, birds and mammals. The assessment endpoints being considered for the OU-2 SLERA are as follows:

- **Terrestrial assessment endpoint 1**: Survival, growth and reproductive ability of indigenous terrestrial plant communities within OU-2.
- **Terrestrial assessment endpoint 2**: Survival, growth and reproductive ability of terrestrial invertebrate communities within OU-2.
- **Terrestrial assessment endpoint 3**: Survival, growth and reproductive ability of terrestrial bird populations within OU-2.
- **Terrestrial assessment endpoint 4**: Survival, growth and reproductive ability of terrestrial mammal populations within OU-2.
- **Terrestrial assessment endpoint 5**: Survival, growth and reproductive ability of reptile populations within OU-2[7].

As described by Barnthouse et al. (2008), "regulations, policies, directives, and guidance documents frequently discuss the need for ecological risk assessments to consider risks to populations, not simply to individual organisms or organism-level attributes. The reason for this [need] is that, from a management perspective, the population-level attributes such as abundance, persistence, age composition, and genetic diversity are usually more relevant than are the health or persistence of individual organisms."

The assessment endpoints listed above consider attributes that are tied to population-level abundance and persistence, in that they consider survival, growth and reproduction. Decreased survival will result in smaller numbers of individuals, decreasing the population of that receptor. Growth measurements such as reduced body weights can be associated with lower fitness and lower reproductive success, leading to a reduction in the receptor population. Similarly, decreased reproduction can result in smaller numbers of individuals over time, also decreasing the population of that receptor.

The analysis for special status species (including federally-listed threatened and endangered species) is performed on an individual level, as even a single individual comprises a larger percentage of those populations at risk. While there is no critical habitat in OU-2 and no record of special status species being observed at or in the immediate vicinity of OU-2, the assessment of risks to single special status individuals will be qualitatively considered as part of the narrative of the OU-2 SLERA.

2.2 Screening-Level Ecological Effects Evaluation

The screening-level ecological effects evaluation involves the identification of appropriate ESVs for the media being evaluated. ESVs are available from a broad range of federal and state sources, one or more of which may be relevant to any given site. Further, ESVs for some media and receptors may not be available from each source; thus, consideration of a range of sources provides greater opportunity for identification of ESVs.

The ESVs to be used in the OU-2 SLERA are provided in Table 3-2A and 3-2B. These criteria are intended to ensure protection of terrestrial organisms including plants and soil invertebrates.

Ideally, ESVs will be identified for any chemical detected in surface soil within the OU-2 SLERA soil dataset from the following sources:

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[7] Due to the lack of toxicity data available for reptiles, the evaluation for reptiles will be presented qualitatively in the OU-2 SLERA Report. As there are no natural water features within OU-2, amphibians will not be added.

- USEPA Ecological Soil Screening Levels (Eco-SSLs) (2007a, b and c): The Eco-SSLs are based on a variety of studies that consider effects at multiple levels of the food web. (https://cfpub.epa.gov/ecotox/)
- USEPA Region 4 (2018): Regional Ecological Risk Assessment (ERA) Supplemental Guidance
- USEPA Region 6 (1999): Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities (EPA530-D-99-001A).
- Oak Ridge National Laboratory (ORNL) terrestrial plant and invertebrate (earthworm) screening values (Efroymson, et al. 1997a, 1997b, 1997c). Values for soil microorganisms and microbial processes (Efroymson et al. 1997c) will be used in cases when earthworm-based values are not available.
- Dutch ESVs (1999): Risk-based Assessment of Soil and Groundwater Quality in the Netherlands: Standards and Remediation Urgency
- Los Alamos National Laboratory (LANL) LANLECORISK Database for radionuclides. https://www.lanl.gov/environment/protection/eco-risk-assessment.php

The primary criteria sources listed above (i.e., LANL, Eco-SSLs, USEPA Region 4, and USEPA Region 6) may not have ESVs for every chemical that was detected in surface soil in the OU-2 SLERA soil dataset. As such, secondary sources of criteria, such as the following, will be used as necessary:

- USEPA (1999) Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities: Appendix E, Toxicity Reference Values
- The USEPA’s ECOTOX database (USEPA 2009)
- ORNL’s Risk Assessment Information System database (ORNL 2009)
- Agency for Toxic Substances and Disease Registry’s (ATSDR’s) toxicological profiles database (ATSDR 2009)
- National Oceanic and Atmospheric Administration (NOAA) Screening Quick Reference Tables (SQuiRT) (NOAA 2008)

Secondary sources typically are less rigorous and/or less applicable than primary sources. For example, the secondary values could be derived using fewer toxicity studies representing fewer species than are used to derive the primary values (Suter and Tsao 1996). Nevertheless, they do represent available data that are relevant for a SLERA and for obscure or rarely detected chemicals; secondary sources present a readily available option for application in the SLERA.

Chemicals that lack an ESV from a primary criteria source and for which a secondary source could not be identified will be retained as COPECs and further evaluated in the next step of the SLERA process.

The radionuclide contaminants being screened in the SLERA will be evaluated based on a comparison of concentrations of radionuclides in soil compared to ESVs provided by Los Alamos National Laboratory (2012). The pathways of exposure include external exposure from soil and internal exposure from the uptake of radionuclides in food and water, and ingestion of soil. ESVs for radionuclides are derived from models that calculate the internal and external dose (LANL 1999).

3.0 STEP 2: SCREENING-LEVEL EXPOSURE ESTIMATE AND RISK CALCULATION

Step 2 of the SLERA includes performing the screening-level exposure assessment, as described in this Section. The screening-level exposure assessment is comprised of the calculation of exposure and risk estimates, and the evaluation of uncertainties in the exposure and risk estimates (USEPA 1997, 2001a).

3.1 Identification of Screening-Level Exposure Estimates

The maximum concentrations detected in surface soil within the OU-2 SLERA soil dataset will be used as the exposure point concentration (EPC) in the screening steps as part of the evaluation of potential direct toxicity. It is important to recognize the overly conservative assumption made by selecting the maximum concentration as the screening-level exposure value. It is very unlikely that organisms would be exposed to the maximum concentration of a chemical for 100 percent of their life/day/life-cycle. Because non-sessile organisms move throughout their home range, they are more likely to experience a wide range of concentrations throughout the life/day/life-cycle. However, in keeping with the conservative nature of a SLERA, maximum detected chemical concentrations will be used (Steps 1 and 2; USEPA 2001). As necessary, more realistic screening may be conducted during the screening refinement (Step 3a), using more realistic exposure estimates; however, Step 3a is not included in the SLERA Work Plan at this time.

3.2 Screening-Level Risk Calculations

Risk estimates will be calculated in the SLERA by dividing conservative chemical-specific exposure estimates by conservative chemical-specific ESVs. These unitless chemical-specific ratios are referred to as Hazard Quotients (HQs). HQs are defined by USEPA as follows:

- An HQ is typically calculated as the ratio of a chemical’s exposure level to its safe level, such that values larger than 1 are of concern (USEPA 2004).
- An HQ less than a value of 1 (to one significant figure) indicates that adverse impacts to wildlife are considered unlikely (USEPA 1997).

An HQ of one or greater is an indication that further evaluation may be necessary to evaluate the potential for adverse impacts to wildlife. Chemicals that, at this point in the process, lack a reliable and appropriate ESV may also need to be further evaluated for the potential for adverse impacts to wildlife.

3.3 Evaluation of Uncertainties

An evaluation of uncertainties is a component of risk assessment (USEPA 1997). A risk assessment is designed to provide estimates of the potential risks that may exist for wildlife and incorporates uncertainty in a conservative (i.e., precautionary) manner. Uncertainty in an ERA is “the imperfect knowledge concerning the present or future state of the system under consideration; a component of risk resulting from imperfect knowledge of the degree of hazard or of its spatial and temporal distribution” (USEPA 1997).

Quantitative evaluation of ecological risks is frequently limited by uncertainty regarding data, exposure, and toxicity. Although risk assessment follows a formal scientific approach, making assumptions or estimates based on limited data that are available or incorporation of professional judgment is an inherent part of the risk assessment process. Uncertainties that may lead to either an overestimation or an underestimation of risk are associated with each stage of risk assessment. Therefore, uncertainties that may lead to either an overestimation or an underestimation of risk will be considered in detail in the OU-2 SLERA Report for each stage of the risk assessment process.

For example, the uncertainty section of the OU-2 SLERA Report will include a discussion of topics such as:

- Analytical data used in the ERA (the historic data sources, chemical concentration results and distributions, issues or inconsistencies with the background data, and detection frequencies in each medium;
- The surrogate species used to reflect the broader range of species that they represent for the LVW ecosystem (in the event that the results of the screening evaluation suggest that refinements are warranted); and
- The derivation and selection of ESVs and TRVs, with regard to a variety of topics, such as representativeness to the LVW species and conditions, uncertainty factors used in the derivation, and how these affect the subsequent screening calculations.

3.4 SLERA Scientific Management Decision Point

The types of decisions typically considered at the SMDPs were identified in Section 1 of this SLERA Work Plan. An interim SMDP will occur at the conclusion of the screening step to identify the chemicals and media that do not pose unacceptable risks and those (if any) that require further assessment or action (Step 3a). If no chemicals and media require further assessment, the ERA process would conclude at the terminus of the screening (Steps 1 and 2). The following three options for a decision are considered at this SMDP (USEPA 1997):

- Whether the available information is adequate to conclude that historical industrial activities in OU-1 do not pose an unacceptable ecological risk to ecological receptors in OU-2, and, therefore, that there is no need for further action on the basis of ecological risk.
- Whether the available information is not adequate to make a decision, whereupon the ERA process should continue.
- Whether the available information indicates a potential for an adverse ecological effect, and a more thorough assessment or remediation is warranted.

If further assessment or action (i.e., the Step 3a or beyond) is needed, then a work plan addendum will be submitted to the Trust and NDEP for approval.

4.0 SCHEDULE

The OU-2 SLERA will be conducted following NDEP approval of this SLERA Work Plan and in parallel with the OU-1 refined SLERA, OU-1/OU-2 RI, and the BHRAs for OU-1 and OU-2 currently in progress. The OU-1 refined SLERA and the OU-2 SLERA reports are anticipated to be submitted to NDEP for review in June 2019.

5.0 REFERENCES

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TABLES

TABLE 2-1: Chemical Classes Analyzed in Soil in the NERT Off-Site Study Area

Nevada Environmental Response Trust Site

Henderson, Nevada

Groups
Dioxins/Furans
Explosives/Perchlorate
Metals
Organic Halides
Organochlorine Pesticides
Organophosphate Pesticides
Polychlorinated Biphenyls (PCBs)
Polycycylic Aromatic Hydrocarbons (PAHs)
Radium Compounds
Semi-Volatile Organic Compounds (SVOCs)
Total Petroleum Hydrocarbons (TPHs)
Volatile Organic Compounds (VOCs)

TABLE 2-2. Rationale for Soil Samples Collected by ENSR (2007) and Kerr-McGee (1999)

Nevada Environmental Response Trust
Henderson, Nevada

Boring ID	Characterized Areas & Location Rationale
SA-24	NW Drainage Ditch - floor of ditch entering property
SA-25	NW Drainage Ditch - floor of ditch exiting property
SA-26	Auto salvage yard soil stain
SA-27	Recycle / salvage yard soil stain
PC-70	Groundwater sampling well location

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TABLE 2-3: ENSR and Kerr-McGee Data in NERT Off-Site Study Area Shallow Soil for use in the SLERA

Nevada Environmental Response Trust Site

Henderson, Nevada

Analyte Group	Analyte	CAS	Unit	Source				
				Ker McKee (1999)	ENSR (2007)			
				PC-70	SA-24	SA-25	SA-26	SA-27
				0.0 - 0.0 ft bgs	1.0 - 2.5 ft bgs	0.5 - 2.0 ft bgs	0.5 - 2.0 ft bgs	0.5 - 2.0 ft bgs
				06/23/1999	11/03/2006	11/03/2006	11/20/2006	11/02/2006
Dioxins	1,2,3,4,5,6,7,8-Octachlorodibenzo-p-dioxin	OCDD	ng/kg	--	2.462	88.725 J	3.042	145.942
	1,2,3,4,5,6,7,8-Octachlorodibenzofuran	OCDF	ng/kg	--	1.385	1,726.841 J	6.411	59.691
	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	ng/kg	--	0.281	101.111	0.614	10.888
	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	ng/kg	--	0.646	1,181.817 J	3.290	26.455
	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	ng/kg	--	<0.068	544.7 J	1.001	10.922
	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6	ng/kg	--	<0.057	8.369	<0.059	<0.089
	1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	ng/kg	--	0.317	441.621 J	1.230	10.811
	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	57653-85-7	ng/kg	--	<0.054	28.654	<0.053	0.806
	1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	ng/kg	--	0.207	408.013	0.897	7.190
	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3	ng/kg	--	<0.056	31.372	<0.055	0.700
	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	ng/kg	--	<0.028	64.621	<0.117	0.925
	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	40321-76-4	ng/kg	--	<0.056	16.513	<0.058	0.419
	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	ng/kg	--	0.201	216.329 J	0.634	5.893
	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	ng/kg	--	0.057	157.601 J	0.381	4.081
	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	ng/kg	--	0.076	139.916	0.201	3.078
	2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	ng/kg	--	<0.046	4.934	0.009	0.150
	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	ng/kg	--	0.183	145.395 J	0.940	7.057
	HpCDD (total)	HPCDD	ng/kg	--	--	153.094	--	--
	HpCDF (total)	HPCDF	ng/kg	--	--	2,353.029 J	--	--
	HxCDD (total)	HXCDD	ng/kg	--	--	224.223	--	--
	HxCDF (total)	HXCDF	ng/kg	--	--	2,007.901 J	--	--
	PeCDD (total)	PECDD	ng/kg	--	--	194.911	--	--
	PeCDF (total)	PECDF	ng/kg	--	--	1,913.666 J	--	--
	TCDD (total)	41903-57-5	ng/kg	--	--	182.58	--	--
	TCDF (total)	TCDF	ng/kg	--	--	1,638.217 J	--	--
	Total TEQ - ENSR Calculated (a)	TTEQ-A	ng/kg	--	0.12	217	0.49	5.37
	Total TEQ - ENSR Calculated (b)	TTEQ-B	ng/kg	--	0.18	217	0.54	5.37
General Chemistry	Alkalinity	T-ALK	mg/kg	--	343	1,390	330 J+	1,100
	Alkalinity (as CaCO3)	ALK AS CACO3	mg/kg	--	<28.5	205	92.2 J+	53.0
	Ammonia	7664-41-7	mg/kg	--	<0.63	<0.62	0.59 UJ	<0.58
	Bromide	24959-67-9	mg/kg	--	<0.58	<0.56	<0.54	<0.52
	Chlorate	14866-68-3	mg/kg	--	5.1 J-	1.1 UJ	1.1 UJ	6.3 J-
	Chloride	16887-00-6	mg/kg	--	467	7.3	14.2 J	531
	Cyanide (total)	57-12-5	mg/kg	--	<0.14	<0.14	--	<0.13
	Hydrogen carbonate	71-52-3	mg/kg	--	320	1,180	238 J+	1,050
	Methylene Blue Active Substances	MBAS	mg/kg	--	<2.5	<2.9	<2.3	<2.0
	Moisture	PER MOISTURE	percent	5.08	13.2	11.4	7.0	4.6
	Nitrate (as N)	NO3	mg/kg	--	19.4	0.83 J	0.53 J	2.9 J
	Nitrite	14797-65-0	mg/kg	--	3.3	0.10 J	0.27	4.2 J-
	Perchlorate	14797-73-0	ug/kg	--	3,840	152	21,800	918
	Sulfate	14808-79-8	mg/kg	--	159	15.2	183	22.5
	Total Organic Carbon	TOC	mg/kg	335	2,700	14,500	3,700 J-	5,200
	ortho-Phosphate	O-PO4	mg/kg	--	<5.8	<1.1	<1.1	<1.0
	pH	PH	pH units	--	9.5	10.3	8.6	8.5
Metals	Aluminum	7429-90-5	mg/kg	--	6,630 J	5,770 J	8,130	7,210 J
	Antimony	7440-36-0	mg/kg	--	0.15 J-	0.15 J-	0.21 J-	0.15 J-
	Arsenic	7440-38-2	mg/kg	--	2.1	2.9	3.1	2.3
	Barium	7440-39-3	mg/kg	--	148 J	146 J	186 J-	162 J
	Beryllium	7440-41-7	mg/kg	--	0.45	0.40	0.49 J-	0.45
	Boron	7440-42-8	mg/kg	--	11.5 UJ	11.3 UJ	10.8 UJ	10.5 UJ
	Cadmium	7440-43-9	mg/kg	--	0.086	0.13	0.23	0.092
	Calcium	7440-70-2	mg/kg	--	8,460 J	33,800 J	19,900	18,600 J
	Chromium (total)	7440-47-3	mg/kg	--	6.8 J-	5.7 J-	10.9 J-	7.9 J-
	Chromium VI	18540-29-9	mg/kg	--	<0.12	0.15 J	0.22	<0.10
	Cobalt	7440-48-4	mg/kg	--	5.7 J-	5.3 J-	6.1 J-	5.0 J-
	Copper	7440-50-8	mg/kg	--	11.8 J	12.1 J	13.1 J	10.1 J
	Iron	7439-89-6	mg/kg	--	10,900 J	7,850 J	13,100	9,850 J
	Lead	7439-92-1	mg/kg	--	7.9	9.8	12.6	8.8
	Magnesium	7439-95-4	mg/kg	--	5,050 J-	7,220 J-	7,110 J-	6,880 J-
	Manganese	7439-96-5	mg/kg	--	300 J+	447 J+	339	272 J+
	Mercury	7439-97-6	mg/kg	--	<0.038	<0.038	<0.036	0.010 J
	Molybdenum	7439-98-7	mg/kg	--	0.43 J	0.63	1.1	0.43 J
	Nickel	7440-02-0	mg/kg	--	12.3 J	10.1 J	12.5 J-	12.3 J

TABLE 2-3: ENSR and Kerr-McGee Data in NERT Off-Site Study Area Shallow Soil for use in the SLERA

Nevada Environmental Response Trust Site

Henderson, Nevada

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				0.0 - 0.0 ft bgs	1.0 - 2.5 ft bgs	0.5 - 2.0 ft bgs	0.5 - 2.0 ft bgs	0.5 - 2.0 ft bgs
				06/23/1999	11/03/2006	11/03/2006	11/20/2006	11/02/2006
Metals	Platinum	7440-06-4	mg/kg	--	<0.12	<0.11	0.016 J	0.012 J
	Potassium	7440-09-7	mg/kg	--	2,560 J	2,430 J	2,900 J-	2,940 J
	Selenium	7782-49-2	mg/kg	--	<0.58	<0.57	0.54 UJ	<0.52
	Silver	7440-22-4	mg/kg	--	0.11 J	0.10 J	0.13 J	0.12 J
	Sodium	7440-23-5	mg/kg	--	440 J-	22.6 UJ	1,000 J-	429 J-
	Strontium	7440-24-6	mg/kg	--	127 J	187 J	134 J-	118 J
	Thallium	7440-28-0	mg/kg	--	0.084 J	0.20 J	<0.22	0.14 J
	Tin	7440-31-5	mg/kg	--	0.53	0.50	0.68	0.46
	Titanium	7440-32-6	mg/kg	--	394 J	342 J	670	350 J
	Tungsten	7440-33-7	mg/kg	--	0.30 J-	0.98 J-	0.54 UJ	0.39 J-
	Uranium (total)	U-TOTAL	mg/kg	--	0.74	0.87	0.88	0.85
	Vanadium	7440-62-2	mg/kg	--	21.5 J-	18.7 J-	37.1 J-	18.3 J-
	Zinc	7440-66-6	mg/kg	--	26.8 J-	26.7 J-	31.6 J-	26.4 J-
OCPs	2,4,5-T	93-76-5	ug/kg	<1	--	--	--	--
	2,4,5-TP	93-72-1	ug/kg	<1	--	--	--	--
	2,4-D	94-75-7	ug/kg	<10	--	--	--	--
	2,4-DB	94-82-6	ug/kg	60	--	--	--	--
	4,4'-DDD	72-54-8	mg/kg	--	<0.0020	<0.0019	<0.0018	<0.0018
	4,4'-DDE	72-55-9	mg/kg	--	<0.0020	0.015 J+	<0.0018	<0.0018
	4,4'-DDT	50-29-3	mg/kg	--	<0.0020	0.010 J+	0.0018 UJ	<0.0018
	Aldrin	309-00-2	mg/kg	--	<0.0020	<0.0019	<0.0018	<0.0018
	Chlordane (total)	57-74-9	mg/kg	--	<0.012	<0.011	<0.011	<0.010
	Dalapon	75-99-0	ug/kg	<26	--	--	--	--
	Dicamba	1918-00-9	ug/kg	2 j	--	--	--	--
	Dichloroprop	120-36-5	ug/kg	<10	--	--	--	--
	Dieldrin	60-57-1	mg/kg	--	<0.0020	<0.0019	<0.0018	<0.0018
	Dinoseb	88-85-7	ug/kg	<5.4	--	--	--	--
	Endosulfan I	959-98-8	mg/kg	--	<0.0020	<0.0019	<0.0018	<0.0018
	Endosulfan II	33213-65-9	mg/kg	--	<0.0020	<0.0019	<0.0018	<0.0018
	Endosulfan sulfate	1031-07-8	mg/kg	--	<0.0020	<0.0019	<0.0018	<0.0018
	Endrin	72-20-8	mg/kg	--	<0.0020	<0.0019	<0.0018	<0.0018
	Endrin aldehyde	7421-93-4	mg/kg	--	<0.0020	<0.0019	<0.0018	<0.0018
	Endrin ketone	53494-70-5	mg/kg	--	<0.0020	<0.0019	0.0018 UJ	<0.0018
	Heptachlor	76-44-8	mg/kg	--	<0.0020	<0.0019	<0.0018	<0.0018
	Heptachlor epoxide	1024-57-3	mg/kg	--	<0.0020	<0.0019	<0.0018	<0.0018
	MCPA (2-Methyl-4-chlorophenoxy acetic acid)	94-74-6	ug/kg	1,200,000	--	--	--	--
	Mecoprop	7085-19-0	ug/kg	<5,400.00	--	--	--	--
	Methoxychlor	72-43-5	mg/kg	--	<0.0038	<0.0037	0.0036 UJ	<0.0035
	Pentachlorophenol	87-86-5	ug/kg	<1	--	--	--	--
	Toxaphene	8001-35-2	mg/kg	--	<0.058	<0.056	<0.054	<0.052
	alpha-BHC	319-84-6	mg/kg	--	<0.0020	<0.0019	<0.0018	<0.0018
	alpha-Chlordane	5103-71-9	mg/kg	--	<0.0020	<0.0019	<0.0018	<0.0018
	beta-BHC	319-85-7	mg/kg	--	<0.0020	0.0044 J+	0.0041 J	<0.0018
	delta-BHC	319-86-8	mg/kg	--	<0.0020	<0.0019	<0.0018	<0.0018
	gamma-BHC	58-89-9	mg/kg	--	<0.0020	<0.0019	<0.0018	<0.0018
	gamma-Chlordane	5103-74-2	mg/kg	--	<0.0020	<0.0019	<0.0018	<0.0018
OPPs	Chlorpyrifos	2921-88-2	mg/kg	--	<0.023	<0.023	0.022 UJ	<0.021
	Coumaphos	56-72-4	mg/kg	--	<0.015	<0.015	0.014 UJ	<0.014
	Dasanit	115-90-2	mg/kg	--	<0.015	<0.015	0.014 UJ	<0.014
	Demeton-O	298-03-3	mg/kg	--	0.045 UJ	0.044 UJ	0.042 UJ	0.041 UJ
	Demeton-S	126-75-0	mg/kg	--	0.017 UJ	0.017 UJ	0.016 UJ	0.016 UJ
	Diazinon	333-41-5	mg/kg	--	0.025 UJ	0.025 UJ	0.024 UJ	0.023 UJ
	Dichlorovos	62-73-7	mg/kg	--	<0.027	<0.026	0.025 UJ	<0.024
	Dimethoate	60-51-5	mg/kg	--	<0.025	<0.025	0.024 UJ	<0.023
	Disulfoton	298-04-4	mg/kg	--	<0.055	<0.054	0.052 UJ	<0.050
	EPN	2104-64-5	mg/kg	--	0.015 UJ	0.015 UJ	0.014 UJ	0.014 UJ
	Ethoprop	13194-48-4	mg/kg	--	<0.017	<0.017	0.016 UJ	<0.016
	Famphur	52-85-7	mg/kg	--	<0.015	<0.015	0.014 UJ	<0.014
	Fenthion	55-38-9	mg/kg	--	<0.038	<0.037	0.036 UJ	<0.035
	Guthion	86-50-0	mg/kg	--	<0.015	<0.015	0.014 UJ	<0.014
	Malathion	121-75-5	mg/kg	--	<0.017	<0.017	0.016 UJ	<0.016
	Merphos	150-50-5	mg/kg	--	<0.035	<0.034	0.032 UJ	<0.031
	Methyl parathion	298-00-0	mg/kg	--	<0.023	<0.023	0.022 UJ	<0.021
	Mevinphos	7786-34-7	mg/kg	--	<0.017	<0.017	0.016 UJ	<0.016

TABLE 2-3: ENSR and Kerr-McGee Data in NERT Off-Site Study Area Shallow Soil for use in the SLERA

Nevada Environmental Response Trust Site

Henderson, Nevada

Analyte Group	Analyte	CAS	Unit	Source				
				Ker McKee (1999)	ENSR (2007)			
				PC-70	SA-24	SA-25	SA-26	SA-27
				0.0 - 0.0 ft bgs	1.0 - 2.5 ft bgs	0.5 - 2.0 ft bgs	0.5 - 2.0 ft bgs	0.5 - 2.0 ft bgs
				06/23/1999	11/03/2006	11/03/2006	11/20/2006	11/02/2006
OPPs	**Naled**	**300-76-5**	**mg/kg**	--	0.038 UJ	0.037 UJ	0.036 UJ	0.035 UJ
	Parathion	**56-38-2**	**mg/kg**	--	<0.021	<0.020	0.019 UJ	<0.019
	Phorate	**298-02-2**	**mg/kg**	--	<0.023	<0.023	0.022 UJ	<0.021
	Prothiophos	**34643-46-4**	**mg/kg**	--	<0.023	<0.023	0.022 UJ	<0.021
	Ronnel	**299-84-3**	**mg/kg**	--	0.021 UJ	0.020 UJ	0.019 UJ	0.019 UJ
	Stirophos	**22248-79-9**	**mg/kg**	--	<0.017	<0.017	0.016 UJ	<0.016
	Sulfotepp	**3689-24-5**	**mg/kg**	--	<0.023	<0.023	0.022 UJ	<0.021
	Sulprofos	**35400-43-2**	**mg/kg**	--	<0.015	<0.015	0.014 UJ	<0.014
	Thionazin	**297-97-2**	**mg/kg**	--	<0.021	<0.020	0.019 UJ	<0.019
	Trichloronate	**327-98-0**	**mg/kg**	--	<0.023	<0.023	0.022 UJ	<0.021
Organics	**Organic Halides (total)**	**TOH**	**mg/kg**	180 j	--	--	--	--
PAHs	**2-Methylnaphthalene**	**91-57-6**	**mg/kg**	--	--	--	<0.0071	--
	Acenaphthene	**83-32-9**	**mg/kg**	--	--	--	<0.0071	--
	Acenaphthylene	**208-96-8**	**mg/kg**	--	--	--	<0.0071	--
	Anthracene	**120-12-7**	**mg/kg**	--	--	--	<0.0071	--
	Benzo(a)anthracene	**56-55-3**	**mg/kg**	--	--	--	<0.0071	--
	Benzo(a)pyrene	**50-32-8**	**mg/kg**	--	--	--	<0.0071	--
	Benzo(b)fluoranthene	**205-99-2**	**mg/kg**	--	--	--	<0.0071	--
	Benzo(g,h,i)perylene	**191-24-2**	**mg/kg**	--	--	--	<0.0071	--
	Benzo(k)fluoranthene	**207-08-9**	**mg/kg**	--	--	--	<0.0071	--
	Chrysene	**218-01-9**	**mg/kg**	--	--	--	<0.0071	--
	Dibenz(a,h)anthracene	**53-70-3**	**mg/kg**	--	--	--	<0.0071	--
	Fluoranthene	**206-44-0**	**mg/kg**	--	--	--	<0.0071	--
	Fluorene	**86-73-7**	**mg/kg**	--	--	--	<0.0071	--
	Hexachlorobenzene	**118-74-1**	**mg/kg**	--	--	--	0.0086	--
	Indeno(1,2,3-cd)pyrene	**193-39-5**	**mg/kg**	--	--	--	<0.0071	--
	Naphthalene	**91-20-3**	**mg/kg**	--	--	--	<0.0071	--
	Phenanthrene	**85-01-8**	**mg/kg**	--	--	--	<0.0071	--
	Pyrene	**129-00-0**	**mg/kg**	--	--	--	<0.0071	--
PCBs	**4,4'-DDD**	**72-54-8**	**ug/kg**	<0.41	--	--	--	--
	4,4'-DDE	**72-55-9**	**ug/kg**	<0.41	--	--	--	--
	4,4'-DDT	**50-29-3**	**ug/kg**	<0.41	--	--	--	--
	Aldrin	**309-00-2**	**ug/kg**	<0.21	--	--	--	--
	Aroclor-1016	**12674-11-2**	**mg/kg**	--	<0.038	<0.037	<0.036	<0.035
			ug/kg	<10	--	--	--	--
	Aroclor-1221	**11104-28-2**	**mg/kg**	--	<0.038	<0.037	<0.036	<0.035
			ug/kg	<10	--	--	--	--
	Aroclor-1232	**11141-16-5**	**mg/kg**	--	<0.038	<0.037	<0.036	<0.035
			ug/kg	<10	--	--	--	--
	Aroclor-1242	**53469-21-9**	**mg/kg**	--	<0.038	<0.037	<0.036	<0.035
			ug/kg	<10	--	--	--	--
	Aroclor-1248	**12672-29-6**	**mg/kg**	--	<0.038	<0.037	<0.036	<0.035
			ug/kg	<10	--	--	--	--
	Aroclor-1254	**11097-69-1**	**mg/kg**	--	<0.038	<0.037	<0.036	<0.035
			ug/kg	<10	--	--	--	--
	Aroclor-1260	**11096-82-5**	**mg/kg**	--	<0.038	<0.037	<0.036	<0.035
			ug/kg	<10	--	--	--	--
	Dieldrin	**60-57-1**	**ug/kg**	<0.41	--	--	--	--
	Endosulfan I	**959-98-8**	**ug/kg**	<0.21	--	--	--	--
	Endosulfan II	**33213-65-9**	**ug/kg**	<0.41	--	--	--	--
	Endosulfan sulfate	**1031-07-8**	**ug/kg**	<0.41	--	--	--	--
	Endrin	**72-20-8**	**ug/kg**	<0.41	--	--	--	--
	Endrin aldehyde	**7421-93-4**	**ug/kg**	<0.41	--	--	--	--
	Endrin ketone	**53494-70-5**	**ug/kg**	<0.41	--	--	--	--
	Heptachlor	**76-44-8**	**ug/kg**	<0.21	--	--	--	--
	Heptachlor epoxide	**1024-57-3**	**ug/kg**	<0.21	--	--	--	--
	Methoxychlor	**72-43-5**	**ug/kg**	<2.1	--	--	--	--
	Toxaphene	**8001-35-2**	**ug/kg**	<21	--	--	--	--
	alpha-BHC	**319-84-6**	**ug/kg**	0.32 j	--	--	--	--
	alpha-Chlordane	**5103-71-9**	**ug/kg**	<0.21	--	--	--	--
	beta-BHC	**319-85-7**	**ug/kg**	0.47 j	--	--	--	--
	delta-BHC	**319-86-8**	**ug/kg**	<0.21	--	--	--	--
	gamma-BHC	**58-89-9**	**ug/kg**	<0.21	--	--	--	--
	gamma-Chlordane	**5103-74-2**	**ug/kg**	<0.21	--	--	--	--

TABLE 2-3: ENSR and Kerr-McGee Data in NERT Off-Site Study Area Shallow Soil for use in the SLERA

Nevada Environmental Response Trust Site

Henderson, Nevada

Analyte Group	Analyte	CAS	Unit	Source				
				Ker McKee (1999)	ENSR (2007)			
				PC-70	SA-24	SA-25	SA-26	SA-27
				0.0 - 0.0 ft bgs	1.0 - 2.5 ft bgs	0.5 - 2.0 ft bgs	0.5 - 2.0 ft bgs	0.5 - 2.0 ft bgs
				06/23/1999	11/03/2006	11/03/2006	11/20/2006	11/02/2006
RAD	Radium-226	13982-63-3	pci/g	--	0.965 J	1.21 J	1.2 J-	0.985 J
	Radium-228	15262-20-1	pci/g	--	1.79	2.03	1.91 J-	1.87
	Thorium-228	14274-82-9	pci/g	--	1.66	1.64	>1 Value	1.62
	Thorium-230	14269-63-7	pci/g	--	0.999	1.27	>1 Value	1.02
RAD	Thorium-232	7440-29-1	pci/g	--	2.02	1.89	>1 Value	1.96
	Thorium-234	15065-10-8	pci/g	--	<8.26	<1.01	<10.2	<9.94
	Uranium-234	13966-29-5	pci/g	--	1.21	1.25	>1 Value	1.32
	Uranium-235	15117-96-1	pci/g	--	<0.268	<0.270	>1 Value	<0.290
	Uranium-238	7440-61-1	pci/g	--	<2.47	<1.82	>1 Value	<2.71
SVOCs	1,2,4-Trichlorobenzene	120-82-1	ug/kg	<35	--	--	--	--
	1,2-Dichlorobenzene	95-50-1	ug/kg	<35	--	--	--	--
	1,3-Dichlorobenzene	541-73-1	ug/kg	<35	--	--	--	--
	1,4-Dichlorobenzene	106-46-7	ug/kg	<35	--	--	--	--
	1,4-Dioxane	123-91-1	ug/kg	--	<380	<370	<71	<350
	2,4,5-Trichlorophenol	95-95-4	ug/kg	<70	--	--	--	--
	2,4,6-Trichlorophenol	88-06-2	ug/kg	<70	--	--	--	--
	2,4-Dichlorophenol	120-83-2	ug/kg	<70	--	--	--	--
	2,4-Dimethylphenol	105-67-9	ug/kg	<70	--	--	--	--
	2,4-Dinitrophenol	51-28-5	ug/kg	<200	--	--	--	--
	2,4-Dinitrotoluene	121-14-2	ug/kg	<70	--	--	--	--
	2,6-Dinitrotoluene	606-20-2	ug/kg	<35	--	--	--	--
	2-Chloronaphthalene	91-58-7	ug/kg	<35	--	--	--	--
	2-Chlorophenol	95-57-8	ug/kg	<35	--	--	--	--
	2-Methylnaphthalene	91-57-6	ug/kg	<35	<380	<370	<360	<350
	2-Methylphenol	95-48-7	ug/kg	<35	--	--	--	--
	2-Nitroaniline	88-74-4	ug/kg	<35	--	--	--	--
	2-Nitrophenol	88-75-5	ug/kg	<70	--	--	--	--
	3,3'-Dichlorobenzidine	91-94-1	ug/kg	<70	--	--	--	--
	3-Nitroaniline	99-09-2	ug/kg	<70	--	--	--	--
	4,6-Dinitro-2-methylphenol	534-52-1	ug/kg	<180	--	--	--	--
	4-Bromophenyl-phenyl ether	101-55-3	ug/kg	<70	--	--	--	--
	4-Chloro-3-methylphenol	59-50-7	ug/kg	<70	--	--	--	--
	4-Chloroaniline	106-47-8	ug/kg	<35	--	--	--	--
	4-Chlorophenyl-phenyl ether	7005-72-3	ug/kg	<35	--	--	--	--
	4-Methylphenol	106-44-5	ug/kg	<70	--	--	--	--
	4-Nitroaniline	100-01-6	ug/kg	<70	--	--	--	--
	4-Nitrophenol	100-02-7	ug/kg	<180	--	--	--	--
	Acenaphthene	83-32-9	ug/kg	<35	<380	<370	<360	<350
	Acenaphthylene	208-96-8	ug/kg	<35	<380	<370	<360	<350
	Anthracene	120-12-7	ug/kg	<35	<380	<370	<360	<350
	Benzo(a)anthracene	56-55-3	ug/kg	<35	<380	<370	<360	<350
	Benzo(a)pyrene	50-32-8	ug/kg	<35	<380	<370	<360	<350
	Benzo(b)fluoranthene	205-99-2	ug/kg	<35	<380	<370	<360	<350
	Benzo(g,h,i)perylene	191-24-2	ug/kg	<35	<380	<370	<360	<350
	Benzo(k)fluoranthene	207-08-9	ug/kg	<35	<380	<370	<360	<350
	Butylbenzylphthalate	85-68-7	ug/kg	<70	<380	<370	<360	<350
	Carbazole	86-74-8	ug/kg	<35	--	--	--	--
	Chrysene	218-01-9	ug/kg	<35	<380	<370	<360	<350
	Di-n-butylphthalate	84-74-2	ug/kg	<70	<380	<370	<360	<350
	Di-n-octylphthalate	117-84-0	ug/kg	<70	<380	<370	<360	<350
	Dibenz(a,h)anthracene	53-70-3	ug/kg	<35	<380	<370	<360	<350
	Dibenzofuran	132-64-9	ug/kg	<35	--	--	--	--
	Diethylphthalate	84-66-2	ug/kg	<70	<380	<370	<360	<350
	Dimethylphthalate	131-11-3	ug/kg	<70	<380	<370	<360	<350
	Fluoranthene	206-44-0	ug/kg	<35	<380	<370	<360	<350
	Fluorene	86-73-7	ug/kg	<35	<380	<370	<360	<350
	Hexachlorobenzene	118-74-1	ug/kg	<35	<380	<370	<360	<350
	Hexachlorobutadiene	87-68-3	ug/kg	<70	--	--	--	--
	Hexachlorocyclopentadiene	77-47-4	ug/kg	<180	--	--	--	--
	Hexachloroethane	67-72-1	ug/kg	<35	--	--	--	--
	Indeno(1,2,3-cd)pyrene	193-39-5	ug/kg	<35	<380	<370	<360	<350
	Isophorone	78-59-1	ug/kg	<35	--	--	--	--
	Naphthalene	91-20-3	ug/kg	<35	<380	<370	<360	<350
	Nitrobenzene	98-95-3	ug/kg	<35	<380	<370	<360	<350

TABLE 2-3: ENSR and Kerr-McGee Data in NERT Off-Site Study Area Shallow Soil for use in the SLERA

Nevada Environmental Response Trust Site

Henderson, Nevada

Analyte Group	Analyte	CAS	Unit	Source				
				Ker McKee (1999)	ENSR (2007)			
				PC-70	SA-24	SA-25	SA-26	SA-27
				0.0 - 0.0 ft bgs	1.0 - 2.5 ft bgs	0.5 - 2.0 ft bgs	0.5 - 2.0 ft bgs	0.5 - 2.0 ft bgs
				06/23/1999	11/03/2006	11/03/2006	11/20/2006	11/02/2006
SVOCs	Octachlorostyrene	29082-74-4	ug/kg	--	<380	<370	<360	<350
	Pentachlorophenol	87-86-5	ug/kg	<180	--	--	--	--
	Phenanthrene	85-01-8	ug/kg	<35	<380	<370	<360	<350
	Phenol	108-95-2	ug/kg	<70	--	--	--	--
	Pyrene	129-00-0	ug/kg	<35	<380	<370	<360	<350
	Pyridine	110-86-1	ug/kg	--	<1,800	<1,800	<1,700	<1,700
	bis(2-Chloro-1-methylethyl) ether	108-60-1	ug/kg	<35	--	--	--	--
	bis(2-Chloroethoxy)methane	111-91-1	ug/kg	<70	--	--	--	--
	bis(2-Chloroethyl) ether	111-44-4	ug/kg	<35	--	--	--	--
	bis(2-Ethylhexyl)phthalate	117-81-7	ug/kg	1,000	<380	150 J	<360	<350
	n-Nitroso-di-n-propylamine	621-64-7	ug/kg	<35	--	--	--	--
	n-Nitrosodiphenylamine	86-30-6	ug/kg	<35	--	--	--	--
TPH	Ethanol	64-17-5	mg/kg	--	--	--	54 UJ	52 UJ
	Ethylene glycol	107-21-1	mg/kg	--	--	--	54 UJ	52 UJ
	Methanol	67-56-1	mg/kg	--	--	--	54 UJ	52 UJ
	Oil Range Organics	TPH-MOTOR	mg/kg	--	<29	26 J+	150 J	4.0 J
	Total petroleum hydrocarbon-diesel	TPH-DIESEL	mg/kg	--	<29	5.1 J+	<110	<26
	Total petroleum hydrocarbon-gasoline	TPH-GASOLINE	mg/kg	--	<0.12	<0.11	0.11 UJ	<0.10
VOCs	1,1,1,2-Tetrachloroethane	630-20-6	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	1,1,1-Trichloroethane	71-55-6	ug/kg	<1	<5.8	<5.6	<5.4	<5.2
	1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	<1	<5.8	<5.6	<5.4	<5.2
	1,1,2-Trichloroethane	79-00-5	ug/kg	<2	<5.8	<5.6	<5.4	<5.2
	1,1-Dichloroethane	75-34-3	ug/kg	<1	<5.8	<5.6	<5.4	<5.2
	1,1-Dichloroethene	75-35-4	ug/kg	<2	<5.8	<5.6	<5.4	<5.2
	1,1-Dichloropropene	563-58-6	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	1,2,3-Trichlorobenzene	87-61-6	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	1,2,3-Trichloropropane	96-18-4	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	1,2,4-Trichlorobenzene	120-82-1	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	1,2,4-Trimethylbenzene	95-63-6	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	1,2-Dibromo-3-chloropropane	96-12-8	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	1,2-Dibromoethane	106-93-4	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	1,2-Dichlorobenzene	95-50-1	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	1,2-Dichloroethane	107-06-2	ug/kg	<2	<5.8	<5.6	<5.4	<5.2
	1,2-Dichloropropane	78-87-5	ug/kg	<3	<5.8	<5.6	<5.4	<5.2
	1,3,5-Trimethylbenzene	108-67-8	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	1,3-Dichlorobenzene	541-73-1	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	1,3-Dichloropropane	142-28-9	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	1,4-Dichlorobenzene	106-46-7	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	2,2-Dichloropropane	594-20-7	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	2-Butanone	78-93-3	ug/kg	<7	<12	<11	<11	<10
	2-Chlorotoluene	95-49-8	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	2-Hexanone	591-78-6	ug/kg	<3	12 UJ	11 UJ	11 UJ	10 UJ
	4-Chlorotoluene	106-43-4	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	4-Methyl-2-pentanone	108-10-1	ug/kg	4 j	<12	<11	11 UJ	<10
	Acetone	67-64-1	ug/kg	560	<12	<11	12	<10
	Benzene	71-43-2	ug/kg	<1	<5.8	<5.6	<5.4	<5.2
	Bromobenzene	108-86-1	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	Bromochloromethane	74-97-5	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	Bromodichloromethane	75-27-4	ug/kg	<2	<5.8	<5.6	<5.4	<5.2
	Bromoform	75-25-2	ug/kg	<1	<5.8	<5.6	<5.4	<5.2
	Bromomethane	74-83-9	ug/kg	<3	<12	<11	11 UJ	10 UJ
	Carbon disulfide	75-15-0	ug/kg	<3	--	--	--	--
	Carbon tetrachloride	56-23-5	ug/kg	<1	<5.8	<5.6	<5.4	<5.2
	Chlorobenzene	108-90-7	ug/kg	<1	<5.8	<5.6	<5.4	<5.2
	Chloroethane	75-00-3	ug/kg	<3	5.8 UJ	5.6 UJ	5.4 UJ	5.2 UJ
	Chloroform	67-66-3	ug/kg	<1	<5.8	<5.6	<5.4	<5.2
	Chloromethane	74-87-3	ug/kg	<2	5.8 UJ	5.6 UJ	5.4 UJ	5.2 UJ
	Cumene	98-82-8	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	Dibromochloromethane	124-48-1	ug/kg	<1	<5.8	<5.6	<5.4	<5.2
	Dibromomethane	74-95-3	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	Dichlorodifluoromethane	75-71-8	ug/kg	--	5.8 UJ	5.6 UJ	5.4 UJ	5.2 UJ
	Diisopropyl ether	108-20-3	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	Ethyl benzene	100-41-4	ug/kg	<1	<5.8	<5.6	<5.4	<5.2
	Ethyl tert-butyl ether	637-92-3	ug/kg	--	<5.8	<5.6	<5.4	<5.2

TABLE 2-3: ENSR and Kerr-McGee Data in NERT Off-Site Study Area Shallow Soil for use in the SLERA

Nevada Environmental Response Trust Site

Henderson, Nevada

Analyte Group	Analyte	CAS	Unit	Source				
				Ker McKee (1999)	ENSR (2007)			
				PC-70	SA-24	SA-25	SA-26	SA-27
				0.0 - 0.0 ft bgs	1.0 - 2.5 ft bgs	0.5 - 2.0 ft bgs	0.5 - 2.0 ft bgs	0.5 - 2.0 ft bgs
				06/23/1999	11/03/2006	11/03/2006	11/20/2006	11/02/2006
VOCs	Hexachlorobutadiene	87-68-3	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	Methyl tert-butyl ether	1634-04-4	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	Methylene Chloride	75-09-2	ug/kg	<2	<5.8	<5.6	<5.4	5.2 UJ
	Naphthalene	91-20-3	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	Styrene	100-42-5	ug/kg	<1	<5.8	<5.6	<5.4	<5.2
	Tetrachloroethene	127-18-4	ug/kg	<1	<5.8	<5.6	<5.4	<5.2
	Toluene	108-88-3	ug/kg	<1	<5.8	<5.6	0.30 J	<5.2
	Trichloroethene	79-01-6	ug/kg	<1	<5.8	<5.6	<5.4	<5.2
	Trichlorofluoromethane	75-69-4	ug/kg	--	5.8 UJ	5.6 UJ	5.4 UJ	5.2 UJ
	Vinyl chloride	75-01-4	ug/kg	<2	<5.8	<5.6	5.4 UJ	<5.2
	Xylenes (total)	1330-20-7	ug/kg	<1	<12	<11	<11	<10
	cis-1,2-Dichloroethene	156-59-2	ug/kg	<2	<5.8	<5.6	<5.4	<5.2
	cis-1,3-Dichloropropene	10061-01-5	ug/kg	<1	<5.8	<5.6	<5.4	<5.2
	n-Butylbenzene	104-51-8	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	n-Propylbenzene	103-65-1	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	p-Cymene	99-87-6	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	sec-Butylbenzene	135-98-8	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	t-Amyl methyl ether	994-05-8	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	tert Butyl alcohol	75-65-0	ug/kg	--	5.8 UJ	5.6 UJ	5.4 UJ	5.2 UJ
	tert-Butylbenzene	98-06-6	ug/kg	--	<5.8	<5.6	<5.4	<5.2
	trans-1,2-Dichloroethene	156-60-5	ug/kg	<2	<5.8	<5.6	<5.4	<5.2
	trans-1,3-Dichloropropene	10061-02-6	ug/kg	<1	<5.8	<5.6	<5.4	<5.2

Notes:

µg/kg	Microgram per kilogram.
bgs	Below Ground Surface
BHC	Hexachlorocyclohexane
DL	Detection limit
DDD	Dichlorodiphenyldichloroethylene
DDE	Dichlorodiphenyldichloroethylene
DDT	Dichlorodiphenyltrichloroethane
EPN	Ethylp-nitrophenyl thionobenzenephosphonate
ft	Foot
HMW	High Molecular Weight
HPCDD	Heptachlorodibenzo-p-dioxin
HPCDF	Heptachlorodibenzofuran
HXCDD	Hexachlorodibenzo-p-dioxin mixture
HxCDF	Heptachlorodibenzofuran mixture
LMW	Low Molecular Weight
mg/kg	Milligram per kilogram.
ND	Not detected
ng/kg	Nanograms per kilogram
OCPs	Organochlorine pesticides
OPPs	Organophosphate pesticides
PeCDD	Pentachlorodibenzo-p-furan
PeCDF	Pentachlorodibenzofuran
PAHs	Polycyclic Aromatic Hydrocarbons
PCBs	Polychlorinated biphenyls
pci/g	PicoCuries per gram
RAD	Radium Compounds
SVOCS	Semivolatile Organic Compounds
TCDD	Tetrachlorodibenzodioxin
TCDF	Tetrachlorodibenzofuran
TEQ	Toxic equivalency
TPH	Total Petroleum Hydrocarbons
VOCS	Volatile Organic Compounds

Lab Qualifiers

J or j	Indicates an estimated value.
J+	Indicates an estimated value with a positive bias.
J-	Indicates an estimated value with a negative bias.
<	Below laboratory detection limit.
UJ	The analyte was analyzed for and was not present above the level of the associated value.
*	Analyte was anlayzed by two different methods. The maximum concentration of the two methods is depicted in the table.

TABLE 2-4: BEC Parcels A-B Shallow Soil Results for use in the SLERA (All Samples Collected at 0 ft bgs)

Nevada Environmental Response Trust Site Henderson, Nevada

Analytic Method	Analyte	Unit	TSB-AJ-01-0	TSB-AJ-02-0	TSB-AJ-02-0 (FD)	TSB-AJ-03-0	TSB-AR-01-0	TSB-AR-01-0 (FD)	TSB-AR-02-0	TSB-AR-04-0	TSB-AR-05-0	TSB-AR-06-0	TSB-AR-06-0 (FD)	TSB-AR-07-0	TSB-AR-08-0	TSB-AR-10-0	TSB-AR-11-0	TSB-AR-11-0 (FD)	TSB-AR-12-0	TSB-AR-13-0	TSB-AR-14-0	TSB-AR-3-0	TSB-AR-9-0	TSB-BJ-01-0
			Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample
			9/7/2007	9/7/2007	9/7/2007	9/7/2007	9/5/2007	9/5/2007	9/5/2007	9/5/2007	9/5/2007	9/7/2007	9/7/2007	9/5/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/7/2007
3060A/7196A	Chromium (VI)	mg/kg	<1	<1	0.25 J	<1	<1.1	<1.1	0.24 J	0.18 J	0.24 J	0.2 J	0.31 J	0.19 J	0.32 J	<1	0.28 J	0.25 J	<1	<1	<1	<1	0.27 J	0.35 J
E160.3	Percent Moisture	percent	2.4	1.6	1.4	2.1	4.8	6.9	2.6	2.7	3.1	3.4	4.2	5.2	2.5	3.8	3.5	3.4	3	2.5	4	1.7	2.6	1.6
E300	Bromide	mg/kg	<2.6	<2.5	<2.5	<2.6	4.1 J	6.3 J	2.6 UJ	5.1 J	1.7 J	4.6 J	7.6 J	2.6 UJ	0.69 J	1.2 J	<2.6	<2.6	<2.6	<2.6	<2.6	<2.5	1.3 J	<2.5
	Chlorate	mg/kg	<5.1	<5.1	<5.1	2.6 J	2.1 J	2.8 J	<5.1	<5.1	<5.2	2.8 J	4.6 J	<5.3	<5.1	1.4 J	<5.2	<5.2	<5.2	<5.1	<5.2	<5.1	<5.1	<5.1
	Chloride	mg/kg	<2.1	12.6	9.1	16.3	905 J-	947 J-	2.1 UJ	626 J-	555 J-	432 J	2210 J	14.4 J-	165 J-	515 J-	4.4 J-	4.8 J-	273	4.4	76.1 J-	3.3	377	7.1
	Fluoride	mg/kg	<1	0.79 J	<1	1.6	0.68 J	1 J	0.5 J	1.1	<1	0.87 J	0.69 J	<1.1	<1	<1	0.57 J	<1	<1	<1	<1	<1	0.53 J	<1
	Nitrate (as N)	mg/kg	0.53 J+	1.8	1.6	8.1	5.3 J-	5.5 J-	0.53 J-	13.7 J-	10.6 J-	36.6 J	229 J	0.33 J-	8.3 J-	10.6 J-	1.6 J-	1.3 J-	0.42	2.1	2.6 J-	0.99	9	2
	Nitrite (as N)	mg/kg	<0.21	<0.2	<0.2	0.45	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.2	<0.21	<0.2
	Orthophosphate as P	mg/kg	<5.1	5.1 UJ	5.1 UJ	5.1 UJ	<5.3	<5.4	<5.1	<5.1	<5.2	<5.2	<5.2	<5.3	<5.1	<5.2	2 J	2 J	<5.2	<5.1	<5.2	<5.1	<5.1	5.1 UJ
	Sulfate	mg/kg	11.7	36.2	30.8	38.9	110 J-	116 J-	10.6 J-	385 J-	125 J-	370 J	1450 J	19.3 J-	94.1 J-	52.2 J-	36.3 J-	29.4 J-	170	9.1	112 J-	17.2	73	38
E300.0	Bromine	mg/kg	<5.1	<5.1	<5.1	<5.1	8.2 J	12.7 J	5.1 UJ	10.2 J	3.4 J	9.1 J	15.2 J	5.3 UJ	1.4 J	2.4 J	<5.2	<5.2	<5.2	<5.1	<5.2	<5.1	2.6 J	<5.1
	Chlorine	mg/kg	<4.1	25.2	18.3	32.6	1810 J-	1890 J-	4.1 UJ	1250 J-	1110 J-	863 J	4410 J	28.8 J-	331 J-	1030 J-	8.9 J-	9.5 J-	546	8.9	152 J-	6.6	753	14.2
E314.0	Perchlorate	ug/kg	64.1	154	151	228	3440	4260	53.4	1020	3710	14700	11200	335	1610	8440	67.2	73	59.9	<41	256	73.1	1280	304
EPA 300.1 Mod.	Chlorite	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EPA 8270C	2,2'-/4,4'-Dichlorobenzil	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<640	<520	<350	<340	<340	<340	<510	<340	<340	<340	<340	<340	<340
EPA 901.1	RADIUM-226	pCi/g	0.98	1.19	1.08	1.03	1.08	0.959	1.13	1.02	0.953	0.955	1.05	0.954	1.01	1.13	0.926	1.01	1.02	0.881	0.946	1.05	1.05	0.969
	RADIUM-228	pCi/g	1.91	1.78	1.96	1.83	1.75	1.5	1.85	1.75	1.77	1.73	1.79	1.81	1.63	1.82	1.82	1.97	1.88	2.04	1.84	1.96	1.68	1.84
HASL-300 Th Mod	THORIUM-228	pci/g	1.48	1.29	1.71	1.52	1.65	1.58	1.36	1.7	1.57	1.19	1.37	1.66	1.86	1.27	1.85	2.07	2.06	1.52	2.07	1.82	1.51	1.37
	THORIUM-230	pci/g	1.15	0.983	0.982	0.892	1.44	1.03	0.889	1.09	1.07	0.973	0.95	1.04	1.15	1.26	1.06	1.36	1.43	1.13	0.904	1.44	1.2	1.09
	THORIUM-232	pci/g	1.36	1.38	1.36	1.4	1.49	1.54	1.23	1.6	1.34	1.58	1.54	1.6	1.41	1.63	1.35	1.62	1.63	1.24	1.48	1.94	1.53	1.58
HASL-300 U Mod	URANIUM-233/234	pci/g	4.38E-01 J	3.41E-01 J	3.65E-01 J	2.79E-01 J	0.702	0.788	3.35E-01 J	4.39E-01 J	2.89E-01 J	2.46E-01 J	3.56E-01 J	4.00E-01 J	2.98E-01 J	4.74E-01 J	3.05E-01 J	3.48E-01 J	3.92E-01 J	4.95E-01 J	2.93E-01 J	3.87E-01 J	3.79E-01 J	2.30E-01 J
	URANIUM-235/236	pci/g	<1.06E-02	<8.69E-03	<1.30E-02	1.93E-02 J	2.14E-02 J	2.17E-02 J	<3.74E-03	1.43E-02 J	1.79E-02 J	<1.17E-02	<1.22E-02	<7.45E-03	<5.18E-03	<1.58E-02	<1.37E-02	2.17E-02 J	<8.92E-03	1.41E-02 J	<6.11E-03	<6.20E-03	<5.65E-03	<1.04E-02
	URANIUM-238	pci/g	2.94E-01 J	2.72E-01 J	3.18E-01 J	2.19E-01 J	4.12E-01 J	4.70E-01 J	3.03E-01 J	3.54E-01 J	2.58E-01 J	2.40E-01 J	2.65E-01 J	3.26E-01 J	2.38E-01 J	3.53E-01 J	2.05E-01 J	2.60E-01 J	2.71E-01 J	2.54E-01 J	2.44E-01 J	2.53E-01 J	2.59E-01 J	1.54E-01 J
M8015D	TPH (as Diesel)	mg/kg	<26	<25	<25	<26	<26	<27	<26	<26	<26	<26	<26	<26	<26	<26	26 UJ	<26	<26	<26	<26	<25	<26	<25
SW1664A	HEM Oil/Grease	mg/kg	205 UJ	203 UJ	203 UJ	204 UJ	<210	<215	<205	<206	<206	207 UJ	209 UJ	<211	<205	208 UJ	<207	<207	206 UJ	205 UJ	<208	203 UJ	205 UJ	203 UJ
	n-Hexane Extractable Material, Silica Gel Treated	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SW6010	Lithium	mg/kg	13.1	15.5	13.9	13	14.5	13.8	16.1	13.9	12.7	14.3	11.9	13.6	11.8	16.6	11.1	13.4	16.9	15.5	12.2	16.6	14.5	14.9
	Sulfur	mg/kg	<1030	<1020	<1010	<1020	<1050	<1070	<1030	<1030	<1030	1210	1110	<1050	<1030	<1040	<1040	<1040	<1030	<1030	<1040	<1020	<1030	<1020
SW6020	Aluminum	mg/kg	8140	9020	8570	8920	8810	7810	8730	8760	7910	8600	7860	8430	9000	9200	9050	8400	8820	8730	8090	8540	6780	9750
	Antimony	mg/kg	0.13 J-	1 UJ	0.11 J-	0.16 J-	0.13 J-	1.1 UJ	0.13 J-	0.12 J-	0.15 J-	0.11 J-	1 UJ	0.12 J-	0.24 J-	0.21 J-	0.19 J-	0.19 J-	0.19 J-	0.24 J-	0.16 J-	0.19 J-	0.15 J-	0.37 J-
	Arsenic	mg/kg	2.4	2.7	2.5	2.8	3.1	3.7	2.5	2.7	2.8	3	2.8	2.3	2.4	2.6	3.1	2.6	3.1	2.7	2.4	2.4	2.3	2.8
	Barium	mg/kg	183	171	222	235	180 J-	158 J-	207 J-	243 J-	177 J-	169	176	183 J-	220 J+	199 J+	220 J+	213 J+	188 J+	177 J+	179 J+	202 J+	162 J+	243
	Beryllium	mg/kg	0.49	0.43	0.5	0.52	0.52	0.52	0.51	0.51	0.51	0.5	0.45	0.48	0.52	0.51	0.5	0.48	0.53	0.52	0.49	0.46	0.42	0.57
	Boron	mg/kg	<20.5	<20.3	<20.3	<20.4	<21	<21.5	<20.5	<20.6	<20.6	<20.7	<20.9	<21.1	<20.5	<20.8	<20.7	<20.7	<20.6	<20.5	<20.8	<20.3	<20.5	<20.3
	Cadmium	mg/kg	0.12	0.1 J	0.12	0.19	0.088 J	0.096 J	0.12	0.1 J	0.11	0.13	0.11	0.13	0.14	0.12	0.14	0.14	<0.1	0.22	<0.1	0.12	<0.1	0.48
	Calcium	mg/kg	37000	24400	23500	25200	27100	37500	32500	23900	24300	30700	23600	27300	18000	23500	19900	19300	20300	21400	20700	19100	21400	20700
	Chromium (Total)	mg/kg	9.9	13.8	9.7	12.5	10.9 J-	9.6 J-	11.8 J-	12.8 J-	10.9 J-	11.8	10.4	10.7 J-	13.3 J-	12.1 J-	10.2 J-	11.3 J-	12.4 J-	13.1 J-	10.4 J-	10.5 J-	7.3 J-	14.7
	Cobalt	mg/kg	5.3	6.2	5.4	6.3	6.8	7.4	6.5	7	5.7	6	5.3	6	6.5	5.9	6.2	6.5	5.9	6.1	5.1	5.3	5	6.7
	Copper	mg/kg	12.3	16.1	12.4	14.5	12.5	15.5	13.5	14	13.2	12.7	11.9	14.1	14.6	12.8	13.7	16.2	12.5	13.9	11.8	11.8	13	17.8
	Iron	mg/kg	12400	12200	12800	14200	13600	14500	14600	14300	13700	14800	12900	13100	14900	13900	13500	13800	14200	13500	12000	12700	10500	15600
	Lead	mg/kg	10	8.1	10.3	14.4	9.3	8.6	10.9	9.3	9.8	8.9	8.6	10.5	13	10.5	11.8	11.7	10.2	14	7.8	9.5	8.7	29.5
	Magnesium	mg/kg	7650 J-	9380 J-	7690 J-	8050 J-	9790	9540	8800	8750	8220	9010 J-	7990 J-	7200	8140 J-	8270 J-	7430 J-	7430 J-	7320 J-	8170 J-	8600 J-	7530 J-	6690 J-	8400 J-
	Manganese	mg/kg	291	310	332	447	327	313	399	603	322	372	314	364	414	365	400	422	323	394	256	341	280	493
	Molybdenum	mg/kg	<1	<1	<1	<1	0.5 J	0.48 J	0.59 J	0.68 J	0.72 J	<1	<1	0.52 J	0.68 J	0.56 J	0.58 J	0.64 J	0.58 J	0.79 J	0.48 J	0.69 J	0.62 J	<1
	Nickel	mg/kg	12.6	23.7 J	12.1 J	14.3	15.4 J-	16.7 J-	15.6 J-	17.2 J-	14.1 J-	13.8	12.3	14.5 J-	15.3 J-	14.1 J-	13.8 J-	14.7 J-	12.4 J-	14.1 J-	12.4 J-	13.8 J-	11.5 J-	15.7
	Niobium	mg/kg	<5.1	<5.1	<5.1	<5.1	2 J+	<5.4	<5.1	<5.1	<5.2	1.6 J+	<5.2	<5.3	5.1 UJ	<5.2	<5.2	<5.2	<5.2	<5.1	<5.2	<5.1	<5.1	<5.1
	Palladium	mg/kg	0.43	0.39	0.4	0.44	0.52	0.44	0.4	0.39	0.37	0.39	0.34	0.34	0.31	0.34	0.39	0.34	0.32	0.35	0.34	0.35	0.3	0.39
	Phosphorus (as P)	mg/kg	785 J	1320 J	732 J	818 J	807 J	1020 J	947 J	864 J	819 J	814 J	781 J	1040 J	856 J	751 J	1020 J	1130 J	563 J	747 J	527 J	893 J	947 J	805 J
	Platinum	mg/kg	<0.21	<0.2	<0.2	<0.2	<0.21	<0.22	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.2	<0.21	<0.2
	Potassium	mg/kg	3590	2390	3170	3260	2900	2490	3110	3040	2680	4750	4800	3710	3140	4150	3820	3240	4510	3750	2720	3180	2870	3140
	Selenium	mg/kg	<1	<1	<1	<1	<1.1	<1.1	<1	<1	<1	<1	<1	<1.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

TABLE 2-4: BEC Parcels A-B Shallow Soil Results for use in the SLERA (All Samples Collected at 0 ft bgs)

Nevada Environmental Response Trust Site Henderson, Nevada

Analytic Method	Analyte	Unit	TSB-AJ-01-0	TSB-AJ-02-0	TSB-AJ-02-0 (FD)	TSB-AJ-03-0	TSB-AR-01-0	TSB-AR-01-0 (FD)	TSB-AR-02-0	TSB-AR-04-0	TSB-AR-05-0	TSB-AR-06-0	TSB-AR-06-0 (FD)	TSB-AR-07-0	TSB-AR-08-0	TSB-AR-10-0	TSB-AR-11-0	TSB-AR-11-0 (FD)	TSB-AR-12-0	TSB-AR-13-0	TSB-AR-14-0	TSB-AR-3-0	TSB-AR-9-0	TSB-BJ-01-0
			Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample
			9/7/2007	9/7/2007	9/7/2007	9/7/2007	9/5/2007	9/5/2007	9/5/2007	9/5/2007	9/5/2007	9/7/2007	9/7/2007	9/5/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/7/2007
SW6020	Silicon	mg/kg	657 J+	600 J+	651 J+	420 J+	829	770	1320	745	987	745 J+	508 J+	912	648 J+	421 J+	636 J+	560 J+	477 J+	690 J+	607 J+	638 J+	265 J+	814 J+
	Silver	mg/kg	0.12 J	0.086 J	0.11 J	0.12 J	0.11 J	0.11 J	0.12 J	0.12 J	0.12 J	0.12 J	0.11 J	0.12 J	0.13 J	0.13 J	0.12 J	0.11 J	0.13 J	0.12 J	0.11 J	0.11 J	0.099 J	0.13 J
	Sodium	mg/kg	373 J+	1100 J	244 J	363 J+	668	584	332	697	541	1720	1450	427	401 J+	459 J+	433 J+	403 J+	649 J+	244 J+	542 J+	363 J+	342 J+	273 J+
	Strontium	mg/kg	175	180	177	180	204	187	163	174	143	165	154	138	126 J	141 J	155 J	144 J	126 J	143 J	141 J	143 J	131 J	155
	Thallium	mg/kg	<0.41	<0.41	<0.41	<0.41	<0.42	<0.43	<0.41	<0.41	<0.41	<0.41	<0.42	<0.42	<0.41	<0.42	<0.42	<0.41	<0.41	<0.41	<0.42	<0.41	<0.41	<0.41
	Tin	mg/kg	0.51	<0.41	<0.41	0.62	0.47	0.45	0.46	0.46	0.51	0.49	<0.42	0.45	0.67	0.59	0.59	0.61	0.58	0.73	0.52	0.78	0.52	1.2
	Titanium	mg/kg	662	509	648	785	608	650	665	675	759	780	631	648	752	648	713	745	762	667	613	709	552	752
	Tungsten	mg/kg	<1	<1	<1	<1	<1.1	<1.1	<1	<1	<1	<1.0	<1	<1.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Uranium	mg/kg	1.2	0.84	0.89	0.98	1.1	1.3	0.96	0.94	0.86	0.9	0.88	1	0.96	0.89	0.95	0.83	1	0.86	0.83	0.91	0.79	0.87
	Vanadium	mg/kg	29.4	26.5	30.7	36.3	33.8	36.9	33.7	36.5	33.4	36.4	31	31.4	36.2	32.2	32.7	33.6	35.2	30.9	29.4	30.7	27.8	38.2
	Zinc	mg/kg	32.5 J-	29 J-	30.4 J-	38.2 J-	30.2 J-	32.4 J-	31.9 J-	32.8 J-	31.8 J-	33.3 J-	30.7 J-	33.5 J-	36.7 J-	33.5 J-	33.3 J-	34.7 J-	32.5 J-	61.6 J-	28.2 J-	30.1 J-	30.2 J-	211 J-
	Zirconium	mg/kg	22.1	17.8 J+	23.7	23.4	19.8 J	22.5	22.1	4.9 J	23.8	24.6	22.2	21.6	23.6	24.5	22.9	22.4	26.9	25.1	21.3	23	21.8	24.2
SW7471	Mercury	ug/kg	15 J	<33.9	7.3 J	10.1 J	13 J	14 J	<34.2	7.9 J	14.8 J	<34.5	11.3 J	<35.1	<34.2	14.4 J	<34.5	<34.5	7.9 J	14.4 J	10.9 J	9.3 J	10.1 J	15.6 J
SW8015B	Gasoline Range Organics	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.11	<0.11	<0.1	<0.1	<0.1	<0.1	<0.1	<0.11	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
SW8081	2,4-DDD	ug/kg	<1.7	<1.7	<1.7	<1.7	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.7	<1.7	<1.7
	2,4-DDE	ug/kg	<1.7	2.2	3.5	<1.7	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	7.4 J	<1.7	<1.8	<1.7	<1.7	<1.7
	4,4-DDD	ug/kg	<1.7	<1.7	<1.7	<1.7	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.7	<1.7	<1.7
	4,4-DDE	ug/kg	<1.7	4.4	8.2	3.9 J+	<1.8	<1.8	3.5	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	4.6 J	<1.7	<1.8	<1.7	2	2 J+
	4,4-DDT	ug/kg	<1.7	3.6	7.3	2.3 J+	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.7	<1.7	<1.7
	Aldrin	ug/kg	<1.7	<1.7	<1.7	<1.7	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.7	<1.7	<1.7
	alpha-BHC	ug/kg	<1.7	<1.7	<1.7	<1.7	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.7	<1.7	<1.7
	alpha-Chlordane	ug/kg	<1.7	<1.7	<1.7	<1.7	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.7	<1.7	<1.7
	beta-BHC	ug/kg	2.2	10	17	6 J+	<1.8	<1.8	3.5	<1.7	<1.8	<1.8	<1.8	11	5.3	2.8	5.9	5.9	6.2	<1.7	2.7	6.5	1.7	7.8 J+
	Chlordane	ug/kg	<17	<17	<17	<17	<18	<18	<17	<17	<18	<18	<18	<18	<17	<18	<18	<18	<18	<17	<18	<17	<17	<17
	delta-BHC	ug/kg	<1.7	<1.7	<1.7	<1.7	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.7	<1.7	<1.7
	Dieldrin	ug/kg	<1.7	<1.7	<1.7	<1.7	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.7	<1.7	<1.7
	Endosulfan I	ug/kg	<1.7	<1.7	<1.7	<1.7	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.7	<1.7	<1.7
	Endosulfan II	ug/kg	<1.7	<1.7	<1.7	<1.7	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.7	<1.7	<1.7
	Endosulfan sulfate	ug/kg	<1.7	<1.7	<1.7	<1.7	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.7	<1.7	<1.7
	Endrin	ug/kg	<1.7	<1.7	<1.7	<1.7	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.7	<1.7	<1.7
	Endrin aldehyde	ug/kg	<1.7	<1.7	<1.7	<1.7	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	3.6 J	<1.7	<1.8	<1.7	<1.7	<1.7
	Endrin ketone	ug/kg	<1.7	<1.7	<1.7	<1.7	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.7	<1.7	<1.7
	gamma-Chlordane	ug/kg	<1.7	<1.7	<1.7	<1.7	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.7	<1.7	<1.7
	Heptachlor	ug/kg	<1.7	<1.7	<1.7	<1.7	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.7	<1.7	<1.7
	Heptachlor epoxide	ug/kg	<1.7	<1.7	<1.7	<1.7	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.7	<1.7	<1.7
	Lindane	ug/kg	<1.7	<1.7	<1.7	<1.7	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.8	<1.8	<1.8	<1.7	<1.8	<1.7	<1.7	<1.7
	Methoxychlor	ug/kg	<3.4	<3.4	<3.3	<3.4	<3.5	<3.5	<3.4	<3.4	<3.4	<3.4	<3.4	<3.5	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4
	Toxaphene	ug/kg	<69	<68	<68	<68	<70	<72	<69	<69	<69	<69	<70	<71	<69	<70	<69	<69	<69	<69	<70	<68	<69	<68
SW8260	1,1,1,2-Tetrachloroethane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	1,1,1-Trichloroethane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	1,1,2,2-Tetrachloroethane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	1,1,2-Trichloroethane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	1,1-Dichloroethane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	1,1-Dichloroethylene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	1,1-Dichloropropene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	1,2,3-Trichlorobenzene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	1,2,3-Trichloropropane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	1,2,4-Trichlorobenzene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	1,2,4-Trimethylbenzene	ug/kg	<5.1	0.57 J	0.41 J	0.43 J	<5.2	0.24 J	<5.1	0.23 J	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	0.25 J	<5.1	<5.1	<5.1	<5.2	<5	<5.1	0.39 J
	1,2-Dibromo-3-chloropropane (DBCP)	ug/kg	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	1,2-Dichlorobenzene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1

TABLE 2-4: BEC Parcels A-B Shallow Soil Results for use in the SLERA (All Samples Collected at 0 ft bgs)

Nevada Environmental Response Trust Site Henderson, Nevada

Analytic Method	Analyte	Unit	TSB-AJ-01-0	TSB-AJ-02-0	TSB-AJ-02-0 (FD)	TSB-AJ-03-0	TSB-AR-01-0	TSB-AR-01-0 (FD)	TSB-AR-02-0	TSB-AR-04-0	TSB-AR-05-0	TSB-AR-06-0	TSB-AR-06-0 (FD)	TSB-AR-07-0	TSB-AR-08-0	TSB-AR-10-0	TSB-AR-11-0	TSB-AR-11-0 (FD)	TSB-AR-12-0	TSB-AR-13-0	TSB-AR-14-0	TSB-AR-3-0	TSB-AR-9-0	TSB-BJ-01-0
			Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample
			9/7/2007	9/7/2007	9/7/2007	9/7/2007	9/5/2007	9/5/2007	9/5/2007	9/5/2007	9/5/2007	9/7/2007	9/7/2007	9/5/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/7/2007
SW8260	1,2-Dichloroethane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	1,2-Dichloroethylene	ug/kg	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	1,2-Dichloropropane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	1,3,5- Trichlorobenzene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	1,3,5-Trimethylbenzene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	1,3-Dichlorobenzene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	1,3-Dichloropropane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	1,4-Dichlorobenzene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	1-Nonanal	ug/kg	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	2,2,3-Trimethylbutane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	2,2-Dichloropropane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	2,2-Dimethylpentane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	2,3-Dimethylpentane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	2,4-Dimethylpentane	ug/kg	<20	<20	<20	<20	<21	<21	<20	<21	<20	<21	<21	<21	<21	<21	<21	<21	<20	<20	<21	<20	<20	<20
SW8260	2-Chlorotoluene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	2-Nitropropane	ug/kg	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	2-Phenylbutane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	3,3-dimethylpentane	ug/kg	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	3-ethylpentane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	3-Methylhexane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	4-Chlorotoluene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Acetone	ug/kg	<20	<20	<20	<20	16 J	15 J	13 J	7.7 J	<20	<21	<21	6.5 J	<21	<21	<21	<21	<20	<20	<21	<20	<20	<20
	Acetonitrile	ug/kg	51 UJ	51 UJ	51 UJ	51 UJ	52 UJ	53 UJ	51 UJ	51 UJ	51 UJ	52 UJ	52 UJ	53 UJ	51 UJ	52 UJ	52 UJ	51 UJ	51 UJ	51 UJ	52 UJ	50 UJ	51 UJ	51 UJ
	Benzene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Bromobenzene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Bromodichloromethane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Bromomethane	ug/kg	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Carbon disulfide	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Carbon tetrachloride	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	CFC-11	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	CFC-12	ug/kg	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Chlorinated fluorocarbon (Freon 113)	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Chlorobenzene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Chlorobromomethane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Chlorodibromomethane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Chloroethane	ug/kg	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Chloroform	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Chloromethane	ug/kg	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	cis-1,2-Dichloroethylene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	cis-1,3-Dichloropropylene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Cymene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Dibromomethane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Dichloromethane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Ethanol	ug/kg	250 UJ	250 UJ	250 UJ	260 UJ	260 UJ	270 UJ	250 UJ	260 UJ	260 UJ	260 UJ	260 UJ	260 UJ	260 UJ	260 UJ	260 UJ	260 UJ	260 UJ	250 UJ	260 UJ	250 UJ	250 UJ	250 UJ
	Ethylbenzene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	0.2 J	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	0.24 J	<5.1	<5.1
	Hexane, 2-methyl-	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Isopropylbenzene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	m,p-Xylene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Methyl disulfide	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Methyl ethyl ketone	ug/kg	<20	<20	<20	<20	<21	<21	<20	<21	<20	<21	<21	<21	<21	<21	<21	<21	<20	<20	<21	<20	<20	<20
	Methyl iodide	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1

TABLE 2-4: BEC Parcels A-B Shallow Soil Results for use in the SLERA (All Samples Collected at 0 ft bgs)

Nevada Environmental Response Trust Site Henderson, Nevada

Analytic Method	Analyte	Unit	TSB-AJ-01-0	TSB-AJ-02-0	TSB-AJ-02-0 (FD)	TSB-AJ-03-0	TSB-AR-01-0	TSB-AR-01-0 (FD)	TSB-AR-02-0	TSB-AR-04-0	TSB-AR-05-0	TSB-AR-06-0	TSB-AR-06-0 (FD)	TSB-AR-07-0	TSB-AR-08-0	TSB-AR-10-0	TSB-AR-11-0	TSB-AR-11-0 (FD)	TSB-AR-12-0	TSB-AR-13-0	TSB-AR-14-0	TSB-AR-3-0	TSB-AR-9-0	TSB-BJ-01-0
			Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample
			9/7/2007	9/7/2007	9/7/2007	9/7/2007	9/5/2007	9/5/2007	9/5/2007	9/5/2007	9/5/2007	9/7/2007	9/7/2007	9/5/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/7/2007
SW8260	Methyl isobutyl ketone	ug/kg	<20	<20	<20	<20	<21	<21	<20	<21	<20	<21	<21	<21	<21	<21	<21	<21	<20	<20	<21	<20	<20	<20
	Methyl n-butyl ketone	ug/kg	<20	<20	<20	<20	<21	<21	<20	<21	<20	<21	<21	<21	<21	<21	<21	<21	<20	<20	<21	<20	<20	<20
	MTBE (Methyl tert-butyl ether)	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	n-Butyl benzene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	n-Heptane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	n-Propyl benzene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	o-Xylene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Styrene (monomer)	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	tert-Butyl benzene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Tetrachloroethylene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Toluene	ug/kg	<5.1	<5.1	<5.1	<5.1	0.26 J	0.25 J	0.35 J	0.46 J	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	trans-1,2-Dichloroethylene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	trans-1,3-Dichloropropylene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Tribromomethane	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Trichloroethylene	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Vinyl acetate	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Vinyl chloride	ug/kg	<5.1	<5.1	<5.1	<5.1	<5.2	<5.3	<5.1	<5.1	<5.1	<5.2	<5.2	<5.3	<5.1	<5.2	<5.2	<5.1	<5.1	<5.1	<5.2	<5	<5.1	<5.1
	Xylenes (total)	ug/kg	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<11	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SW8270	1,2,4,5-Tetrachlorobenzene	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	1,2-Diphenylhydrazine	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	1,4-Dioxane	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	2,4,5-Trichlorophenol	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	2,4,6-Trichlorophenol	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	2,4-Dichlorophenol	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	2,4-Dimethylphenol	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	2,4-Dinitrophenol	ug/kg	<1600	<1600	<1600	<1600	<1700	<1700	<1600	<1600	<1700	<1700	<1700	<1700	<1600	<1700	<1700	<1700	<1600	<1600	<1700	<1600	<1600	<1600
	2,4-Dinitrotoluene	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	2,6-Dinitrotoluene	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	2-Chloronaphthalene	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	2-Chlorophenol	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	2-Methylnaphthalene	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	2-Nitroaniline	ug/kg	<1600	<1600	<1600	<1600	<1700	<1700	<1600	<1600	<1700	<1700	<1700	<1700	<1600	<1700	<1700	<1700	<1600	<1600	<1700	<1600	<1600	<1600
	2-Nitrophenol	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	3,3'-Dichlorobenzidine	ug/kg	<1600	<1600	<1600	<1600	<1700	<1700	<1600	<1600	<1700	<1700	<1700	<1700	<1600	<1700	<1700	<1700	<1600	<1600	<1700	<1600	<1600	<1600
	3-Methylphenol & 4-Methylphenol	ug/kg	<680	<670	<670	<670	<690	<710	<680	<680	<680	<680	<690	<700	<680	<690	<680	<680	<680	<680	<690	<670	<680	<670
	3-Nitroaniline	ug/kg	<1600	<1600	<1600	<1600	<1700	<1700	<1600	<1600	<1700	<1700	<1700	<1700	<1600	<1700	<1700	<1700	<1600	<1600	<1700	<1600	<1600	<1600
	4-Bromophenyl phenyl ether	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	4-Chloro-3-Methylphenol	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	4-Chlorophenyl phenyl ether	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	4-Chlorothioanisole	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	4-Nitrophenol	ug/kg	<1600	<1600	<1600	<1600	<1700	<1700	<1600	<1600	<1700	<1700	<1700	<1700	<1600	<1700	<1700	<1700	<1600	<1600	<1700	<1600	<1600	<1600
	Acenaphthene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Acenaphthylene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Acetophenone	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Aniline	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Anthracene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Azobenzene	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Benzenethiol	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Benzo(a)anthracene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Benzo(a)pyrene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Benzo(b)fluoranthene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 2-4: BEC Parcels A-B Shallow Soil Results for use in the SLERA (All Samples Collected at 0 ft bgs)

Nevada Environmental Response Trust Site Henderson, Nevada

Analytic Method	Analyte	Unit	TSB-AJ-01-0	TSB-AJ-02-0	TSB-AJ-02-0 (FD)	TSB-AJ-03-0	TSB-AR-01-0	TSB-AR-01-0 (FD)	TSB-AR-02-0	TSB-AR-04-0	TSB-AR-05-0	TSB-AR-06-0	TSB-AR-06-0 (FD)	TSB-AR-07-0	TSB-AR-08-0	TSB-AR-10-0	TSB-AR-11-0	TSB-AR-11-0 (FD)	TSB-AR-12-0	TSB-AR-13-0	TSB-AR-14-0	TSB-AR-3-0	TSB-AR-9-0	TSB-BJ-01-0
			Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample
			9/7/2007	9/7/2007	9/7/2007	9/7/2007	9/5/2007	9/5/2007	9/5/2007	9/5/2007	9/5/2007	9/7/2007	9/7/2007	9/5/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/7/2007
SW8270	Benzo(g,h,i)perylene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Benzo(k)fluoranthene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Benzoic acid	ug/kg	1600 UJ	1600 UJ	1600 UJ	1600 UJ	1700 UJ	1700 UJ	1600 UJ	1600 UJ	1700 UJ	1700 UJ	1700 UJ	1700 UJ	1600 UJ	1700 UJ	1700 UJ	1700 UJ	1600 UJ	1600 UJ	1700 UJ	1600 UJ	1600 UJ	1600 UJ
	Benzyl alcohol	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Benzyl butyl phthalate	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	bis(2-Chloroethoxy) methane	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	bis(2-Chloroethyl) ether	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	bis(2-Chloroisopropyl) ether	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	bis(2-Ethylhexyl) phthalate	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	bis(p-Chlorophenyl) disulfide	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	bis(p-Chlorophenyl) sulfone	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Carbazole	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Chrysene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Dibenzo(a,h)anthracene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Dibenzofuran	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Dibutyl phthalate	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Diethyl phthalate	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
SW8270	Dimethyl phthalate	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Di-n-octyl phthalate	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Diphenyl sulfone	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Fluoranthene	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Fluorene	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Hexachloro-1,3-butadiene	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Hexachlorobenzene	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Hexachlorocyclopentadiene	ug/kg	<1600	<1600	<1600	<1600	<1700	<1700	<1600	<1600	<1700	<1700	<1700	<1700	<1600	<1700	<1700	<1700	<1600	<1600	<1700	<1600	<1600	<1600
	Hexachloroethane	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Hydroxymethyl phthalimide	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Indeno(1,2,3-cd)pyrene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Isophorone	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Naphthalene	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Nitrobenzene	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	N-nitrosodi-n-propylamine	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	N-nitrosodiphenylamine	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	o-Cresol	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Octachlorostyrene	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	p-Chloroaniline	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	p-Chlorothiophenol	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Pentachlorobenzene	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Pentachlorophenol	ug/kg	<1600	<1600	<1600	<1600	<1700	<1700	<1600	<1600	<1700	<1700	<1700	<1700	<1600	<1700	<1700	<1700	<1600	<1600	<1700	<1600	<1600	<1600
	Phenanthrene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Phenol	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Phenyl Disulfide	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Phenyl Sulfide	ug/kg	<340	<340	<330	<340	<350	<350	<340	<340	<340	<340	<340	<350	<340	<340	<340	<340	<340	<340	<340	<340	<340	<340
	Phthalic acid	ug/kg	<1600	<1600	<1600	<1600	<1700	<1700	<1600	<1600	<1700	<1700	<1700	<1700	<1600	<1700	<1700	<1700	<1600	<1600	<1700	<1600	<1600	<1600
	p-Nitroaniline	ug/kg	<1600	<1600	<1600	<1600	<1700	<1700	<1600	<1600	<1700	<1700	<1700	<1700	<1600	<1700	<1700	<1700	<1600	<1600	<1700	<1600	<1600	<1600
	Pyrene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Pyridine	ug/kg	<680	<670	<670	<670	<690	<710	<680	<680	<680	<680	<690	<700	<680	<690	<680	<680	<680	<680	<690	<670	<680	<670
SW8290	1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/g	5.8	59	--	160	10	--	170 J	25	200	6.9 J	2.8 J	86	99	<0.87	48	--	41	32	2.7 J+	50	81	92
	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/g	<1.1	4.9 J	--	13	<3.1	--	14 J	<2.1	13 J	<0.67	<0.8	6 J	8.4	<1	22	--	3.5 J	13	<1.5	4.3 J	6.5	8.9
	1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/g	2.7 J	26	--	59	4.7 J	--	110 J	9.7 J	73	<2.5	<0.96	30	32	<0.53	16	--	14	12	<0.98	16	28	49
	1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	3.6 J	29	--	72	5.1 J	--	120	9.6	74	3.4 J	<1.4	31	35	<0.51	18	--	15	15	<1.1	19	30	54

TABLE 2-4: BEC Parcels A-B Shallow Soil Results for use in the SLERA (All Samples Collected at 0 ft bgs)

Nevada Environmental Response Trust Site Henderson, Nevada

Analytic Method	Analyte	Unit	TSB-AJ-01-0	TSB-AJ-02-0	TSB-AJ-02-0 (FD)	TSB-AJ-03-0	TSB-AR-01-0	TSB-AR-01-0 (FD)	TSB-AR-02-0	TSB-AR-04-0	TSB-AR-05-0	TSB-AR-06-0	TSB-AR-06-0 (FD)	TSB-AR-07-0	TSB-AR-08-0	TSB-AR-10-0	TSB-AR-11-0	TSB-AR-11-0 (FD)	TSB-AR-12-0	TSB-AR-13-0	TSB-AR-14-0	TSB-AR-3-0	TSB-AR-9-0	TSB-BJ-01-0
			Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample
			9/7/2007	9/7/2007	9/7/2007	9/7/2007	9/5/2007	9/5/2007	9/5/2007	9/5/2007	9/5/2007	9/7/2007	9/7/2007	9/5/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/6/2007	9/7/2007
SW8290	**1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin**	**pg/g**	<0.66	<0.79	--	<2	<2.2	--	<2.3	<1.9	<2.1	<0.53	<0.52	<2.2	<0.97	<0.5	<2	--	<0.43	<1.9	<0.4	<0.48	<0.98	<1.7
	1,2,3,6,7,8-Hexachlorodibenzofuran	**pg/g**	2.9 J	23	--	57	3.7 J	--	84	7.3	56	<2.3	<0.77	26	29	<0.35	14	--	11	11	<0.69	16	23	47
	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	**pg/g**	<0.71	<2.3	--	4.8 J	<2.1	--	6.2	<1.8	4.4 J	<0.57	<0.56	<2.1	2.7 J	<0.47	<1.9	--	<1.1	<1.8	<0.37	<1.6	<1.9	4.5 J
	1,2,3,7,8,9-Hexachlorodibenzofuran	**pg/g**	<0.6	2.9 J	--	7.1	<2.7	--	9.2 J	<2.6	5.2	<1.2	<0.55	<2.1	3.6 J	<0.41	<2.2	--	<1.6	<2.4	<0.32	<1.8	3.1 J	8.5
	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	**pg/g**	<0.54	<1.7	--	4.1 J	<1.8	--	6.3	<1.5	3.1 J	<0.43	<0.43	<1.7	<2.3	<0.41	<1.6	--	<0.81	<1.5	<0.51	<1.3	<2	3.1 J
	1,2,3,7,8-Pentachlorodibenzofuran	**pg/g**	2.8 J	21	--	47	3 J	--	84 J	6.3	41	<1.8	<0.8	19	21	<0.34	9.9	--	7.9	11	<0.75	12	18	52
	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	**pg/g**	<0.66	<2.1	--	3.8 J	<2.2	--	7.2 J	<1.8	3.1 J	<0.79	<0.68	<2.1	<1.8	<0.57	<2	--	<0.75	<1.9	<0.61	<1.4	<1.8	4.1 J
	2,3,4,6,7,8-Hexachlorodibenzofuran	**pg/g**	<0.88	5.4	--	14	<2.7	--	23	<2.6	13	<0.61	<0.37	6.3	7.2	<0.41	3.9 J	--	<2.4	3.6 J	<0.25	3.3 J	5 J	13
	2,3,4,7,8-Pentachlorodibenzofuran	**pg/g**	<1.4	11	--	24	<2.3	--	42 J	2.8 J	21	<0.87	<0.47	11	11	<0.36	5 J	--	3.8 J	4.9 J	<0.41	6.1	8.3	28
	2,3,7,8-Tetrachlorodibenzofuran	**pg/g**	1.6	10	--	25	1.6	--	43 J	3.1	19	1.1 J	0.43 UJ	9.5	11	<0.26	5.6	--	3.5	6.9	<0.41	5.6	7.4	31
	2,3,7,8-Tetrachlorodibenzo-p-dioxin	**pg/g**	<0.39	<0.34	--	0.95 J	<0.98	--	1.4 J	<0.97	0.95 J	<0.37	<0.37	<0.9	<0.37	<0.31	<0.84	--	<0.36	<0.81	<0.27	<0.36	<0.32	0.97 J
	Octachlorodibenzodioxin	**pg/g**	2.7 UJ	6.4 J	--	14	<5	--	21 J	6.6 J	20	<2.6	<1	9 J	13	7.9 J+	100	--	6.2 J	76	9.4 J+	7.3 J	10	15 J
	Octachlorodibenzofuran	**pg/g**	9.8 J	120	--	300	16	--	350 J	52	480	19 J	4.9 UJ	170	200	<1.9	100	--	91	65	5.5 J+	100	180	180 J
SW8310	**Acenaphthene**	**ug/kg**	280	200 J	51 UJ	<51	<53	<54	<51	<51	<52	75 J	140 J	<53	<51	<52	<52	<52	<52	<51	<52	<51	400	<51
	Acenaphthylene	**ug/kg**	100 UJ	100 UJ	100 UJ	100 UJ	110 UJ	110 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	110 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ	100 UJ
	Anthracene	**ug/kg**	<31	<30	<30	<31	<32	<32	<31	<31	<31	<31	<31	<32	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31
	Benzo(a)anthracene	**ug/kg**	<15	<15	<15	<15	16 UJ	55 J	<15	<15	<15	<16	<16	<16	<15	<16	<16	<16	<15	<15	<16	<15	<15	<15
	Benzo(a)pyrene	**ug/kg**	<15	<15	<15	<15	<16	<16	<15	<15	<15	<16	<16	<16	<15	<16	<16	<16	<15	<15	<16	<15	<15	<15
	Benzo(b)fluoranthene	**ug/kg**	<15	<15	<15	<15	<16	<16	<15	<15	<15	<16	<16	<16	<15	<16	<16	<16	<15	<15	<16	<15	<15	<15
	Benzo(g,h,i)perylene	**ug/kg**	<31	<30	<30	<31	<32	<32	<31	<31	<31	<31	<31	<32	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31
	Benzo(k)fluoranthene	**ug/kg**	15 UJ	15 UJ	15 UJ	15 UJ	16 UJ	16 UJ	15 UJ	15 UJ	15 UJ	16 UJ	16 UJ	16 UJ	15 UJ	16 UJ	16 UJ	16 UJ	15 UJ	15 UJ	16 UJ	15 UJ	15 UJ	15 UJ
	Chrysene	**ug/kg**	<15	<15	<15	<15	<16	<16	<15	<15	<15	<16	<16	<16	<15	<16	<16	<16	<15	<15	<16	<15	<15	<15
	Dibenzo(a,h)anthracene	**ug/kg**	<31	<30	<30	<31	<32	<32	<31	<31	<31	<31	<31	<32	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31
	Indeno(1,2,3-cd)pyrene	**ug/kg**	<15	<15	<15	<15	<16	<16	<15	<15	<15	<16	<16	<16	<15	<16	<16	<16	<15	<15	<16	<15	<15	<15
	Phenanthrene	**ug/kg**	<31	<30	<30	<31	<32	<32	<31	<31	<31	<31	<31	<32	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31
	Pyrene	**ug/kg**	<31	<30	<30	<31	<32	<32	<31	<31	<31	<31	<31	<32	<31	<31	<31	<31	<31	31 UJ	31 UJ	<31	<31	<31

TABLE 2-4: BEC Parcels A-B Shallow Soil Results for use in the SLERA (All Samples Collected at 0 ft bgs)

Nevada Environmental Response Trust Site Henderson, Nevada

Analytic Method	Analyte	Unit	TSB-BJ-02-0	TSB-BJ-03-0	TSB-BJ-03-0 (FD)	TSB-BJ-04-0	TSB-BJ-05-0	TSB-BJ-06-0	TSB-BR-01-0	TSB-BR-02-0	TSB-BR-03-0	TSB-BR-04-0	TSB-BR-04-0 (FD)	TSB-BR-05-0	TSB-BR-06-0
			Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample
			9/7/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/7/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/7/2007
3060A/7196A	Chromium (VI)	mg/kg	<1	--	--	0.58 J	0.24 J	0.49 J	0.19 J	<1	0.32 J	<1	<1	0.54 J	<1
E160.3	Percent Moisture	percent	1.8	11.3	7.2	3	3.4	5.3	2.6	2.3	5.6	3.6	2.9	1.8	1.4
E300	Bromide	mg/kg	<2.5	<2.8	<2.7	<2.6	<2.6	<2.6	0.92 J	<2.6	<2.6	<2.6	<2.6	<2.5	<2.5
	Chlorate	mg/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	2.9 J	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Chloride	mg/kg	189	345	313	9.7	221	7.1	664	95.2	28.8	13.1 J	7.8 J	4.3	85.9
	Fluoride	mg/kg	0.8 J	<1.1	<1.1	<1	<1	0.87 J	0.39 J	<1	<1.1	<1	0.56 J	<1	0.74 J
	Nitrate (as N)	mg/kg	5.3	6.9	6.6	3.3	12	7.2	44.6	6.2	2.6	3.5	2.4	0.96	2.2
	Nitrite (as N)	mg/kg	<0.2	<0.23	<0.22	<0.21	<0.21	<0.21	<0.21	<0.2	<0.21	<0.21	<0.21	<0.2	<0.2
	Orthophosphate as P	mg/kg	5.1 UJ	5.6 UJ	5.4 UJ	5.2 UJ	5.2 UJ	5.3 UJ	5.1 UJ	5.1 UJ	5.3 UJ	5.2 UJ	5.2 UJ	5.1 UJ	5.1 UJ
	Sulfate	mg/kg	98.7	256	280	39.5	1550	43.4	528	487	78.8	536 J	201 J	19.5	94.2
E300.0	Bromine	mg/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	1.8 J	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Chlorine	mg/kg	378	689	627	19.5	442	14.3	1330	190	57.5	26.2 J	15.6 J	8.7	172
E314.0	Perchlorate	ug/kg	2070	349 J	9880 J	259	11400	1170	13200	2670	627	1280 J	368 J	122	492
EPA 300.1 Mod.	Chlorite	ug/kg	--	<230	<220	--	--	--	--	--	--	--	--	--	--
EPA 8270C	2,2'-/4,4'-Dichlorobenzil	ug/kg	<340	<2800	<2700	<340	<340	<350	<340	<340	<350	<340	<340	<340	<500
EPA 901.1	RADIUM-226	pCi/g	1.04	0.857	0.975	0.954	0.837	0.96	0.961	0.954	1.02	0.896	1	0.985	1.03
	RADIUM-228	pCi/g	1.78	1.69	1.76	1.95	2.07	2	1.99	1.65	1.76	1.74	1.95	1.81	2.13
HASL-300 Th Mod	THORIUM-228	pci/g	1.8	1.32	2.13	1.59	1.83E+00 J-	1.8	1.61	1.8	1.21	1.74E+00 J	1.67E-02 UJ	1.63	2.17
	THORIUM-230	pci/g	1.24	1.09	1.08	0.85	1.47E+00 J-	1.39	1.07	1.08	0.794	1.26E+00 J	3.08E-01 J	0.891	1.3
	THORIUM-232	pci/g	1.76	1.45	1.74	1.8	1.12E+00 J-	1.78	1.37	1.85	1.54	2.36E+00 J	0.00E+00 UJ	1.46	2.02
HASL-300 U Mod	URANIUM-233/234	pci/g	4.43E-01 J	2.80E-01 J	2.64E-01 J	2.99E-01 J	2.25E-01 J	3.17E-01 J	3.71E-01 J	2.62E-01 J	2.37E-01 J	3.26E-01 J	3.43E-01 J	2.99E-01 J	2.60E-01 J
	URANIUM-235/236	pci/g	<1.08E-02	<5.90E-03	1.84E-02 J+	1.47E-02 J+	<6.59E-03	<1.25E-02	<2.82E-03	<1.58E-02	<5.31E-03	<5.71E-03	2.15E-02 J+	<5.31E-03	<5.60E-03
	URANIUM-238	pci/g	3.46E-01 J	2.53E-01 J	3.09E-01 J	2.73E-01 J	1.53E-01 J	1.69E-01 J	2.88E-01 J	1.77E-01 J	1.25E-01 J	2.53E-01 J	1.86E-01 J	2.46E-01 J	1.76E-01 J
M8015D	TPH (as Diesel)	mg/kg	<25	28 UJ	<27	<26	26 UJ	<26	<26	<26	<26	<26	<26	<25	<25
SW1664A	HEM Oil/Grease	mg/kg	204 UJ	225 UJ	215 UJ	206 UJ	207 UJ	211 UJ	205 UJ	205 UJ	212 UJ	207 UJ	206 UJ	204 UJ	203 UJ
	n-Hexane Extractable Material, Silica Gel Treated	mg/kg	--	225 UJ	215 UJ	206 UJ	207 UJ	--	205 UJ	205 UJ	212 UJ	207 UJ	206 UJ	204 UJ	--
SW6010	Lithium	mg/kg	<25.5	<11.3	<10.8	11.2	<10.4	13.9	<10.3	11.8	12	<10.4	12.2	10.9	13
	Sulfur	mg/kg	<2550	<1130	<1080	<1030	979 J	<1060	453 J	443 J	<1060	<1040	<1030	<1020	<1010
SW6020	Aluminum	mg/kg	8990	7910	8400	8360	7860	8270	8100	8010	7390	7510	7740	7960	8670
	Antimony	mg/kg	0.21 J-	0.18 J-	0.17 J-	0.2 J-	0.29 J-	0.13 J-	0.17 J-	0.42 J-	0.38 J-	0.15 J-	0.17 J-	0.16 J-	0.12 J-
	Arsenic	mg/kg	2.6	2.5	2.5	2.7	3.4	2.5	2.5	2.8	2.5	2.5	2.6	2.3	2.3
	Barium	mg/kg	217	198 J+	184 J+	197 J+	216 J+	170	178 J+	218 J+	179 J+	208 J+	202 J+	183 J+	208
	Beryllium	mg/kg	0.54	0.51	0.52	0.56	0.49	0.48	0.5	0.5	0.47	0.47	0.49	0.48	0.5
	Boron	mg/kg	<20.4	<22.5	<21.5	<20.6	<20.7	<21.1	<20.5	<20.5	<21.2	<20.7	<20.6	<20.4	<20.3
	Cadmium	mg/kg	0.59	0.18	0.16	0.34	0.31	0.14	0.11	0.43	0.56	0.17	0.13	0.14	0.12
	Calcium	mg/kg	21200	33900	21300	19400	16900	19100	15600	23800	20200	50700 J	23000 J	21400	20700
	Chromium (Total)	mg/kg	15.9	9.5	9.4	13.2	10.6	11.5	9.8	9.9	9.9	7.4	8.7	8.7	10.9
	Cobalt	mg/kg	7	6.3 J	7.1 J	6.8 J	6.5 J	6	6.1 J	7.5 J	5.5 J	6 J	6.1 J	6 J	6.5
	Copper	mg/kg	19.3	19.7	18.1	18.6	16.3	14	14.9	31	24.4	13	12.7	12.6	15
	Iron	mg/kg	17200	12400	12700	13000	12800	13900	12400	14000	11900	11000	11800	11300	13900
	Lead	mg/kg	18.4	28.6	17.5	34.6	28.2	11.6	11.3	96.9	136	14.7	13	10.8	11.6
	Magnesium	mg/kg	8060 J-	10600	10200	7810	8440	7620 J-	7250	9380	7630	7870	7840	8170	8170 J-
	Manganese	mg/kg	476	441	571	494	554	376	405	668	405	428	388	415	416
	Molybdenum	mg/kg	<1	<1.1	<1.1	<1	1.1	<1.1	<1	<1	<1.1	<1	<1	<1	<1
	Nickel	mg/kg	22.2	13.5 J	15.2 J	15.4 J	14.2 J	13.8	12.7 J	16.5 J	13.3 J	13.1 J	12.9 J	14.5 J	16.9
	Niobium	mg/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	5.1 UJ	<5.1
	Palladium	mg/kg	0.35	0.33	0.3	0.3	0.33	0.35	0.34	0.37	0.34	0.38	0.35	0.33	0.35
	Phosphorus (as P)	mg/kg	1110 J	1280 J	1500 J	1350 J	1210 J	914 J	1180 J	1510 J	958 J	1120 J	1080 J	1100 J	1080 J
	Platinum	mg/kg	<0.2	<0.23	<0.22	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.2	<0.2
	Potassium	mg/kg	2790	2730 J+	2670 J+	2400 J+	2810 J+	3180	2590 J+	2920 J+	2570 J+	2950 J+	2980 J+	3100 J+	2820
	Selenium	mg/kg	<1	<1.1	<1.1	<1	<1	<1.1	<1	<1	<1.1	<1	<1	<1	<1

TABLE 2-4: BEC Parcels A-B Shallow Soil Results for use in the SLERA (All Samples Collected at 0 ft bgs)

Nevada Environmental Response Trust Site Henderson, Nevada

Analytic Method	Analyte	Unit	TSB-BJ-02-0	TSB-BJ-03-0	TSB-BJ-03-0 (FD)	TSB-BJ-04-0	TSB-BJ-05-0	TSB-BJ-06-0	TSB-BR-01-0	TSB-BR-02-0	TSB-BR-03-0	TSB-BR-04-0	TSB-BR-04-0 (FD)	TSB-BR-05-0	TSB-BR-06-0
			Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample
			9/7/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/7/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/7/2007
SW6020	Silicon	mg/kg	714 J+	347 J+	286 J+	128 J+	166 J+	652 J+	292 J+	131 J+	231 J+	262 J+	188 J+	221 J+	552 J+
	Silver	mg/kg	0.13 J	0.12 J	0.11 J	0.11 J	0.11 J	0.11 J	0.11 J	0.12 J	0.82	0.1 J	0.094 J	0.089 J	0.1 J
	Sodium	mg/kg	369 J+	627	608	410	731	275 J+	627	552	427	504	548	369	698
	Strontium	mg/kg	141	143 J	120 J	130 J	149 J	144	140 J	147 J	130 J	165 J	152 J	140 J	142
	Thallium	mg/kg	<0.41	<0.45	<0.43	<0.41	<0.41	<0.42	<0.41	<0.41	<0.42	<0.42	<0.41	<0.41	<0.41
	Tin	mg/kg	0.71	0.61	0.57	0.76	0.87	0.56	0.58	1.5	1.3	0.52	0.56	0.48	0.47
	Titanium	mg/kg	982	640	567	613	554	760	590	544	537	547	530	507	788
	Tungsten	mg/kg	<1	<1.1	<1.1	<1	<1	<1.1	<1	<1	<1.1	<1	<1	<1	<1
	Uranium	mg/kg	1	0.78	0.81	0.81	0.73	0.9	0.8	0.74	0.69	0.91	0.94	0.71	0.9
	Vanadium	mg/kg	53.4	30.1	29.3	29.7	28.7	37.5	28.6	28.5	25	24.2	26.9	25.3	37.1
	Zinc	mg/kg	67.2 J-	41.8	40.4	65	53.5	43.6 J-	34.7 J+	125	79	32 J+	32.2 J+	30.8 J+	33 J-
	Zirconium	mg/kg	24.1	22 J+	18.7 J+	22.5	22.5	21.3	23	21.1	20.6 J+	21.6	20.6	18.3 J+	20.6
SW7471	Mercury	ug/kg	15.4 J	9 J	9.9 J	17.5 J	11.9 J	7.7 J	13.9 J	14.2 J	8.3 J	12.3 J	13.2 J	11.4 J	14.7 J
SW8015B	Gasoline Range Organics	mg/kg	<0.1	<0.11	<0.11	<0.1	<0.1	<0.11	<0.1	<0.1	<0.11	<0.1	<0.1	<0.1	<0.1
SW8081	2,4-DDD	ug/kg	<1.7	<19	<18	2 J	8.3 J+	<1.8	17 J+	<1.7	<1.8	<1.8	<1.8	<1.7	<1.7
	2,4-DDE	ug/kg	3.4	<19	<18	6.6 J	49 J	2.3 J	99 X	<1.7	<1.8	<1.8	<1.8	<1.7	<1.7
	4,4-DDD	ug/kg	<1.7	<19	<18	<1.8	18 J+	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.7	<1.7
	4,4-DDE	ug/kg	8.4 J+	28	<18	33 J+	150	14 J+	310	<1.7	7.9 J+	<1.8	1.8	<1.7	2.4 J+
	4,4-DDT	ug/kg	3.2 J	<19	<18	15 J+	63 J	12 J+	99 J	<1.7	3.5 J+	<1.8	<1.8	<1.7	<1.7
	Aldrin	ug/kg	<1.7	<19	<18	<1.8	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.7	<1.7
	alpha-BHC	ug/kg	<1.7	<19	<18	<1.8	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.7	<1.7
	alpha-Chlordane	ug/kg	<1.7	<19	<18	<1.8	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.7	<1.7
	beta-BHC	ug/kg	15 J+	130 J	27 J	35 J+	91 X	23 J+	190	<1.7	59	9.9	11	<1.7	11 J+
	Chlordane	ug/kg	<17	<190	<180	<18	<18	<18	<17	<17	<18	<18	<18	<17	<17
	delta-BHC	ug/kg	<1.7	<19	<18	<1.8	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.7	<1.7
	Dieldrin	ug/kg	<1.7	<19	<18	<1.8	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.7	<1.7
	Endosulfan I	ug/kg	<1.7	<19	<18	<1.8	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.7	<1.7
	Endosulfan II	ug/kg	<1.7	<19	<18	<1.8	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.7	<1.7
	Endosulfan sulfate	ug/kg	<1.7	<19	<18	<1.8	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.7	<1.7
	Endrin	ug/kg	<1.7	<19	<18	<1.8	<1.8	<1.8	7 J	<1.7	<1.8	<1.8	<1.8	<1.7	<1.7
	Endrin aldehyde	ug/kg	<1.7	<19	<18	<1.8	<1.8	<1.8	2.7 J	<1.7	<1.8	<1.8	<1.8	<1.7	<1.7
	Endrin ketone	ug/kg	<1.7	<19	<18	<1.8	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.7	<1.7
	gamma-Chlordane	ug/kg	<1.7	<19	<18	<1.8	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.7	<1.7
	Heptachlor	ug/kg	<1.7	<19	<18	<1.8	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.7	<1.7
	Heptachlor epoxide	ug/kg	<1.7	<19	<18	<1.8	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.7	<1.7
	Lindane	ug/kg	<1.7	<19	<18	<1.8	<1.8	<1.8	<1.7	<1.7	<1.8	<1.8	<1.8	<1.7	<1.7
	Methoxychlor	ug/kg	<3.4	<37	<36	<3.4	<3.4	<3.5	<3.4	<3.4	<3.5	<3.4	<3.4	<3.4	<3.3
	Toxaphene	ug/kg	<68	<760	<720	<69	<69	<71	<69	<69	<71	<69	<69	<68	<68
SW8260	1,1,1,2-Tetrachloroethane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	1,1,1-Trichloroethane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	1,1,2,2-Tetrachloroethane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	1,1,2-Trichloroethane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	1,1-Dichloroethane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	1,1-Dichloroethylene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	1,1-Dichloropropene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	1,2,3-Trichlorobenzene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	1,2,3-Trichloropropane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	1,2,4-Trichlorobenzene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	1,2,4-Trimethylbenzene	ug/kg	0.35 J	0.27 J	0.38 J	0.28 J	0.44 J	0.31 J	0.43 J	0.23 J	<5.3	0.31 J	0.31 J	0.24 J	0.37 J
	1,2-Dibromo-3-chloropropane (DBCP)	ug/kg	<10	<11	<11	<10	<10	<11	<10	<10	<11	<10	<10	<10	<10
	1,2-Dichlorobenzene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1

TABLE 2-4: BEC Parcels A-B Shallow Soil Results for use in the SLERA (All Samples Collected at 0 ft bgs)

Nevada Environmental Response Trust Site Henderson, Nevada

Analytic Method	Analyte	Unit	TSB-BJ-02-0	TSB-BJ-03-0	TSB-BJ-03-0 (FD)	TSB-BJ-04-0	TSB-BJ-05-0	TSB-BJ-06-0	TSB-BR-01-0	TSB-BR-02-0	TSB-BR-03-0	TSB-BR-04-0	TSB-BR-04-0 (FD)	TSB-BR-05-0	TSB-BR-06-0
			Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample
			9/7/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/7/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/7/2007
SW8260	1,2-Dichloroethane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	1,2-Dichloroethylene	ug/kg	<10	<11	<11	<10	<10	<11	<10	<10	<11	<10	<10	<10	<10
	1,2-Dichloropropane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	1,3,5- Trichlorobenzene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	1,3,5-Trimethylbenzene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	1,3-Dichlorobenzene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	1,3-Dichloropropane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	1,4-Dichlorobenzene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	1-Nonanal	ug/kg	<10	<11	<11	<10	<10	<11	<10	<10	<11	<10	<10	<10	<10
	2,2,3-Trimethylbutane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	2,2-Dichloropropane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	2,2-Dimethylpentane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	2,3-Dimethylpentane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	2,4-Dimethylpentane	ug/kg	<20	<23	<22	<21	<21	<21	<21	<20	<21	<21	<21	<20	<20
SW8260	2-Chlorotoluene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	2-Nitropropane	ug/kg	<10	<11	<11	<10	<10	<11	<10	<10	<11	<10	<10	<10	<10
	2-Phenylbutane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	3,3-dimethylpentane	ug/kg	<10	<11	<11	<10	<10	<11	<10	<10	<11	<10	<10	<10	<10
	3-ethylpentane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	3-Methylhexane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	4-Chlorotoluene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Acetone	ug/kg	<20	<23	<22	<21	<21	<21	<21	<20	<21	<21	<21	<20	<20
	Acetonitrile	ug/kg	51 UJ	56 UJ	54 UJ	52 UJ	52 UJ	53 UJ	51 UJ	51 UJ	53 UJ	52 UJ	52 UJ	51 UJ	51 UJ
	Benzene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Bromobenzene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Bromodichloromethane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Bromomethane	ug/kg	<10	<11	<11	<10	<10	<11	<10	<10	<11	<10	<10	<10	<10
	Carbon disulfide	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Carbon tetrachloride	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	CFC-11	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	CFC-12	ug/kg	<10	<11	<11	<10	<10	<11	<10	<10	<11	<10	<10	<10	<10
	Chlorinated fluorocarbon (Freon 113)	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Chlorobenzene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Chlorobromomethane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Chlorodibromomethane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Chloroethane	ug/kg	<10	<11	<11	<10	<10	<11	<10	<10	<11	<10	<10	<10	<10
	Chloroform	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Chloromethane	ug/kg	<10	<11	<11	<10	<10	<11	<10	<10	<11	<10	<10	<10	<10
	cis-1,2-Dichloroethylene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	cis-1,3-Dichloropropylene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Cymene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Dibromomethane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Dichloromethane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Ethanol	ug/kg	250 UJ	280 UJ	270 UJ	260 UJ	260 UJ	260 UJ	260 UJ	260 UJ	260 UJ	260 UJ	260 UJ	250 UJ	250 UJ
	Ethylbenzene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Hexane, 2-methyl-	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Isopropylbenzene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	m,p-Xylene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Methyl disulfide	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Methyl ethyl ketone	ug/kg	<20	<23	<22	<21	<21	<21	<21	<20	<21	<21	<21	<20	<20
	Methyl iodide	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1

TABLE 2-4: BEC Parcels A-B Shallow Soil Results for use in the SLERA (All Samples Collected at 0 ft bgs)

Nevada Environmental Response Trust Site Henderson, Nevada

Analytic Method	Analyte	Unit	TSB-BJ-02-0	TSB-BJ-03-0	TSB-BJ-03-0 (FD)	TSB-BJ-04-0	TSB-BJ-05-0	TSB-BJ-06-0	TSB-BR-01-0	TSB-BR-02-0	TSB-BR-03-0	TSB-BR-04-0	TSB-BR-04-0 (FD)	TSB-BR-05-0	TSB-BR-06-0
			Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample
			9/7/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/7/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/7/2007
SW8260	Methyl isobutyl ketone	ug/kg	<20	<23	<22	<21	<21	<21	<21	<20	<21	<21	<21	<20	<20
	Methyl n-butyl ketone	ug/kg	<20	<23	<22	<21	<21	<21	<21	<20	<21	<21	<21	<20	<20
	MTBE (Methyl tert-butyl ether)	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	n-Butyl benzene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	n-Heptane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	n-Propyl benzene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	o-Xylene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Styrene (monomer)	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	tert-Butyl benzene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Tetrachloroethylene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Toluene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	0.31 J	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	trans-1,2-Dichloroethylene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	trans-1,3-Dichloropropylene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Tribromomethane	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Trichloroethylene	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Vinyl acetate	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Vinyl chloride	ug/kg	<5.1	<5.6	<5.4	<5.2	<5.2	<5.3	<5.1	<5.1	<5.3	<5.2	<5.2	<5.1	<5.1
	Xylenes (total)	ug/kg	<10	<11	<11	<10	<10	<11	<10	<10	<11	<10	<10	<10	<10
SW8270	1,2,4,5-Tetrachlorobenzene	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	1,2-Diphenylhydrazine	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	1,4-Dioxane	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	2,4,5-Trichlorophenol	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	2,4,6-Trichlorophenol	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	2,4-Dichlorophenol	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	2,4-Dimethylphenol	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	2,4-Dinitrophenol	ug/kg	<1600	<1800	<1700	<1600	<1700	<1700	<1600	<1600	<1700	<1700	<1600	<1600	<1600
	2,4-Dinitrotoluene	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	2,6-Dinitrotoluene	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	2-Chloronaphthalene	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	2-Chlorophenol	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	2-Methylnaphthalene	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	2-Nitroaniline	ug/kg	<1600	<1800	<1700	<1600	<1700	<1700	<1600	<1600	<1700	<1700	<1600	<1600	<1600
	2-Nitrophenol	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	3,3'-Dichlorobenzidine	ug/kg	<1600	<1800	<1700	<1600	<1700	<1700	<1600	<1600	<1700	<1700	<1600	<1600	<1600
	3-Methylphenol & 4-Methylphenol	ug/kg	<670	<740	<710	<680	<680	<700	<680	<680	<700	<680	<680	<670	<670
	3-Nitroaniline	ug/kg	<1600	<1800	<1700	<1600	<1700	<1700	<1600	<1600	<1700	<1700	<1600	<1600	<1600
	4-Bromophenyl phenyl ether	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	4-Chloro-3-Methylphenol	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	4-Chlorophenyl phenyl ether	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	4-Chlorothioanisole	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	4-Nitrophenol	ug/kg	<1600	<1800	<1700	<1600	<1700	<1700	<1600	<1600	<1700	<1700	<1600	<1600	<1600
	Acenaphthene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
	Acenaphthylene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
	Acetophenone	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Aniline	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Anthracene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
	Azobenzene	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Benzenethiol	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Benzo(a)anthracene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
	Benzo(a)pyrene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
	Benzo(b)fluoranthene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 2-4: BEC Parcels A-B Shallow Soil Results for use in the SLERA (All Samples Collected at 0 ft bgs)

Nevada Environmental Response Trust Site Henderson, Nevada

Analytic Method	Analyte	Unit	TSB-BJ-02-0	TSB-BJ-03-0	TSB-BJ-03-0 (FD)	TSB-BJ-04-0	TSB-BJ-05-0	TSB-BJ-06-0	TSB-BR-01-0	TSB-BR-02-0	TSB-BR-03-0	TSB-BR-04-0	TSB-BR-04-0 (FD)	TSB-BR-05-0	TSB-BR-06-0
			Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample
			9/7/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/7/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/7/2007
SW8270	Benzo(g,h,i)perylene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
	Benzo(k)fluoranthene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
	Benzoic acid	ug/kg	1600 UJ	1800 UJ	1700 UJ	1600 UJ	1700 UJ	1700 UJ	1600 UJ	1600 UJ	1700 UJ	1700 UJ	1600 UJ	1600 UJ	1600 UJ
	Benzyl alcohol	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Benzyl butyl phthalate	ug/kg	<340	<370	92 J	420	<340	<350	<340	<340	280 J	<340	<340	<340	<330
	bis(2-Chloroethoxy) methane	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	bis(2-Chloroethyl) ether	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	bis(2-Chloroisopropyl) ether	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	bis(2-Ethylhexyl) phthalate	ug/kg	<340	<370	37 J	<340	<340	<350	<340	<340	140 J	<340	<340	<340	<330
	bis(p-Chlorophenyl) disulfide	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	bis(p-Chlorophenyl) sulfone	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Carbazole	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Chrysene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
	Dibenzo(a,h)anthracene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
	Dibenzofuran	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Dibutyl phthalate	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	50 J	<340	<340	<340	<330
	Diethyl phthalate	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
SW8270	Dimethyl phthalate	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Di-n-octyl phthalate	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Diphenyl sulfone	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Fluoranthene	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Fluorene	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Hexachloro-1,3-butadiene	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Hexachlorobenzene	ug/kg	<340	<370	<360	<340	<340	<350	49 J	<340	<350	<340	<340	<340	<330
	Hexachlorocyclopentadiene	ug/kg	<1600	<1800	<1700	<1600	<1700	<1700	<1600	<1600	<1700	<1700	<1600	<1600	<1600
	Hexachloroethane	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Hydroxymethyl phthalimide	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Indeno(1,2,3-cd)pyrene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
	Isophorone	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Naphthalene	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Nitrobenzene	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	N-nitrosodi-n-propylamine	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	N-nitrosodiphenylamine	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	o-Cresol	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Octachlorostyrene	ug/kg	<340	<370	<360	<340	<340	<350	41 J	<340	<350	<340	<340	<340	<330
	p-Chloroaniline	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	p-Chlorothiophenol	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Pentachlorobenzene	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Pentachlorophenol	ug/kg	<1600	<1800	<1700	<1600	<1700	<1700	<1600	<1600	<1700	<1700	<1600	<1600	<1600
	Phenanthrene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
	Phenol	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Phenyl Disulfide	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Phenyl Sulfide	ug/kg	<340	<370	<360	<340	<340	<350	<340	<340	<350	<340	<340	<340	<330
	Phthalic acid	ug/kg	<1600	<1800	<1700	<1600	<1700	<1700	<1600	<1600	<1700	<1700	<1600	<1600	<1600
	p-Nitroaniline	ug/kg	<1600	<1800	<1700	<1600	<1700	<1700	<1600	<1600	<1700	<1700	<1600	<1600	<1600
	Pyrene	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--
	Pyridine	ug/kg	<670	<740	<710	<680	<680	<700	<680	<680	<700	<680	<680	<670	<670
SW8290	1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/g	320 J	350	260	670	1800	740	1700	170	600	60	97	160	170
	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/g	27 J	27	22	59	140	66	120	14	52	6.6	9.4	13	14
	1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/g	170 J	130	110	290	910	300	820	68	220	29	42	71	70
	1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	150	170	130	320	860	310	790	82	250	36	47	78	82

TABLE 2-4: BEC Parcels A-B Shallow Soil Results for use in the SLERA (All Samples Collected at 0 ft bgs)

Nevada Environmental Response Trust Site Henderson, Nevada

Analytic Method	Analyte	Unit	TSB-BJ-02-0	TSB-BJ-03-0	TSB-BJ-03-0 (FD)	TSB-BJ-04-0	TSB-BJ-05-0	TSB-BJ-06-0	TSB-BR-01-0	TSB-BR-02-0	TSB-BR-03-0	TSB-BR-04-0	TSB-BR-04-0 (FD)	TSB-BR-05-0	TSB-BR-06-0
			Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample	Surface Sample
			9/7/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/7/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/10/2007	9/7/2007
SW8290	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/g	4.3 J	4.4 J	4 J	8.5	23	8.2	21	<2.5	6.9	<1.5	<1.6	<1.7	<2.2
	1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	130	130	110	240	640	250	600	68	200	31	41	64	67
	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/g	11	9.8	8.2	20	52	19	48	6.3	16	2.6 J	3.5 J	4.4 J	5.8
	1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	22	16	14	32	110	38	110	9.1	24	4.9 J	5.2	9.6	8.4
	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/g	7.6	6.5	5.6	11	33	16	31	4.1 J	10	<1.6	2.9 J	3.4 J	4.8 J
	1,2,3,7,8-Pentachlorodibenzofuran	pg/g	120	110	96	200	550	220	540	65	160	33	36	59	62
	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/g	8 J	7.6	7.3	14	40	16	38	4 J	11	<2.2	3.2 J	4.9 J	4.2 J
	2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	34	31	26	54	160	56	130	17	52	7.5	9.8	16	17
	2,3,4,7,8-Pentachlorodibenzofuran	pg/g	60	56	48	90	280	110	270	34	76	16	18	29	31
	2,3,7,8-Tetrachlorodibenzofuran	pg/g	69	56	52	97	330	130	320	38	81	17	19	33	32
	2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	2.4	1.9	1.9	2.6 J	10	4.6	9.8	0.99 J	2.5 J	1.1	0.88 J	1.2	1
	Octachlorodibenzodioxin	pg/g	41 J	31	20	82	150	170	160	21	110	6 J	15 J	12	13
	Octachlorodibenzofuran	pg/g	690 J	650	500	1500	4800	1800	4100	330	1200	110 J	200	380	360
SW8310	Acenaphthene	ug/kg	51 UJ	<56	<54	<52	<52	<53	<51	<51	<53	<52	<52	<51	<51
	Acenaphthylene	ug/kg	100 UJ	110 UJ	110 UJ	100 UJ	100 UJ	110 UJ	100 UJ	100 UJ	110 UJ	100 UJ	100 UJ	100 UJ	100 UJ
	Anthracene	ug/kg	31 UJ	<34	<32	<31	<31	<32	<31	<31	<32	<31	<31	<31	<30
	Benzo(a)anthracene	ug/kg	15 UJ	<17	<16	<15	<16	<16	<15	<15	<16	<16	<15	<15	<15
	Benzo(a)pyrene	ug/kg	15 UJ	19	<16	<15	<16	<16	<15	<15	<16	<16	<15	<15	<15
	Benzo(b)fluoranthene	ug/kg	15 UJ	21	<16	<15	<16	<16	<15	<15	<16	<16	<15	<15	<15
	Benzo(g,h,i)perylene	ug/kg	31 UJ	<34	<32	<31	<31	<32	<31	<31	<32	<31	<31	<31	<30
	Benzo(k)fluoranthene	ug/kg	15 UJ	17 UJ	16 UJ	15 UJ	16 UJ	16 UJ	15 UJ	15 UJ	16 UJ	16 UJ	15 UJ	15 UJ	15 UJ
	Chrysene	ug/kg	15 UJ	24	18	<15	<16	<16	<15	<15	<16	<16	<15	<15	<15
	Dibenzo(a,h)anthracene	ug/kg	31 UJ	<34	<32	<31	<31	<32	<31	<31	<32	<31	<31	<31	<30
	Indeno(1,2,3-cd)pyrene	ug/kg	15 UJ	<17	<16	<15	<16	<16	<15	<15	<16	<16	<15	<15	<15
	Phenanthrene	ug/kg	31 UJ	<34	<32	<31	<31	<32	<31	<31	<32	<31	<31	<31	<30
	Pyrene	ug/kg	31 UJ	<34	<32	<31	<31	<32	<31	<31	<32	<31	<31	<31	<30

The BEC Parcels A&B Surface Soils Dataset was extracted directly form the report. The data will be carefully reviewed for usability during the SLERA process.

Notes

<# = less than laboratory detection limit listed
-- = not available
BHC = Hexachlorocyclohexane
CFC = Chlorofluorocarbon
DDD = Dichlorodiphenyldichloroethylene
DDE = Dichlorodiphenyldichloroethylene
DDT = Dichlorodiphenyltrichloroethane
FD = Field Duplicate
HEM = n-Hexane Extractable Material
mg/kg = miligram per kilogram
pci/g = picocuries per gram
pg/g = picogram per gram
TPH = Total Petroleum Hydrocarbon
ug/kg = micogram per kilogram

UJ = Indicates estimated not detected
J = Indicates an estimated value
J+ = Indicates an estimated value with a positive bias
J- = Indicates an estimated value with a negative bias

TABLE 3-1: Threatened and Endangered Species for Clark County

Nevada Environmental Response Trust Site

Henderson, Nevada

Organism Group	Listing Category	Species Common Name	Scientific Name
Amphibian			
	C	Relict leopard frog	*Rana onca*
Birds			
	E	Southwestern willow flycatcher ●	*Empidonax traillii extimus*
	PT	Yellow-billed cuckoo (Western U.S. Distinct Population Segment)	*Coccyzus americanus*
	E	Yuma clapper rail	*Rallus longirostris yumanensis*
Invertebrate			
	E	Mt. Charleston blue butterfly	*Icaricia shasta charlestonensis*
Fishes			
	E	Bonytail chub ●	*Gila elegans*
	E	Colorado pikeminnow *	*Ptychocheilus lucius*
	E	Humpback chub *	*Gila cypha*
	T	Lahontan cutthroat trout	*Oncorhynchus clarkii henshawi*
	E	Moapa dace	*Moapa coriacea*
	E	Pahrump poolfish	*Empetrichthys latos*
	E	Razorback sucker ●	*Xyrauchen texanus*
	E	Virgin River chub + ●	*Gila seminuda*
	E	Woundfin ●	*Plagopterus argentissimus*
Plant			
	C	Las Vegas Buckwheat	*Eriogonum corymbosum var . nile*
Reptile			
	T	Desert tortoise (Mojave population	*Gopherus agassizii*

Notes:

●	Designated Critical Habitat in Clark County
*	Believed extirpated from Nevada
+	Endangered only in the Virgin River, Muddy River population is a sensitive species.
C	Candidate
E	Endangered
P	Proposed listing
T	Threatened

Source:

Nevada Fish & Wildlife Office. 2016. Nevada's Protected Species by County. http://www.fws.gov/nevada/protected_species/species_by_county.html (Last updated June 29, 2016; Accessed April 20, 2018).

TABLE 3-2A: Surface Soil Ecological Screening Values

Nevada Environmental Response Trust Site
Study Area Nevada Environmental Response Trust Site Henderson, Nevada

All Data in mg/kg

CASRN	Chemical Name	Preferred ESV (mg/kg)	Source	Eco-SSL Avian	Eco-SSL Inverts	Eco-SSL Mammal	Eco-SSL Plants	USEPA R4	R6 Earthworms	R6 Plants	ORNL Inverts	ORNL Microbes	ORNL Plants	Dutch Target	Dutch Intervention	Dutch HC50
3268-87-9	1,2,3,4,5,6,7,8-Octachlorodibenzo-p-dioxin	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
39001-02-0	1,2,3,4,5,6,7,8-Octachlorodibenzofuran	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.00000315	R4	NC	NC	NC	NC	0.00000315	0.5	NC	NC	NC	NC	NC	NC	NC
51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
HPCDD	HpCDD (total)	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
HPCDF	HpCDF (total)	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
HXCDD	HxCDD (total)	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
HXCDF	HxCDF (total)	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
PECDD	PeCDD (total)	0.00000315	R4	NC	NC	NC	NC	0.00000315	NC	NC	NC	NC	NC	NC	NC	NC
PECDF	PeCDF (total)	0.00000315	R4	NC	NC	NC	NC	0.00000315	NC	NC	NC	NC	NC	NC	NC	NC
41903-57-5	TCDD (total)	0.00000315	R4	NC	NC	NC	NC	0.00000315	NC	NC	NC	NC	NC	NC	NC	NC
TCDF	TCDF (total)	0.00000315	R4	NC	NC	NC	NC	0.00000315	NC	NC	NC	NC	NC	NC	NC	NC
TTEQ-A	Total TEQ - ENSR Calculated A	0.00000315	R4	NC	NC	NC	NC	0.00000315	NC	NC	NC	NC	NC	NC	NC	NC
TTEQ-B	Total TEQ - ENSR Calculated B	0.00000315	R4	NC	NC	NC	NC	0.00000315	NC	NC	NC	NC	NC	NC	NC	NC
T-ALK	Alkalinity	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
ALK AS CACO3	Alkalinity (as CaCO3)	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
7664-41-7	Ammonia	NC	--	NC	NC	NC	NC	--	NC	NC	NC	NC	NC	NC	NC	NC
24959-67-9	Bromide	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
14866-68-3	Chlorate	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
16887-00-6	Chloride	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
57-12-5	Cyanide (total)	1	Dutch Target	NC	NC	NC	NC	NC	--	--	NC	NC	NC	1	20	NC
71-52-3	Hydrogen carbonate	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
MBAS	Methylene Blue Active Substances	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
PER MOISTURE	Moisture	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
NO3	Nitrate (as N)	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
14797-65-0	Nitrite	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
14797-73-0	Perchlorate	1	USEPA 2002	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
14808-79-8	Sulfate	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
TOC	Total Organic Carbon	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
O-PO4	ortho-Phosphate	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
PH	pH	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
7429-90-5	Aluminum	5	R6	NC	NC	NC	NC	Narrative (6)	--	5	NC	600	50	NC	NC	NC
7440-36-0	Antimony	0.27	Eco-SSL Mammal	NC	78	0.27	NC	0.27	--	0.5	NC	NC	5	3	22	2900
7440-38-2	Arsenic	18	Eco-SSL Plants	43	NC	46	18	18	0.25	1	60	100	10	29	76	40
7440-39-3	Barium	330	Eco-SSL Inverts	NC	330	2000	NC	330	--	5	NC	3000	500	160	625	625
7440-41-7	Beryllium	21	Eco-SSL Mammal	NC	40	21	NC	2.5	--	0.1	NC	NC	10	1.1	NC	30
7440-42-8	Boron	7.5	R4	NC	NC	NC	NC	7.5	NC	NC	NC	20	0.5	NC	NC	NC
7440-43-9	Cadmium	0.36	Eco-SSL Mammal	0.77	140	0.36	32	0.36	10	0.2	20	20	4	0.8	13	12
7440-70-2	Calcium	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
7440-47-3	Chromium (total)	26	Eco-SSL Avian	26	NC	34	NC	23	NC	NC	0.4	10	1	100	380	230

TABLE 3-2A: Surface Soil Ecological Screening Values

Nevada Environmental Response Trust Site
Study Area Nevada Environmental Response Trust Site Henderson, Nevada

All Data in mg/kg

CASRN	Chemical Name	Preferred ESV (mg/kg)	Source	Eco-SSL Avian	Eco-SSL Inverts	Eco-SSL Mammal	Eco-SSL Plants	USEPA R4	R6 Earth-worms	R6 Plants	ORNL Inverts	ORNL Microbes	ORNL Plants	Dutch Target	Dutch Intervention	Dutch HC50
18540-29-9	Chromium VI	130	Eco-SSL Mammal	NC	NC	130	NC	0.34	0.2	0.018	NC	NC	NC	NC	78	NC
7440-48-4	Cobalt	13	Eco-SSL Plants	120	NC	230	13	13	NC	NC	NC	1000	20	9	190	240
7440-50-8	Copper	28	Eco-SSL Avian	28	80	49	70	28	32	1	50	100	100	36	190	190
7439-89-6	Iron	200	ORNL Microbes	NC	NC	NC	NC	Narrative (6)	NC	NC	NC	200	NC	NC	NC	NC
7439-92-1	Lead	11	Eco-SSL Avian	11	1700	56	120	11	100	4.6	500	900	50	85	530	290
7439-95-4	Magnesium	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
7439-96-5	Manganese	220	Eco-SSL Plants	4300	450	4000	220	220	NC	NC	NC	100	500	NC	NC	NC
7439-97-6	Mercury	0.013	R4	NC	NC	NC	NC	0.013	2.5	0.349	0.1	30	0.3	0.3	10	10
7439-98-7	Molybdenum	2	R4	NC	NC	NC	NC	2	NC	NC	NC	200	2	3	190	480
7440-02-0	Nickel	38	Eco-SSL Plants	210	280	130	38	38	100	25	200	90	30	35	100	210
7440-06-4	Platinum	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
7440-09-7	Potassium	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
7782-49-2	Selenium	0.52	Eco-SSL Plants	1.2	4.1	0.63	0.52	0.52	7.7	0.05	70	100	1	0.7	100	30
7440-22-4	Silver	4.2	Eco-SSL Avian	4.2	NC	14	560	4.2	--	0.02	NC	50	2	NC	NC	15
7440-23-5	Sodium	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
7440-24-6	Strontium	96	R4	NC	NC	NC	NC	96	NC	NC	NC	NC	NC	NC	NC	NC
7440-28-0	Thallium	0.05	R4	NC	NC	NC	NC	0.05	--	0.01	NC	NC	1	1	NC	14
7440-31-5	Tin	7.6	R4	NC	NC	NC	NC	7.6	NC	NC	NC	2000	50	NC	NC	910
7440-32-6	Titanium	1000	ORNL Microbes	NC	NC	NC	NC	NC	NC	NC	NC	1000	NC	NC	NC	NC
7440-33-7	Tungsten	400	ORNL Microbes	NC	NC	NC	NC	NC	NC	NC	NC	400	NC	NC	NC	NC
U-TOTAL	Uranium (total)	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
7440-62-2	Vanadium	7.8	Eco-SSL Avian	7.8	NC	280	NC	7.8	NC	NC	NC	20	2	42	NC	250
7440-66-6	Zinc	46	Eco-SSL Avian	46	120	79	160	46	199	0.9	200	100	50	140	720	720
93-76-5	2,4,5-T	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
93-72-1	2,4,5-TP	0.055	R4	NC	NC	NC	NC	0.055	NC	NC	NC	NC	NC	NC	NC	NC
94-75-7	2,4-D	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
94-82-6	2,4-DB	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
72-54-8	4,4'-DDD (3)	0.021	Eco-SSL Mammal	NC	NC	0.021	NC	0.021	NC	NC	NC	NC	NC	0.01	34	NC
72-55-9	4,4'-DDE (3)	0.021	Eco-SSL Mammal	NC	NC	0.021	NC	0.021	NC	NC	NC	NC	NC	0.01	2.3	NC
50-29-3	4,4'-DDT (3)	0.021	Eco-SSL Mammal	0.093	NC	0.021	NC	0.021	NC	NC	NC	NC	NC	0.01	1.7	NC
309-00-2	Aldrin	0.03	R4	NC	NC	NC	NC	0.03	NC	NC	NC	NC	NC	0.00006	0.32	NC
57-74-9	Chlordane (total)	0.00003	Dutch Target	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	0.00003	4	4
75-99-0	Dalapon	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
1918-00-9	Dicamba	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
120-36-5	Dichloroprop	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
60-57-1	Dieldrin	0.0049	Eco-SSL Mammal	0.022	NC	0.0049	NC	0.0029	NC	NC	NC	NC	NC	0.0005	NC	NC
88-85-7	Dinoseb	0.015	R4	NC	NC	NC	NC	0.015	NC	NC	NC	NC	NC	NC	NC	NC
959-98-8	Endosulfan I (4)	0.0009	R4	NC	NC	NC	NC	0.0009	NC	NC	NC	NC	NC	0.00001	4	4
33213-65-9	Endosulfan II (4)	0.0009	R4	NC	NC	NC	NC	0.0009	NC	NC	NC	NC	NC	0.00001	4	4
1031-07-8	Endosulfan sulfate	0.0065	R4	NC	NC	NC	NC	0.0065	NC	NC	NC	NC	NC	NC	NC	NC
72-20-8	Endrin	0.0019	R4	NC	NC	NC	NC	0.0019	NC	NC	NC	NC	NC	0.00004	NC	NC
7421-93-4	Endrin aldehyde	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
53494-70-5	Endrin ketone	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
76-44-8	Heptachlor	0.0016	R4	NC	NC	NC	NC	0.0016	NC	1	NC	NC	NC	0.0007	4	4
1024-57-3	Heptachlor epoxide	0.00015	R4	NC	NC	NC	NC	0.00015	NC	NC	NC	NC	NC	0.0000002	4	4
94-74-6	MCPA (2-Methyl-4-chlorophenoxy acetic acid)	0.00005	Dutch Target	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	0.00005	4	95
7085-19-0	Mecoprop	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
72-43-5	Methoxychlor	0.0021	R4	NC	NC	NC	NC	0.0021	NC	NC	NC	NC	NC	NC	NC	NC
87-86-5	Pentachlorophenol	2.1	Eco-SSL Avian	2.1	31	2.8	5	2.1	10	1.73	6	400	3	NC	NC	5
8001-35-2	Toxaphene	0.00015	R4	NC	NC	NC	NC	0.00015	NC	NC	NC	NC	NC	NC	NC	NC
319-84-6	alpha-BHC	0.0003	R4	NC	NC	NC	NC	0.0003	NC	NC	NC	NC	NC	0.003	17	2
5103-71-9	alpha-Chlordane	0.0029	R4	NC	NC	NC	NC	0.0029	NC	NC	NC	NC	NC	0.00003	4	4
319-85-7	beta-BHC	0.0003	R4	NC	NC	NC	NC	0.0003	NC	NC	NC	NC	NC	0.009	1.6	2
319-86-8	delta-BHC	0.01	Dutch Target	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	0.01	2	2

TABLE 3-2A: Surface Soil Ecological Screening Values

Nevada Environmental Response Trust Site
Study Area Nevada Environmental Response Trust Site Henderson, Nevada

All Data in mg/kg

CASRN	Chemical Name	Preferred ESV (mg/kg)	Source	Eco-SSL Avian	Eco-SSL Inverts	Eco-SSL Mammal	Eco-SSL Plants	USEPA R4	R6 Earth-worms	R6 Plants	ORNL Inverts	ORNL Microbes	ORNL Plants	Dutch Target	Dutch Intervention	Dutch HC50
58-89-9	gamma-BHC	0.0031	R4	NC	NC	NC	NC	0.0031	NC	NC	NC	NC	NC	0.00005	1.2	2
5103-74-2	gamma-Chlordane	0.02	R4	NC	NC	NC	NC	0.02	NC	NC	NC	NC	NC	0.00003	4	4
2921-88-2	Chlorpyrifos	0.003	R4	NC	NC	NC	NC	0.003	NC	NC	NC	NC	NC	NC	NC	NC
56-72-4	Coumaphos	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
115-90-2	Dasanit	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
298-03-3	Demeton-O	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
126-75-0	Demeton-S	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
333-41-5	Diazinon	0.0037	R4	NC	NC	NC	NC	0.0037	NC	NC	NC	NC	NC	NC	NC	NC
62-73-7	Dichlorovos	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
60-51-5	Dimethoate	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
298-04-4	Disulfoton	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2104-64-5	EPN	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
13194-48-4	Ethoprop	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
52-85-7	Famphur	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
55-38-9	Fenthion	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
86-50-0	Guthion	0.00006	R4	NC	NC	NC	NC	0.00006	NC	NC	NC	NC	NC	NC	NC	NC
121-75-5	Malathion	0.00004	R4	NC	NC	NC	NC	0.00004	NC	NC	NC	NC	NC	NC	NC	NC
150-50-5	Merphos	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
298-00-0	Methyl parathion	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
7786-34-7	Mevinphos	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
300-76-5	Naled	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
56-38-2	Parathion	0.00019	R4	NC	NC	NC	NC	0.00019	NC	NC	NC	NC	NC	NC	NC	NC
298-02-2	Phorate	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
34643-46-4	Prothiophos	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
299-84-3	Ronnel	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
22248-79-9	Stirophos	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
3689-24-5	Sulfotepp	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
35400-43-2	Sulprofos	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
297-97-2	Thionazin	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
327-98-0	Trichloronate	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
TOH	Organic Halides (total)	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
91-57-6	2-Methylnaphthalene	NC	--	NC	NC	NC	NC	See Total	NC	NC	NC	NC	NC	NC	NC	NC
83-32-9	Acenaphthene	20	ORNL Plants	NC	NC	NC	NC	See Total	NC	NC	NC	NC	20	NC	NC	NC
208-96-8	Acenaphthylene	NC	--	NC	NC	NC	NC	See Total	NC	NC	NC	NC	NC	NC	NC	NC
120-12-7	Anthracene	NC	--	NC	NC	NC	NC	See Total	NC	NC	NC	NC	NC	NC	NC	NC
56-55-3	Benzo(a)anthracene	1.2	R6	NC	NC	NC	NC	See Total	25	1.2	NC	NC	NC	NC	NC	NC
50-32-8	Benzo(a)pyrene	1.2	R6	NC	NC	NC	NC	See Total	25	1.2	NC	NC	NC	NC	NC	NC
205-99-2	Benzo(b)fluoranthene	1.2	R6	NC	NC	NC	NC	See Total	25	1.2	NC	NC	NC	NC	NC	NC
191-24-2	Benzo(g,h,i)perylene	NC	--	NC	NC	NC	NC	See Total	NC	NC	NC	NC	NC	NC	NC	NC
207-08-9	Benzo(k)fluoranthene	1.2	R6	NC	NC	NC	NC	See Total	25	1.2	NC	NC	NC	NC	NC	NC
218-01-9	Chrysene	1.2	R6	NC	NC	NC	NC	See Total	25	1.2	NC	NC	NC	NC	NC	NC
53-70-3	Dibenz(a,h)anthracene	1.2	R6	NC	NC	NC	NC	See Total	25	1.2	NC	NC	NC	NC	NC	NC
206-44-0	Fluoranthene	NC	--	NC	NC	NC	NC	See Total	NC	NC	NC	NC	NC	NC	NC	NC
86-73-7	Fluorene	30	ORNL Inverts	NC	NC	NC	NC	See Total	NC	NC	30	NC	NC	NC	NC	NC
118-74-1	Hexachlorobenzene	0.079	R4	NC	NC	NC	NC	0.079	NC	NC	NC	1000	NC	NC	NC	NC
193-39-5	Indeno(1,2,3-cd)pyrene	1.2	R6	NC	NC	NC	NC	See Total	25	1.2	NC	NC	NC	NC	NC	NC
91-20-3	Naphthalene	NC	--	NC	NC	NC	NC	See Total	NC	NC	NC	NC	NC	NC	NC	NC
85-01-8	Phenanthrene	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
129-00-0	Pyrene	NC	--	NC	NC	NC	NC	See Total	NC	NC	NC	NC	NC	NC	NC	NC
THMW PAH	ΣHMW PAH	1.1	Eco-SSL Mammal	NC	18	1.1	NC	1.1	NC	NC	NC	NC	NC	1	40	NC
TLMW PAH	ΣLMW PAH	29	Eco-SSL Inverts	NC	29	100	NC	29	NC	NC	NC	NC	NC	1	40	NC
72-54-8	4,4'-DDD (3)	0.021	Eco-SSL Mammal	0.093	NC	0.021	NC	0.021	NC	NC	NC	NC	NC	0.01	34	NC
72-55-9	4,4'-DDE (3)	0.021	Eco-SSL Mammal	0.093	NC	0.021	NC	0.021	NC	NC	NC	NC	NC	0.01	2.3	NC
50-29-3	4,4'-DDT (3)	0.021	Eco-SSL Mammal	0.093	NC	0.021	NC	0.021	NC	NC	NC	NC	NC	0.01	1.7	NC

TABLE 3-2A: Surface Soil Ecological Screening Values

Nevada Environmental Response Trust Site
Study Area Nevada Environmental Response Trust Site Henderson, Nevada

All Data in mg/kg

CASRN	Chemical Name	Preferred ESV (mg/kg)	Source	Eco-SSL Avian	Eco-SSL Inverts	Eco-SSL Mammal	Eco-SSL Plants	USEPA R4	R6 Earth-worms	R6 Plants	ORNL Inverts	ORNL Microbes	ORNL Plants	Dutch Target	Dutch Intervention	Dutch HC50
309-00-2	Aldrin	0.03	R4	NC	NC	NC	NC	0.03	NC	NC	NC	NC	NC	0.00006	0.32	NC
12674-11-2	Aroclor-1016 (5)	0.041	R4	NC	NC	NC	NC	0.041	2.51	10	NC	NC	40	NC	NC	NC
		0.041	R4	NC	NC	NC	NC	0.041	NC	NC	NC	NC	40	NC	NC	NC
11104-28-2	Aroclor-1221 (5)	0.041	R4	NC	NC	NC	NC	0.041	NC	NC	NC	NC	40	NC	NC	NC
		0.041	R4	NC	NC	NC	NC	0.041	NC	NC	NC	NC	40	NC	NC	NC
11141-16-5	Aroclor-1232 (5)	0.041	R4	NC	NC	NC	NC	0.041	NC	NC	NC	NC	40	NC	NC	NC
		0.041	R4	NC	NC	NC	NC	0.041	NC	NC	NC	NC	40	NC	NC	NC
53469-21-9	Aroclor-1242 (5)	0.041	R4	NC	NC	NC	NC	0.041	NC	NC	NC	NC	40	NC	NC	NC
		0.041	R4	NC	NC	NC	NC	0.041	NC	NC	NC	NC	40	NC	NC	NC
12672-29-6	Aroclor-1248 (5)	0.041	R4	NC	NC	NC	NC	0.041	NC	NC	NC	NC	40	NC	NC	NC
		0.041	R4	NC	NC	NC	NC	0.041	NC	NC	NC	NC	40	NC	NC	NC
11097-69-1	Aroclor-1254 (5)	0.041	R4	NC	NC	NC	NC	0.041	2.51	10	NC	NC	40	NC	NC	NC
		0.041	R4	NC	NC	NC	NC	0.041	NC	NC	NC	NC	40	NC	NC	NC
11096-82-5	Aroclor-1260 (5)	0.041	R4	NC	NC	NC	NC	0.041	NC	NC	NC	NC	40	NC	NC	NC
		0.041	R4	NC	NC	NC	NC	0.041	NC	NC	NC	NC	40	NC	NC	NC
60-57-1	Dieldrin	0.0049	Eco-SSL Mammal	0.022	NC	0.0049	NC	0.0029	NC	NC	NC	NC	NC	0.0005	NC	NC
959-98-8	Endosulfan I (4)	0.0009	R4	NC	NC	NC	NC	0.0009	NC	NC	NC	NC	NC	0.00001	4	4
33213-65-9	Endosulfan II (4)	0.0009	R4	NC	NC	NC	NC	0.0009	NC	NC	NC	NC	NC	0.00001	4	4
1031-07-8	Endosulfan sulfate	0.0065	R4	NC	NC	NC	NC	0.0065	NC	NC	NC	NC	NC	NC	NC	NC
72-20-8	Endrin	0.0019	R4	NC	NC	NC	NC	0.0019	NC	NC	NC	NC	NC	0.00004	NC	NC
7421-93-4	Endrin aldehyde	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
53494-70-5	Endrin ketone	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
76-44-8	Heptachlor	0.0016	R4	NC	NC	NC	NC	0.0016	NC	1	NC	NC	NC	0.0007	4	4
1024-57-3	Heptachlor epoxide	0.00015	R4	NC	NC	NC	NC	0.00015	NC	NC	NC	NC	NC	0.0000002	4	4
72-43-5	Methoxychlor	0.0021	R4	NC	NC	NC	NC	0.0021	NC	NC	NC	NC	NC	NC	NC	NC
8001-35-2	Toxaphene	0.00015	R4	NC	NC	NC	NC	0.00015	NC	NC	NC	NC	NC	NC	NC	NC
319-84-6	alpha-BHC	0.0003	R4	NC	NC	NC	NC	0.0003	NC	NC	NC	NC	NC	0.003	17	2
5103-71-9	alpha-Chlordane	0.0029	R4	NC	NC	NC	NC	0.0029	NC	NC	NC	NC	NC	0.00003	4	NC
319-85-7	beta-BHC	0.0003	R4	NC	NC	NC	NC	0.0003	NC	NC	NC	NC	NC	0.009	1.6	2
319-86-8	delta-BHC	0.01	Dutch Target	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	0.01	2	2
58-89-9	gamma-BHC	0.0031	R4	NC	NC	NC	NC	0.0031	NC	NC	NC	NC	NC	0.00005	1.2	2
5103-74-2	gamma-Chlordane	0.02	R4	NC	NC	NC	NC	0.02	NC	NC	NC	NC	NC	0.00003	4	4
13982-63-3	Radium-226	see Table 3-2B		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
15262-20-1	Radium-228	see Table 3-2B		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
14274-82-9	Thorium-228	see Table 3-2B		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
14269-63-7	Thorium-230	see Table 3-2B		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
7440-29-1	Thorium-232	see Table 3-2B		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
15065-10-8	Thorium-234	see Table 3-2B		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
13966-29-5	Uranium-234	see Table 3-2B		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
15117-96-1	Uranium-235	see Table 3-2B		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
7440-61-1	Uranium-238	25	R4	NC	NC	NC	NC	25	NC	NC	NC	NC	NC	NC	NC	NC
120-82-1	1,2,4-Trichlorobenzene	0.27	R4	NC	NC	NC	NC	0.27	NC	NC	20	NC	NC	0.03	11	30
95-50-1	1,2-Dichlorobenzene	0.09	R4	NC	NC	NC	NC	0.09	NC	NC	NC	NC	NC	0.03	19	30
541-73-1	1,3-Dichlorobenzene	0.08	R4	NC	NC	NC	NC	0.08	NC	NC	NC	NC	NC	0.03	19	30
106-46-7	1,4-Dichlorobenzene	0.88	R4	NC	NC	NC	NC	0.88	NC	NC	20	NC	NC	0.03	19	30
123-91-1	1,4-Dioxane	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
95-95-4	2,4,5-Trichlorophenol	4	R4	NC	NC	NC	NC	4	NC	NC	9	NC	4	0.01	22	10
88-06-2	2,4,6-Trichlorophenol	10	ORNL Inverts	NC	NC	NC	NC	NC	NC	NC	10	NC	NC	0.01	22	10
120-83-2	2,4-Dichlorophenol	0.05	R4	NC	NC	NC	NC	0.05	NC	NC	NC	NC	NC	0.01	22	10
105-67-9	2,4-Dimethylphenol	0.04	R4	NC	NC	NC	NC	0.04	NC	NC	NC	NC	NC	NC	NC	NC
51-28-5	2,4-Dinitrophenol	0.061	R4	NC	NC	NC	NC	0.061	NC	NC	NC	NC	20	NC	NC	NC
121-14-2	2,4-Dinitrotoluene	6	R4	NC	NC	NC	NC	6	NC	NC	NC	NC	NC	NC	NC	NC
606-20-2	2,6-Dinitrotoluene	4	R4	NC	NC	NC	NC	4	NC	NC	NC	NC	NC	NC	NC	NC
91-58-7	2-Chloronaphthalene	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

TABLE 3-2A: Surface Soil Ecological Screening Values

Nevada Environmental Response Trust Site

Study Area Nevada Environmental Response Trust Site Henderson, Nevada

All Data in mg/kg

CASRN	Chemical Name	Preferred ESV (mg/kg)	Source	Eco-SSL Avian	Eco-SSL Inverts	Eco-SSL Mammal	Eco-SSL Plants	USEPA R4	R6 Earth-worms	R6 Plants	ORNL Inverts	ORNL Microbes	ORNL Plants	Dutch Target	Dutch Intervention	Dutch HC50
95-57-8	2-Chlorophenol	0.06	R4	NC	NC	NC	NC	0.06	NC	NC	NC	NC	NC	NC	NC	NC
91-57-6	2-Methylnaphthalene	NC	--	NC	NC	NC	NC	See Total	NC	NC	NC	NC	NC	NC	NC	NC
95-48-7	2-Methylphenol	0.1	R4	NC	NC	NC	NC	0.1	NC	NC	NC	NC	NC	NC	NC	NC
88-74-4	2-Nitroaniline	0.02	R4	NC	NC	NC	NC	0.02	NC	NC	NC	NC	NC	NC	NC	NC
88-75-5	2-Nitrophenol	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
91-94-1	3,3'-Dichlorobenzidine	0.03	R4	NC	NC	NC	NC	0.03	NC	NC	NC	NC	NC	NC	NC	NC
99-09-2	3-Nitroaniline	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
534-52-1	4,6-Dinitro-2-methylphenol	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
101-55-3	4-Bromophenyl-phenyl ether	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
59-50-7	4-Chloro-3-methylphenol	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
106-47-8	4-Chloroaniline	1	R4	NC	NC	NC	NC	1	NC	NC	NC	NC	NC	NC	NC	NC
7005-72-3	4-Chlorophenyl-phenyl ether	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
106-44-5	4-Methylphenol	0.08	R4	NC	NC	NC	NC	0.08	NC	NC	NC	NC	NC	NC	NC	NC
100-01-6	4-Nitroaniline	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
100-02-7	4-Nitrophenol	5.12	R4	NC	NC	NC	NC	5.12	NC	NC	7	NC	NC	NC	NC	NC
83-32-9	Acenaphthene	20	ORNL Plants	NC	NC	NC	NC	See Total	NC	NC	NC	NC	20	NC	NC	NC
208-96-8	Acenaphthylene	NC	--	NC	NC	NC	NC	See Total	NC	NC	NC	NC	NC	NC	NC	NC
120-12-7	Anthracene	NC	--	NC	NC	NC	NC	See Total	NC	NC	NC	NC	NC	NC	NC	NC
56-55-3	Benzo(a)anthracene	1.2	R6	NC	NC	NC	NC	See Total	25	1.2	NC	NC	NC	NC	NC	NC
50-32-8	Benzo(a)pyrene	1.2	R6	NC	NC	NC	NC	See Total	25	1.2	NC	NC	NC	NC	NC	NC
205-99-2	Benzo(b)fluoranthene	1.2	R6	NC	NC	NC	NC	See Total	25	1.2	NC	NC	NC	NC	NC	NC
191-24-2	Benzo(g,h,i)perylene	NC	--	NC	NC	NC	NC	See Total	NC	NC	NC	NC	NC	NC	NC	NC
207-08-9	Benzo(k)fluoranthene	1.2	R6	NC	NC	NC	NC	See Total	25	1.2	NC	NC	NC	NC	NC	NC
85-68-7	Butylbenzylphthalate	0.59	R4	NC	NC	NC	NC	0.59	NC	NC	NC	NC	NC	0.1	48	60
86-74-8	Carbazole	0.07	R4	NC	NC	NC	NC	0.07	NC	NC	NC	NC	NC	NC	NC	NC
218-01-9	Chrysene	1.2	R6	NC	NC	NC	NC	See Total	25	1.2	NC	NC	NC	NC	NC	NC
84-74-2	Di-n-butylphthalate	0.011	R4	NC	NC	NC	NC	0.011	NC	NC	NC	NC	200	0.1	36	60
117-84-0	Di-n-octylphthalate	0.91	R4	NC	NC	NC	NC	0.91	NC	NC	NC	NC	NC	0.1	NC	60
53-70-3	Dibenz(a,h)anthracene	1.2	R6	NC	NC	NC	NC	See Total	25	1.2	NC	NC	NC	NC	NC	NC
132-64-9	Dibenzofuran	0.15	R4	NC	NC	NC	NC	0.15	NC	NC	NC	NC	NC	NC	NC	NC
84-66-2	Diethylphthalate	0.25	R4	NC	NC	NC	NC	0.25	NC	NC	NC	NC	100	0.1	53	60
131-11-3	Dimethylphthalate	0.35	R4	NC	NC	NC	NC	0.35	NC	NC	200	NC	NC	0.1	82	60
206-44-0	Fluoranthene	NC	--	NC	NC	NC	NC	See Total	NC	NC	NC	NC	NC	NC	NC	NC
86-73-7	Fluorene	30	ORNL Inverts	NC	NC	NC	NC	See Total	NC	NC	30	NC	NC	NC	NC	NC
118-74-1	Hexachlorobenzene	0.079	R4	NC	NC	NC	NC	0.079	NC	NC	NC	1000	NC	NC	NC	NC
87-68-3	Hexachlorobutadiene	0.009	R4	NC	NC	NC	NC	0.009	NC	NC	NC	NC	NC	NC	NC	NC
77-47-4	Hexachlorocyclopentadiene	0.001	R4	NC	NC	NC	NC	0.001	NC	0.1	NC	NC	10	NC	NC	NC
67-72-1	Hexachloroethane	0.024	R4	NC	NC	NC	NC	0.024	NC	NC	NC	NC	NC	NC	NC	NC
193-39-5	Indeno(1,2,3-cd)pyrene	1.2	R6	NC	NC	NC	NC	See Total	25	1.2	NC	NC	NC	NC	NC	NC
78-59-1	Isophorone	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
91-20-3	Naphthalene	NC	--	NC	NC	NC	NC	See Total	NC	NC	NC	NC	NC	NC	NC	NC
98-95-3	Nitrobenzene	2.2	R4	NC	NC	NC	NC	2.2	2.26	NC	40	1000	NC	NC	NC	NC
29082-74-4	Octachlorostyrene	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
87-86-5	Pentachlorophenol	2.1	Eco-SSL Avian	2.1	31	2.8	5	2.1	10	1.73	6	400	3	NC	NC	5
85-01-8	Phenanthrene	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
108-95-2	Phenol	0.79	R4	NC	NC	NC	NC	0.79	NC	NC	30	1000	70	0.05	14	40
129-00-0	Pyrene	NC	--	NC	NC	NC	NC	See Total	NC	NC	NC	NC	NC	NC	NC	NC
110-86-1	Pyridine	0.1	Dutch Target	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	0.1	11	150
108-60-1	bis(2-Chloro-1-methylethyl) ether	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
111-91-1	bis(2-Chloroethoxy)methane	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
111-44-4	bis(2-Chloroethyl) ether	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
117-81-7	bis(2-Ethylhexyl)phthalate	0.02	R4	NC	NC	NC	NC	0.02	NC	NC	NC	NC	NC	NC	NC	NC
621-64-7	n-Nitroso-di-n-propylamine	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
86-30-6	n-Nitrosodiphenylamine	0.545	R4	NC	NC	NC	NC	0.545	NC	NC	20	NC	NC	NC	NC	NC

TABLE 3-2A: Surface Soil Ecological Screening Values

Nevada Environmental Response Trust Site
Study Area Nevada Environmental Response Trust Site Henderson, Nevada

All Data in mg/kg

CASRN	Chemical Name	Preferred ESV (mg/kg)	Source	Eco-SSL Avian	Eco-SSL Inverts	Eco-SSL Mammal	Eco-SSL Plants	USEPA R4	R6 Earth-worms	R6 Plants	ORNL Inverts	ORNL Microbes	ORNL Plants	Dutch Target	Dutch Intervention	Dutch HC50
64-17-5	Ethanol	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
107-21-1	Ethylene glycol	0.31	R4	NC	NC	NC	NC	0.31	NC	NC	NC	NC	NC	NC	NC	100
67-56-1	Methanol	30	Dutch HC50	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	30
TPH-MOTOR	Oil Range Organics	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
TPH-DIESEL	Total petroleum hydrocarbon-diesel	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
TPH-GASOLINE	Total petroleum hydrocarbon-gasoline	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
630-20-6	1,1,1,2-Tetrachloroethane	0.07	R4	NC	NC	NC	NC	0.07	NC	NC	NC	NC	NC	NC	NC	NC
71-55-6	1,1,1-Trichloroethane	0.04	R4	NC	NC	NC	NC	0.04	NC	NC	NC	NC	NC	0.07	15	90
79-34-5	1,1,2,2-Tetrachloroethane	0.127	R4	NC	NC	NC	NC	0.127	NC	NC	NC	NC	NC	NC	NC	NC
79-00-5	1,1,2-Trichloroethane	0.32	R4	NC	NC	NC	NC	0.32	NC	NC	NC	NC	NC	0.4	10	460
75-34-3	1,1-Dichloroethane	0.14	R4	NC	NC	NC	NC	0.14	NC	NC	NC	NC	NC	0.02	15	40
75-35-4	1,1-Dichloroethene	0.04	R4	NC	NC	NC	NC	0.04	NC	NC	NC	NC	NC	0.1	0.3	130
563-58-6	1,1-Dichloropropene	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
87-61-6	1,2,3-Trichlorobenzene	20	R4	NC	NC	NC	NC	20	NC	NC	20	NC	NC	NC	NC	NC
96-18-4	1,2,3-Trichloropropane	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
120-82-1	1,2,4-Trichlorobenzene	0.27	R4	NC	NC	NC	NC	0.27	NC	NC	20	NC	NC	NC	NC	NC
95-63-6	1,2,4-Trimethylbenzene	0.09	R4	NC	NC	NC	NC	0.09	NC	NC	NC	NC	NC	NC	NC	NC
96-12-8	1,2-Dibromo-3-chloropropane	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
106-93-4	1,2-Dibromoethane	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
95-50-1	1,2-Dichlorobenzene	0.09	R4	NC	NC	NC	NC	0.09	NC	NC	NC	NC	NC	NC	NC	NC
107-06-2	1,2-Dichloroethane	0.4	R4	NC	NC	NC	NC	0.4	NC	NC	NC	NC	NC	0.02	6.4	60
78-87-5	1,2-Dichloropropane	0.28	R4	NC	NC	NC	NC	0.28	NC	NC	700	NC	NC	0.002	2	125
108-67-8	1,3,5-Trimethylbenzene	0.16	R4	NC	NC	NC	NC	0.16	NC	NC	NC	NC	NC	NC	NC	NC
541-73-1	1,3-Dichlorobenzene	0.08	R4	NC	NC	NC	NC	0.08	NC	NC	NC	NC	NC	NC	NC	NC
142-28-9	1,3-Dichloropropane	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
106-46-7	1,4-Dichlorobenzene	0.88	R4	NC	NC	NC	NC	0.88	NC	NC	20	NC	NC	NC	NC	NC
594-20-7	2,2-Dichloropropane	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
78-93-3	2-Butanone	1	R4	NC	NC	NC	NC	1	NC	NC	NC	NC	NC	NC	NC	NC
95-49-8	2-Chlorotoluene	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
591-78-6	2-Hexanone	0.36	R4	NC	NC	NC	NC	0.36	NC	NC	NC	NC	NC	NC	NC	NC
106-43-4	4-Chlorotoluene	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
108-10-1	4-Methyl-2-pentanone	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
67-64-1	Acetone	1.2	R4	NC	NC	NC	NC	1.2	NC	NC	NC	NC	NC	NC	NC	NC
71-43-2	Benzene	0.12	R4	NC	NC	NC	NC	0.12	NC	NC	NC	NC	NC	0.01	1.1	25
108-86-1	Bromobenzene	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
74-97-5	Bromochloromethane	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
75-27-4	Bromodichloromethane	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
75-25-2	Bromoform	0.07	R4	NC	NC	NC	NC	0.07	NC	NC	NC	NC	NC	NC	75	300
74-83-9	Bromomethane	0.002	R4	NC	NC	NC	NC	0.002	NC	NC	NC	NC	NC	NC	NC	NC
75-15-0	Carbon disulfide	0.005	R4	NC	NC	NC	NC	0.005	NC	NC	NC	NC	NC	NC	NC	NC
56-23-5	Carbon tetrachloride	0.05	R4	NC	NC	NC	NC	0.05	NC	NC	NC	1000	NC	NC	NC	NC
108-90-7	Chlorobenzene	2.4	R4	NC	NC	NC	NC	2.4	NC	NC	40	NC	NC	NC	NC	NC
75-00-3	Chloroethane	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
67-66-3	Chloroform	0.05	R4	NC	NC	NC	NC	0.05	NC	NC	NC	NC	NC	0.02	5.6	60
74-87-3	Chloromethane	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
98-82-8	Cumene	0.04	R4	NC	NC	NC	NC	0.04	NC	NC	NC	NC	NC	NC	NC	NC
124-48-1	Dibromochloromethane	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
74-95-3	Dibromomethane	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
75-71-8	Dichlorodifluoromethane	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
108-20-3	Diisopropyl ether	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
100-41-4	Ethyl benzene	0.27	R4	NC	NC	NC	NC	0.27	NC	NC	NC	NC	NC	0.03	50	NC
637-92-3	Ethyl tert-butyl ether	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
87-68-3	Hexachlorobutadiene	0.009	R4	NC	NC	NC	NC	0.009	NC	NC	NC	NC	NC	NC	NC	NC

TABLE 3-2A: Surface Soil Ecological Screening Values

Nevada Environmental Response Trust Site
Study Area Nevada Environmental Response Trust Site Henderson, Nevada

All Data in mg/kg

CASRN	Chemical Name	Preferred ESV (mg/kg)	Source	Eco-SSL Avian	Eco-SSL Inverts	Eco-SSL Mammal	Eco-SSL Plants	USEPA R4	R6 Earth-worms	R6 Plants	ORNL Inverts	ORNL Microbes	ORNL Plants	Dutch Target	Dutch Intervention	Dutch HC50
1634-04-4	Methyl tert-butyl ether	125	Dutch HC50	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	125
75-09-2	Methylene Chloride	10	Dutch Intervention	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	10	NC
91-20-3	Naphthalene	NC	--	NC	NC	NC	NC	See Total	NC	NC	NC	NC	NC	NC	NC	NC
100-42-5	Styrene	1.2	R4	NC	NC	NC	NC	1.2	NC	NC	NC	NC	300	0.3	86	NC
127-18-4	Tetrachloroethene	0.06	R4	NC	NC	NC	NC	0.06	NC	NC	NC	NC	NC	0.002	8.8	60
108-88-3	Toluene	0.15	R4	NC	NC	NC	NC	0.15	NC	NC	NC	NC	200	0.01	32	130
79-01-6	Trichloroethene	0.1	Dutch Target	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	0.1	2.5	60
75-69-4	Trichlorofluoromethane	16.4	R4	NC	NC	NC	NC	16.4	NC	NC	NC	NC	NC	NC	NC	NC
75-01-4	Vinyl chloride	0.01	Dutch Target	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	0.01	0.1	60
1330-20-7	Xylenes (total)	0.1	R4	NC	NC	NC	NC	0.1	NC	NC	NC	NC	NC	0.1	17	NC
156-59-2	cis-1,2-Dichloroethene	0.04	R4	NC	NC	NC	NC	0.04	NC	NC	NC	NC	NC	NC	NC	NC
10061-01-5	cis-1,3-Dichloropropene	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
104-51-8	n-Butylbenzene	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
103-65-1	n-Propylbenzene	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
99-87-6	p-Cymene	0.18	R4	NC	NC	NC	NC	0.18	NC	NC	NC	NC	NC	NC	NC	NC
135-98-8	sec-Butylbenzene	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
994-05-8	t-Amyl methyl ether	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
75-65-0	tert Butyl alcohol	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
98-06-6	tert-Butylbenzene	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
156-60-5	trans-1,2-Dichloroethene	0.04	R4	NC	NC	NC	NC	0.04	NC	NC	NC	NC	NC	NC	NC	44
10061-02-6	trans-1,3-Dichloropropene	NC	--	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

TABLE 3-2A: Surface Soil Ecological Screening Values

Nevada Environmental Response Trust Site
Study Area Nevada Environmental Response Trust Site Henderson, Nevada

Note

(1) All Ecological Screening Values (ESVs) are in milligrams per kilogram (mg/kg).
(2) Hierarchy of surface soil ecological screening values are as follows (in order of preference): Eco-SSL (minimum value reported); USEPA R4; USEPA R6 (minimum value reported); ORNL (minimum value reported); and Dutch ESVs (Target, Intervention, HC50).
(3) The ESV for "DDT/DDE/DDD (total)" was used as a surrogate criterion for DDE, DDT, and DDD for ESVs obtained from USEPA Region 4.
(4) The ESV for total PCBs was used as a surrogate criterion for individual PCBs for ESVs obtained from USEPA Region 4 and ORNL.
(5) The ESV for endosulfan was used as a surrogate criterion for endosulfan I and endosulfan II for ESVs obtained from USEPA Region 4 and Dutch values (Target, Intervention, and HC50).
(6) USEPA Region 4 states "narrative" as the ESV and refers the reader to the Eco-SSL document (USEPA 2007).
(7) The Los Alamos National Laboratory (LANL) database was reviewed perchlorate ESVs. The minimum soil ESV was 0.12 mg/kg and was for a study on done on American robin. The federal ESV for perchlorate (USEPA 2002) was used as it was considered the most appropriate.

µg/kg	Microgram per kilogram.	NC	No Criterion
bgs	Below Ground Surface	ND	Not detected
BHC	Hexachlorocyclohexane	ng/kg	Nanograms per kilogram
DL	Detection limit	OCPs	Organochlorine pesticides
DDD	Dichlorodiphenyldichloroethylene	OPPs	Organophosphate pesticides
DDE	Dichlorodiphenyldichloroethylene	PeCDD	Pentachlorodibenzo-p-furan
DDT	Dichlorodiphenyltrichloroethane	PeCDF	Pentachlorodibenzofuran
Eco SSL	Ecological Soil Screening Value	PAHs	Polycyclic Aromatic Hydrocarbons
ESV	Ecological Screening Value	PCBs	Polychlorinated biphenyls
EPN	Ethylp-nitrophenyl thionobenzenephosphonate	pci/g	PicoCuries per gram
ft	Foot	SVOCS	Semivolatile Organic Compounds
HMW	High Molecular Weight	TCDD	Tetrachlorodibenzodioxin
HPCDD	Heptachlorodibenzo-p-dioxin	TCDF	Tetrachlorodibenzofuran
HPCDF	Heptachlorodibenzofuran	TEQ	Toxic equivalency
HXCDD	Hexachlorodibenzo-p-dioxin mixture	TPH	Total Petroleum Hydrocarbons
HxCDF	Heptachlorodibenzofuran mixture	VOCS	Volatile Organic Compounds
LMW	Low Molecular Weight		
mg/kg	Milligram per kilogram		

References

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Swartjes, F.A. 1999. Risk-based Assessment of Soil and Groundwater Quality in the Netherlands: Standards and Remediation Urgency. Risk Analysis 19(6): 1235-1249
The Netherlands Ministry of Housing, Spatial Planning and Environment's Circular on target values and intervention values for soil remediation http://www.minvrom.nl/minvrom/docs/bodem/S&I2000.PDF and Annex A: Target Values, Soil Remediation Intervention Values and Indicative Levels for Serious Contamination http://www.minvrom.nl/minvrom/docs/bodem/annexS&I2000.PDF were also consulted, but they combine the ecological and human health values.

Eco-SSL ESVs: USEPA. 2007. Ecological Soil Screening Level (Eco-SSL) Guidance and Documents. https://cfpub.epa.gov/ecotox.

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TABLE 3-2B: Surface Soil Ecological Screening Values for Radionuclide Compounds

Nevada Environmental Response Trust Site
Study Area Nevada Environmental Response Trust Site Henderson, Nevada

All Data in mg/kg

			LANL Screening Values pCi/g	
Constituent	Medium	Receptor	NOAEL	LOAEL
RA-226	SOIL	Earthworm (Soil-dwelling invertebrate)	1.5	15
RA-226	SOIL	American robin (Avian insectivore)	8.2	82
RA-226	SOIL	American robin (Avian omnivore)	8.4	84
RA-226	SOIL	American robin (Avian herbivore)	34	340
RA-226	SOIL	Generic plant (Terrestrial autotroph - producer)	54	540
RA-226	SOIL	American kestrel (insectivore / carnivore)	61	610
RA-226	SOIL	Mountain cottontail (Mammalian herbivore)	340	3,400
RA-226	SOIL	Gray fox (Mammalian top carnivore)	370	3,700
RA-226	SOIL	Deer mouse (Mammalian omnivore)	380	3,800
RA-226	SOIL	Montane shrew (Mammalian insectivore)	510	5,100
RA-226	SOIL	American kestrel (Avian top carnivore)	870	8,700
RA-228	SOIL	Earthworm (Soil-dwelling invertebrate)	1.2	12
RA-228	SOIL	American robin (Avian insectivore)	11	110
RA-228	SOIL	American robin (Avian omnivore)	11	110
RA-228	SOIL	American robin (Avian herbivore)	46	460
RA-228	SOIL	Generic plant (Terrestrial autotroph - producer)	48	480
RA-228	SOIL	American kestrel (insectivore / carnivore)	83	830
RA-228	SOIL	Mountain cottontail (Mammalian herbivore)	420	4,200
RA-228	SOIL	Deer mouse (Mammalian omnivore)	490	4,900
RA-228	SOIL	Gray fox (Mammalian top carnivore)	560	5,600
RA-228	SOIL	Montane shrew (Mammalian insectivore)	770	7,700
RA-228	SOIL	American kestrel (Avian top carnivore)	1,400	14,000
TH-228	SOIL	Earthworm (Soil-dwelling invertebrate)	43	430
TH-228	SOIL	Generic plant (Terrestrial autotroph - producer)	140	1,400
TH-228	SOIL	Mountain cottontail (Mammalian herbivore)	800	8,000
TH-228	SOIL	Deer mouse (Mammalian omnivore)	820	8,200
TH-228	SOIL	Gray fox (Mammalian top carnivore)	830	8,300
TH-228	SOIL	Montane shrew (Mammalian insectivore)	830	8,300
TH-228	SOIL	American robin (Avian herbivore)	1,100	11,000
TH-228	SOIL	American robin (Avian omnivore)	1,200	12,000
TH-228	SOIL	American robin (Avian insectivore)	1,300	13,000
TH-228	SOIL	American kestrel (Avian top carnivore)	1,600	16,000
TH-228	SOIL	American kestrel (insectivore / carnivore)	1,600	16,000
TH-230	SOIL	Earthworm (Soil-dwelling invertebrate)	52	520
TH-230	SOIL	Generic plant (Terrestrial autotroph - producer)	200	2,000
TH-230	SOIL	American robin (Avian herbivore)	1,200	12,000
TH-230	SOIL	American robin (Avian omnivore)	1,400	14,000
TH-230	SOIL	American robin (Avian insectivore)	2,200	22,000
TH-230	SOIL	American kestrel (insectivore / carnivore)	17,000	170,000
TH-230	SOIL	Mountain cottontail (Mammalian herbivore)	21,000	210,000
TH-230	SOIL	Gray fox (Mammalian top carnivore)	68,000	680,000
TH-230	SOIL	Deer mouse (Mammalian omnivore)	78,000	780,000
TH-230	SOIL	Montane shrew (Mammalian insectivore)	110,000	1,100,000
TH-230	SOIL	American kestrel (Avian top carnivore)	170,000	1,700,000
TH-232	SOIL	Earthworm (Soil-dwelling invertebrate)	6.2	62
TH-232	SOIL	Generic plant (Terrestrial autotroph - producer)	24	240
TH-232	SOIL	American robin (Avian herbivore)	150	1,500
TH-232	SOIL	American robin (Avian omnivore)	170	1,700
TH-232	SOIL	American robin (Avian insectivore)	260	2,600
TH-232	SOIL	American kestrel (insectivore / carnivore)	2,200	22,000
TH-232	SOIL	Mountain cottontail (Mammalian herbivore)	2,900	29,000
TH-232	SOIL	Gray fox (Mammalian top carnivore)	14,000	140,000
TH-232	SOIL	Deer mouse (Mammalian omnivore)	19,000	190,000
TH-232	SOIL	Montane shrew (Mammalian insectivore)	49,000	490,000

TABLE 3-2B: Surface Soil Ecological Screening Values for Radionuclide Compounds

Nevada Environmental Response Trust Site
Study Area Nevada Environmental Response Trust Site Henderson, Nevada

All Data in mg/kg

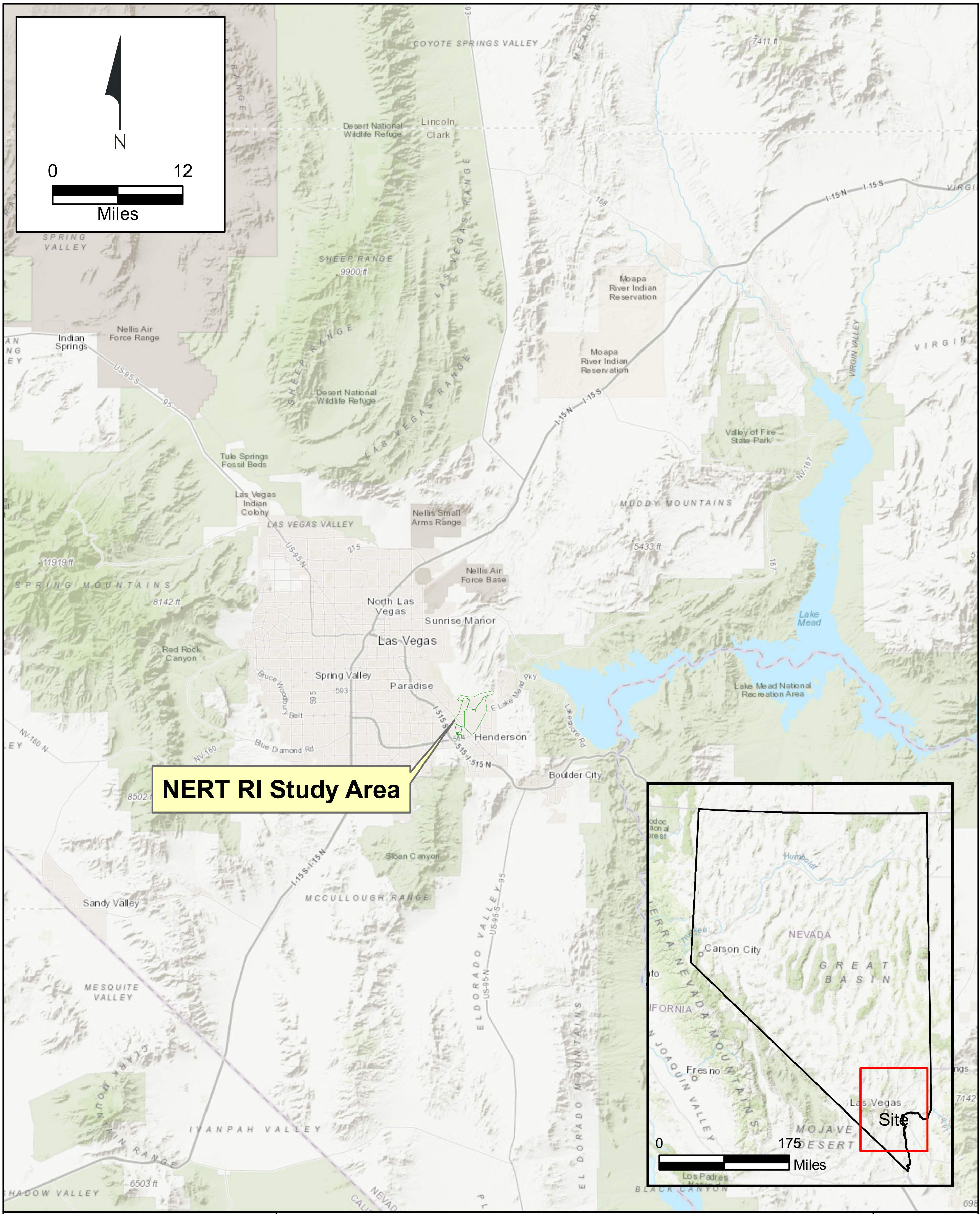
			LANL Screening Values pCi/g	
Constituent	Medium	Receptor	NOAEL	LOAEL
TH-232	SOIL	American kestrel (Avian top carnivore)	50,000	500,000
TH-234 (a)	SOIL	Earthworm (Soil-dwelling invertebrate)	6.2	62
TH-234 (a)	SOIL	Generic plant (Terrestrial autotroph - producer)	24	240
TH-234 (a)	SOIL	American robin (Avian herbivore)	150	1,500
TH-234 (a)	SOIL	American robin (Avian omnivore)	170	1,700
TH-234 (a)	SOIL	American robin (Avian insectivore)	260	2,600
TH-234 (a)	SOIL	American kestrel (insectivore / carnivore)	2,200	22,000
TH-234 (a)	SOIL	Mountain cottontail (Mammalian herbivore)	2,900	29,000
TH-234 (a)	SOIL	Gray fox (Mammalian top carnivore)	14,000	140,000
TH-234 (a)	SOIL	Deer mouse (Mammalian omnivore)	19,000	190,000
TH-234 (a)	SOIL	Montane shrew (Mammalian insectivore)	49,000	490,000
TH-234 (a)	SOIL	American kestrel (Avian top carnivore)	50,000	500,000
U-234	SOIL	Generic plant (Terrestrial autotroph - producer)	440	4,400
U-234	SOIL	Earthworm (Soil-dwelling invertebrate)	2,200	22,000
U-234	SOIL	American robin (Avian herbivore)	14,000	140,000
U-234	SOIL	American robin (Avian omnivore)	27,000	270,000
U-234	SOIL	Mountain cottontail (Mammalian herbivore)	36,000	360,000
U-234	SOIL	American robin (Avian insectivore)	69,000	690,000
U-234	SOIL	Gray fox (Mammalian top carnivore)	110,000	1,100,000
U-234	SOIL	Deer mouse (Mammalian omnivore)	120,000	1,200,000
U-234	SOIL	Montane shrew (Mammalian insectivore)	140,000	1,400,000
U-234	SOIL	American kestrel (Avian top carnivore)	260,000	2,600,000
U-234	SOIL	American kestrel (insectivore / carnivore)	260,000	2,600,000
U-235	SOIL	Generic plant (Terrestrial autotroph - producer)	440	4,400
U-235	SOIL	Earthworm (Soil-dwelling invertebrate)	1,600	16,000
U-235	SOIL	Mountain cottontail (Mammalian herbivore)	4,700	47,000
U-235	SOIL	Deer mouse (Mammalian omnivore)	5,200	52,000
U-235	SOIL	Gray fox (Mammalian top carnivore)	5,200	52,000
U-235	SOIL	Montane shrew (Mammalian insectivore)	5,200	52,000
U-235	SOIL	American robin (Avian herbivore)	6,300	63,000
U-235	SOIL	American robin (Avian omnivore)	7,900	79,000
U-235	SOIL	American robin (Avian insectivore)	9,500	95,000
U-235	SOIL	American kestrel (Avian top carnivore)	10,000	100,000
U-235	SOIL	American kestrel (insectivore / carnivore)	10,000	100,000
U-238	SOIL	Generic plant (Terrestrial autotroph - producer)	400	4,000
U-238	SOIL	Earthworm (Soil-dwelling invertebrate)	1,100	11,000
U-238	SOIL	Mountain cottontail (Mammalian herbivore)	2,000	20,000
U-238	SOIL	Deer mouse (Mammalian omnivore)	2,100	21,000
U-238	SOIL	Gray fox (Mammalian top carnivore)	2,100	21,000
U-238	SOIL	Montane shrew (Mammalian insectivore)	2,100	21,000
U-238	SOIL	American robin (Avian herbivore)	3,300	33,000
U-238	SOIL	American robin (Avian omnivore)	3,700	37,000
U-238	SOIL	American robin (Avian insectivore)	4,000	40,000
U-238	SOIL	American kestrel (Avian top carnivore)	4,200	42,000
U-238	SOIL	American kestrel (insectivore / carnivore)	4,200	42,000

Notes:

pCi/g	Picocuries per gram.
LANL	Los Alamos National Laborator. 2018. ECORISK Database (Release 4.1). http://www.lanl.gov/environment/protection/eco-risk-assessment.php. Accessed: 4/11/2018.
RA	Radium
TH	Thorium
U	Uranium

(a) No date for TH-234; therefore, TH-232 was used as surrogate.

FIGURES



Path: H:\LePetomane\NERT\GIS\EcoRisk Figures\Maps\Fig 1-1. Site Location.mxd

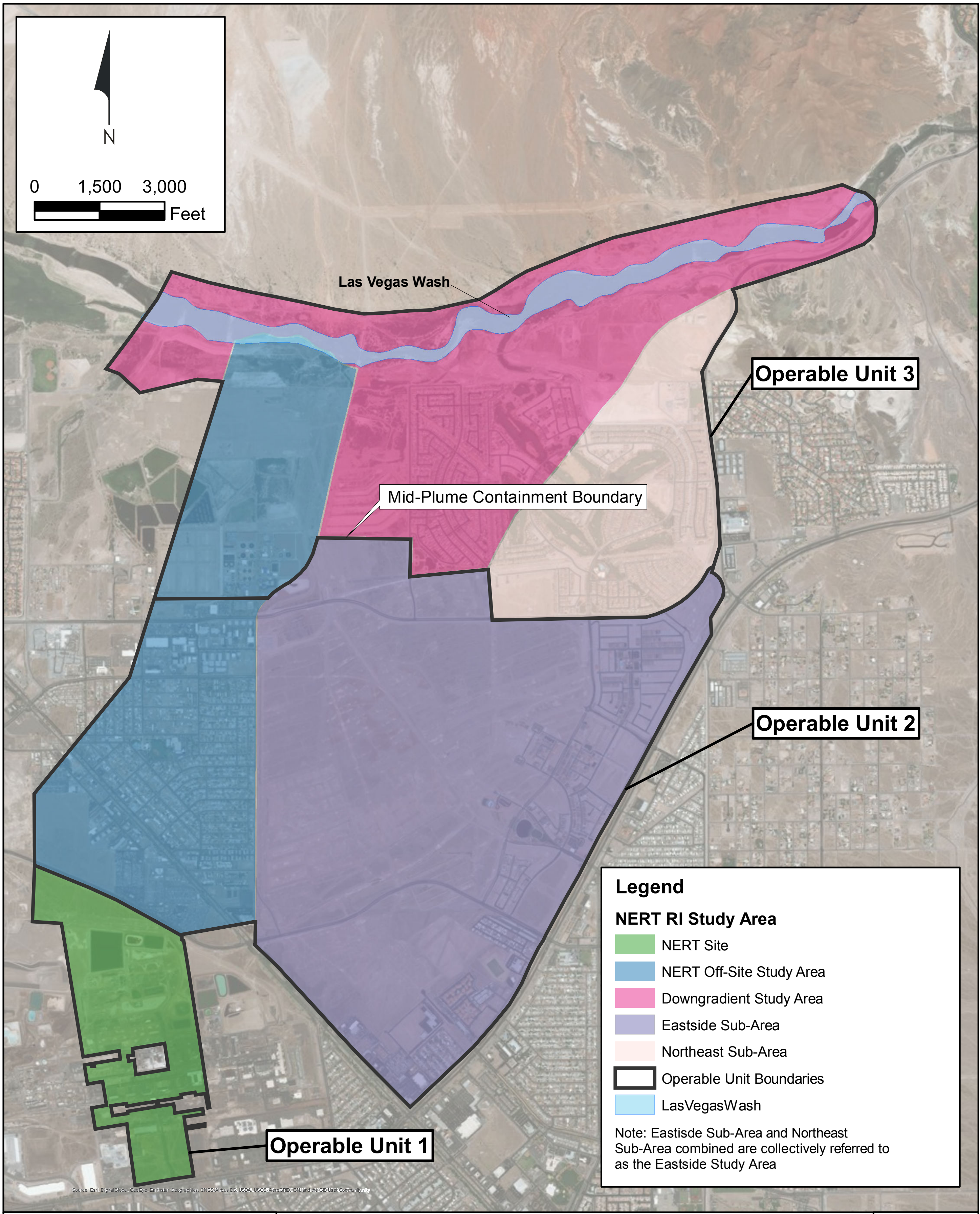
RAMBOLL

NERT RI Study Area Location Map

Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
1-1

Drafter: RS
Date: 5/9/2018
Contract Number: 169000 6943
Approved by:
Revised:



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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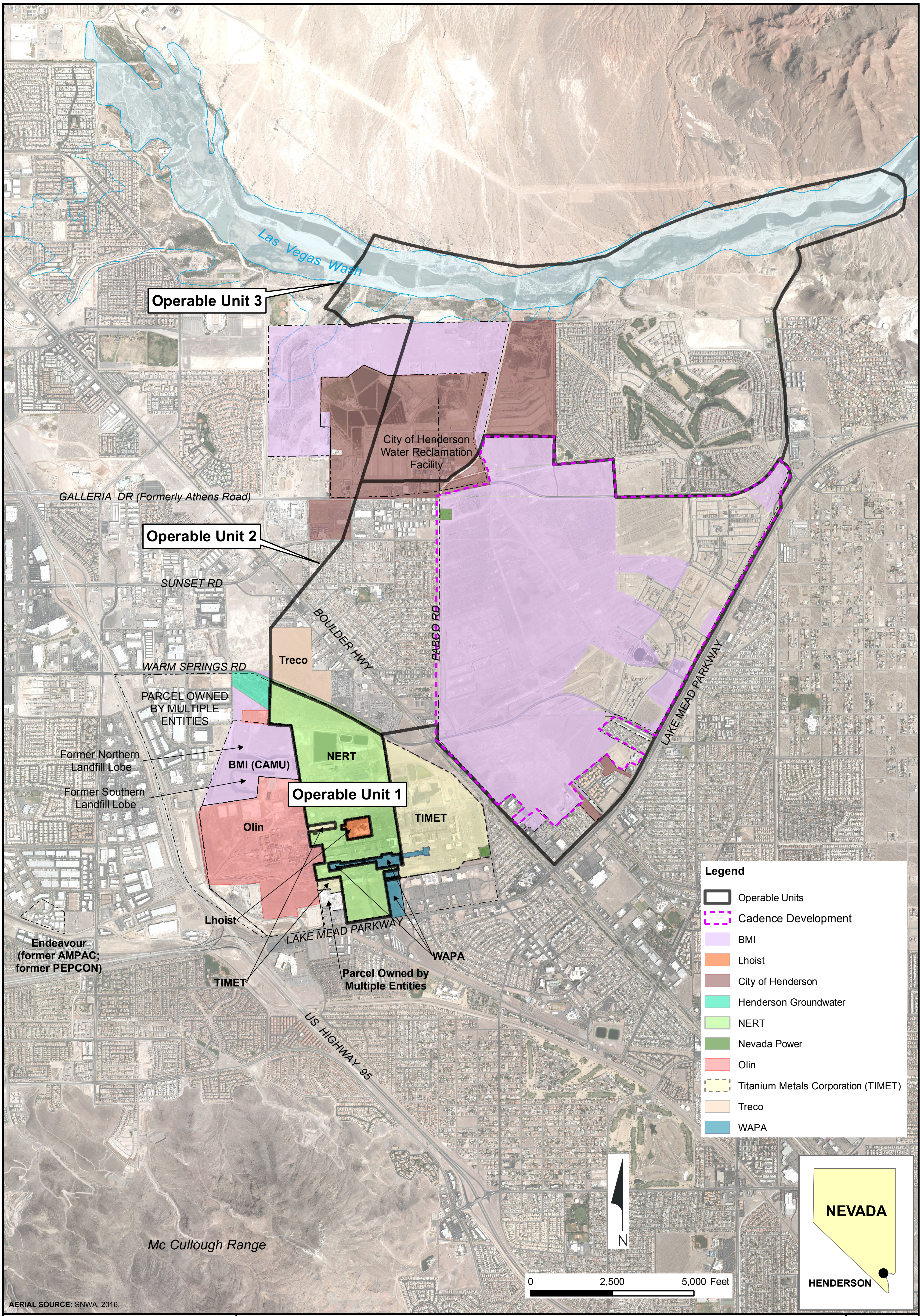
NERT Operable Units and RI Study Areas

Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
1-2

Drafter: RS **Date: 5/30/2018** **Contract Number: 169000 6943** **Approved by:** **Revised:**



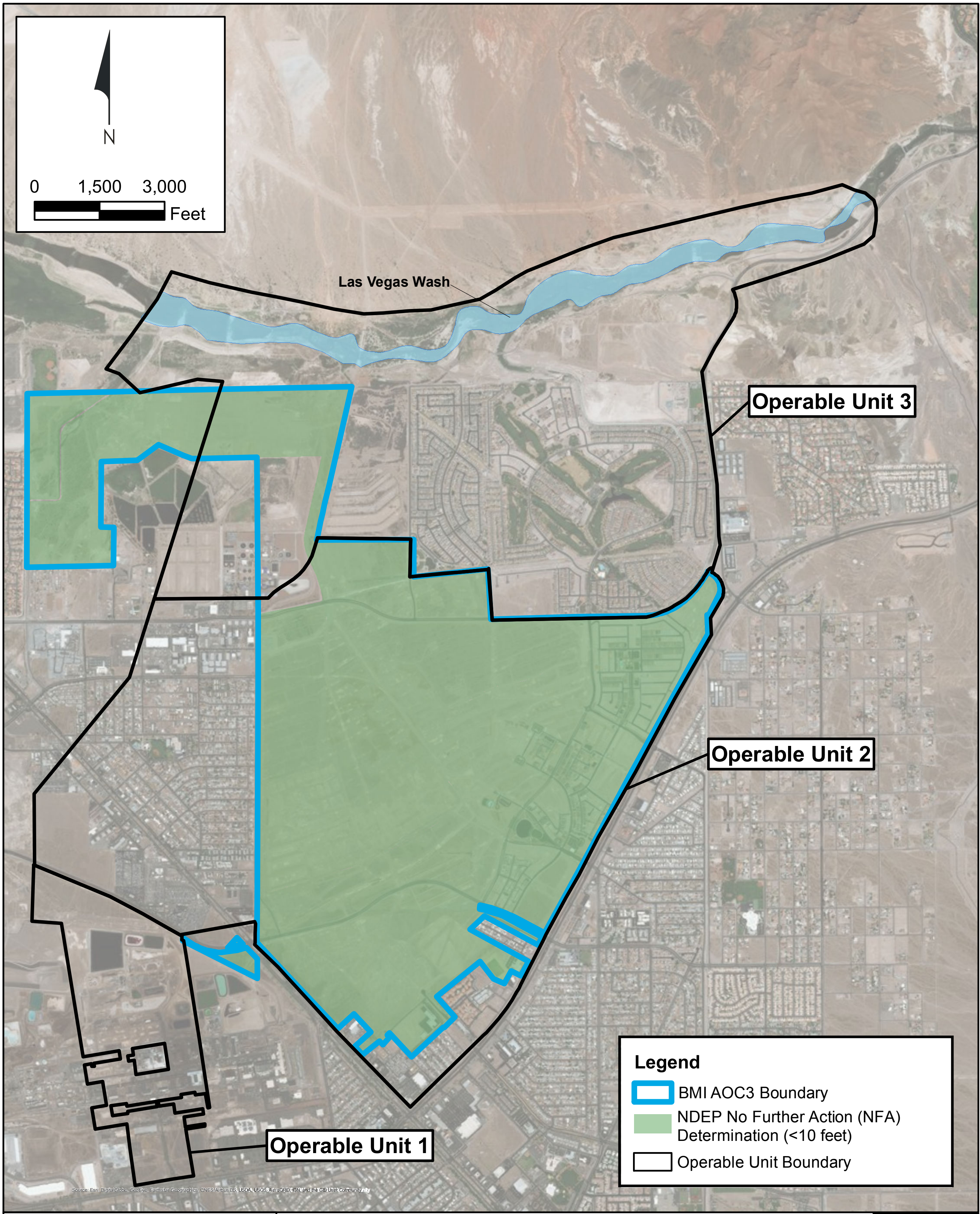
Surrounding BMI Complex Facilities

Nevada Environmental Response Trust Site, Henderson, Nevada

Figure

1-3

Drafter: RS | Date: 5/30/2018 | Contract Number: 169000 6943 | Approved by: | Revised:



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Path: \\wcevlfps1\eng\LePetomane\NERT\GIS\EcoRisk Figures\Maps\Fig 1-4 BMI Investigation Sub Areas.mxd

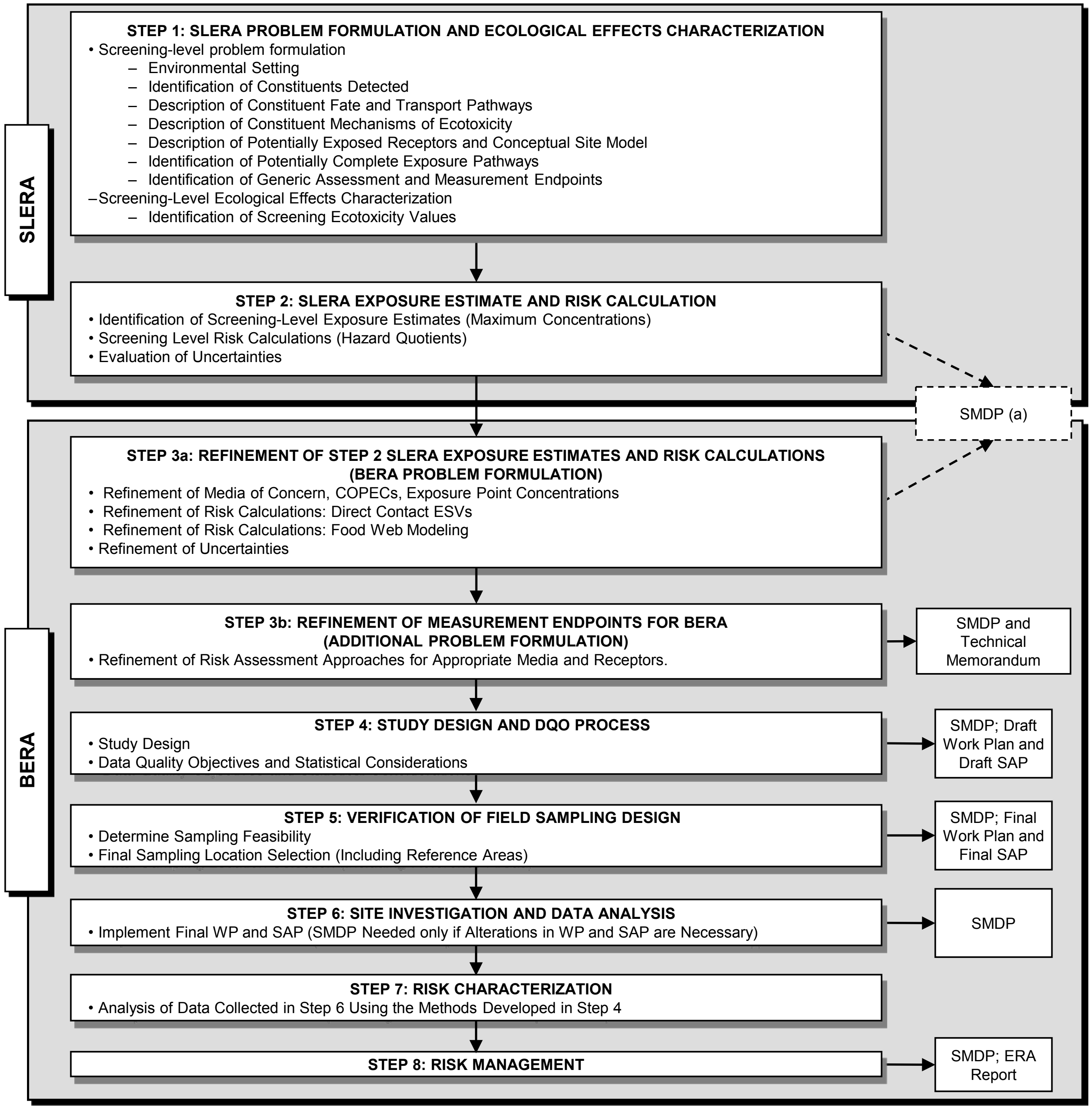
RAMBOLL

BMI Investigation No Further Action Determination Areas

Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
1-4

Drafter: RS | Date: 5/29/2018 | Contract Number: 169000 6943 | Approved by: | Revised:



Notes:

COPEC	Chemical of Potential Ecological Concern.
DQO	Data Quality Objectives.
ERA	Ecological Risk Assessment.
ESV	Ecological Screening Value.
SAP	Sampling and Analysis Plan.
SMDP	Scientific Management Decision Point.
WP	Work Plan.
BERA	Baseline ERA.
SLERA	Screening-level ERA.
USEPA	United State Environmental Protection Agency.

(a) SMDP occurs EITHER after Step 2 or after Step 3a.

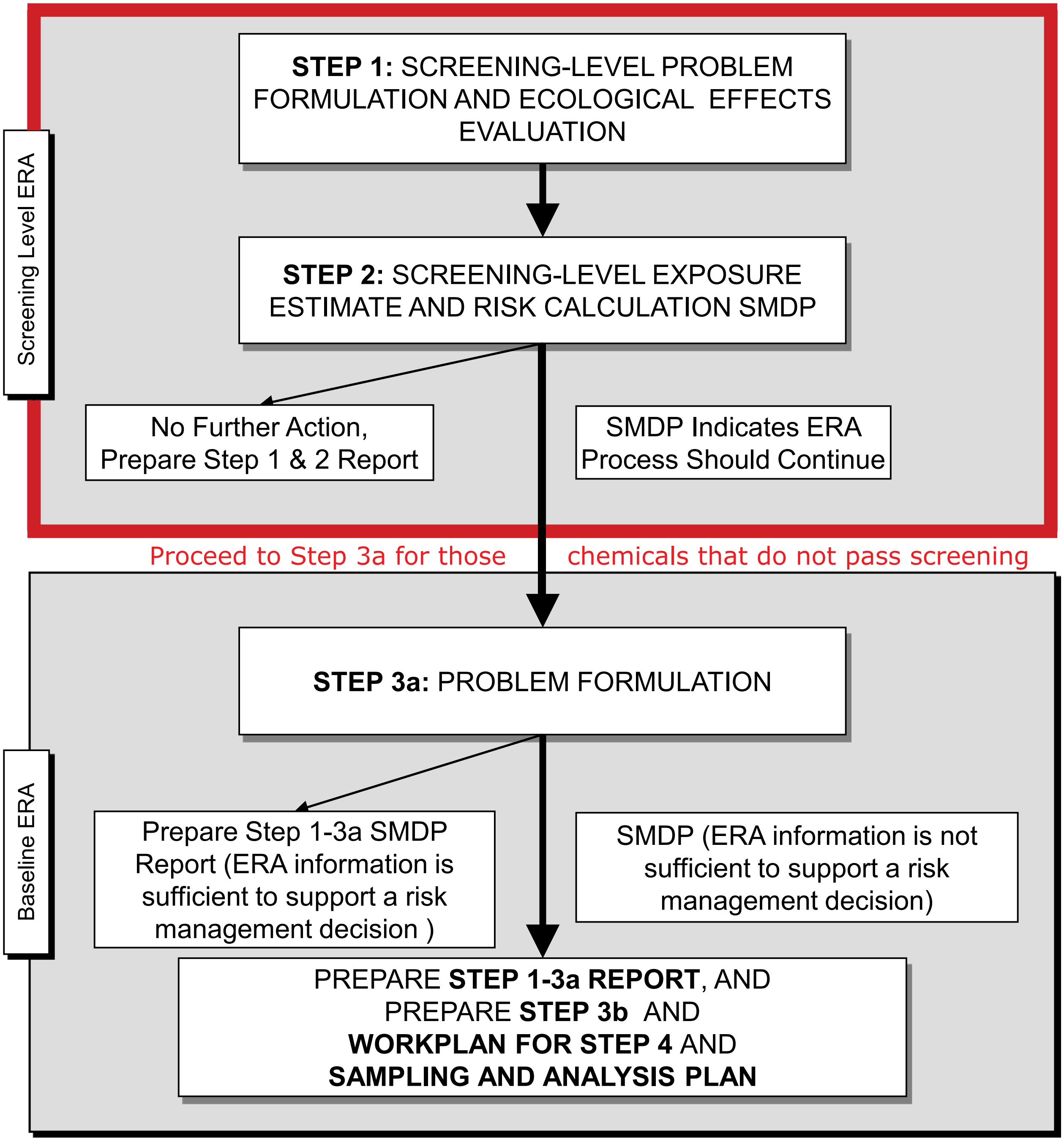
Source: Adapted from Figure 1-2 of USEPA 1997 (modification to reflect the Step 1-3a elements specific to the Chemtronics ERA).

USEPA Expanded Eight-Step Ecological Risk Assessment Process

Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
1-5

Drafter: RS
Date: 5/8/2018
Contract Number: 169000 6943
Approved by:
Revised:



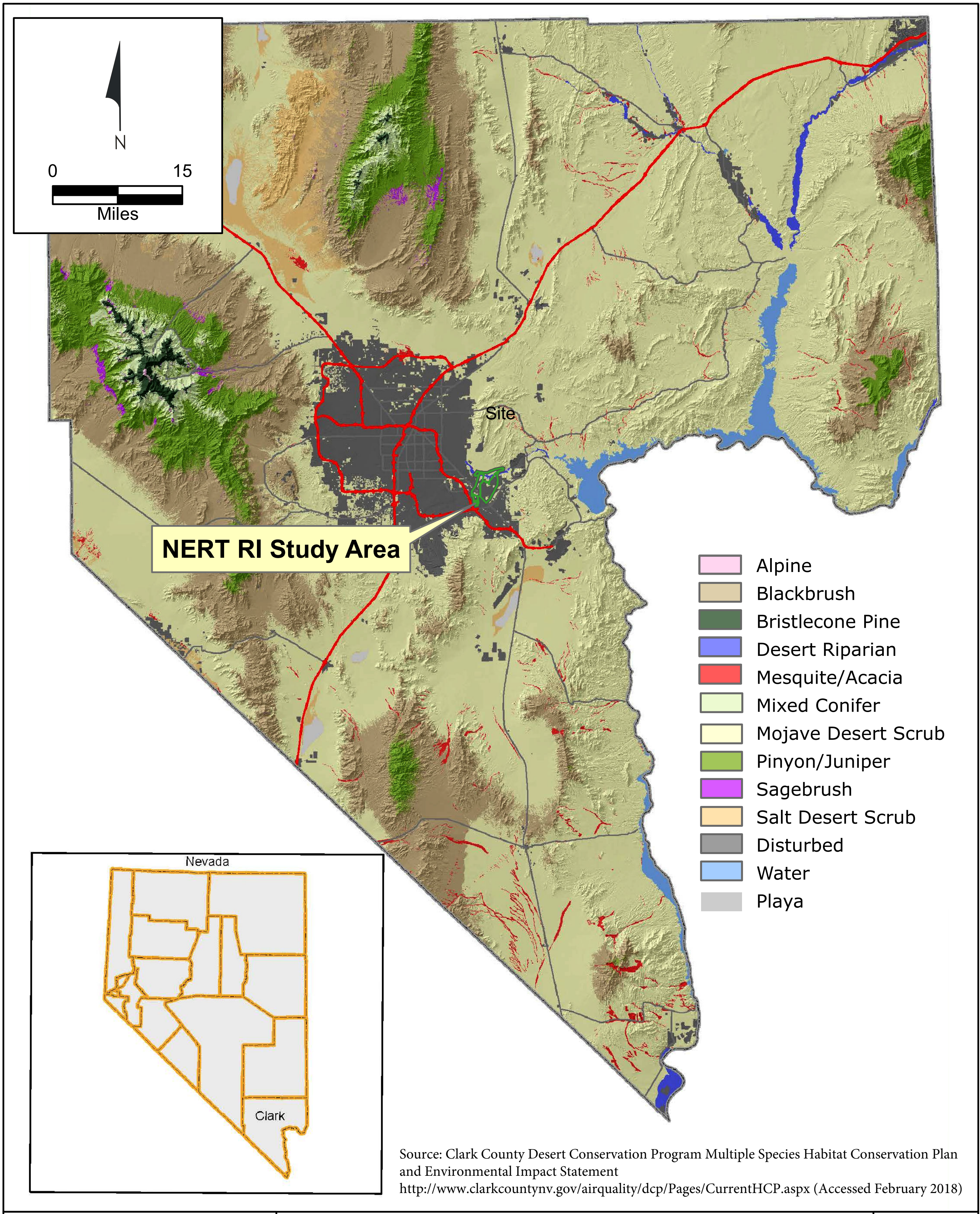
ERA – Ecological Risk Assessment
SMDP – Scientific Management Decision Point

RAMBOLL

SLERA Steps 1, 2, and 3a of USEPA Eight-Step ERA Process
Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
1-6

Drafter: RS Date: 5/8/2018 Contract Number: 169000 6943 Approved by: Revised:



Source: Clark County Desert Conservation Program Multiple Species Habitat Conservation Plan and Environmental Impact Statement http://www.clarkcountynv.gov/airquality/dcp/Pages/CurrentHCP.aspx (Accessed February 2018)

Path: \\Wcevlfps1\eng\LePetomane\NERT\GIS\EcoRisk Figures\Maps\Fig 3-1.mxd

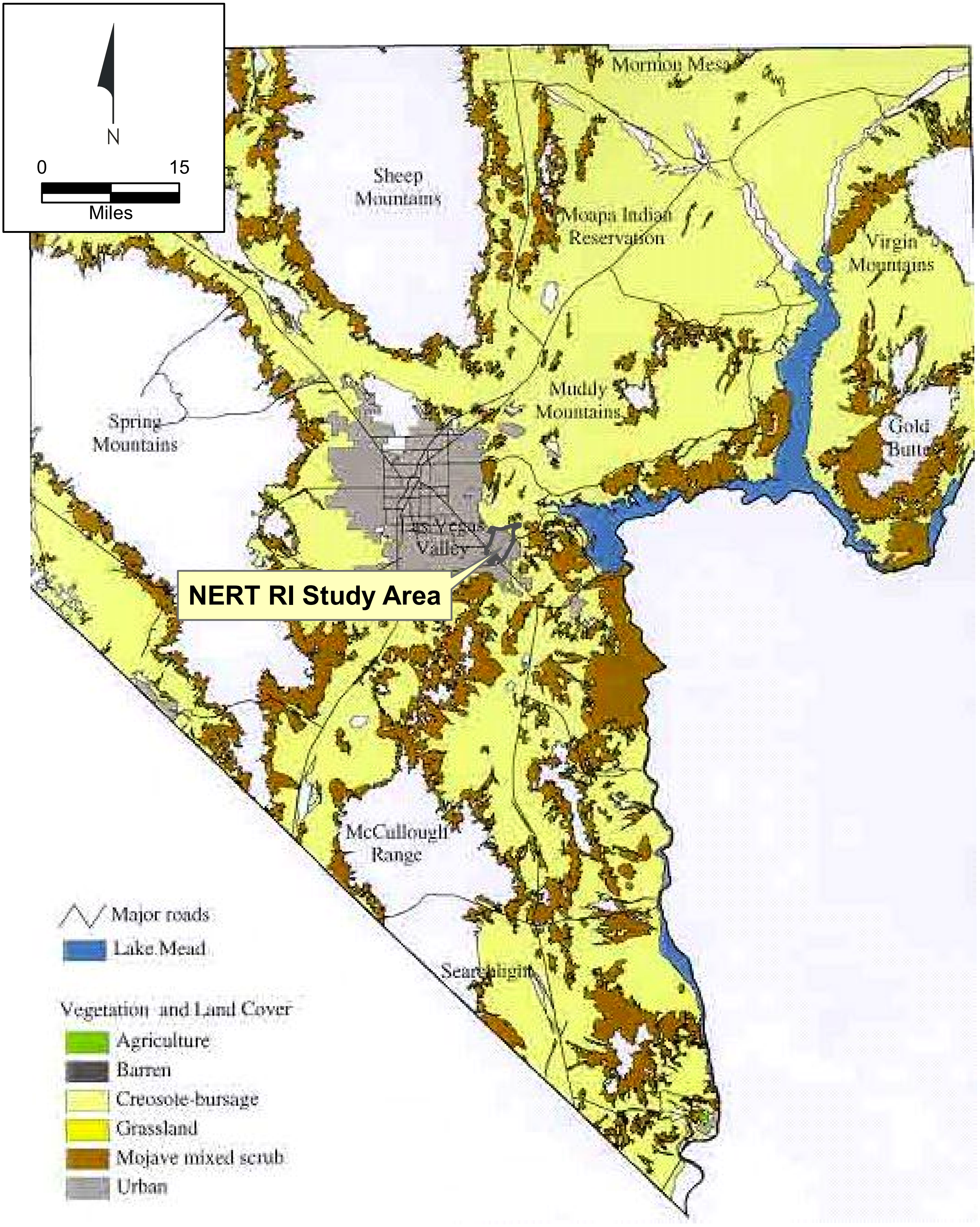
Clark County Ecosystem Distribution Map

Nevada Environmental Response Trust Site, Henderson, Nevada

Figure

2-1

Drafter: RS Date: 5/8/2018 Contract Number: 169000 6943 Approved by: Revised:



Source: Clark County Desert Conservation Program Multiple Species Habitat Conservation Plan and Environmental Impact Statement
http://www.clarkcountynv.gov/airquality/dcp/Pages/CurrentHCP.aspx (Accessed February 2018)

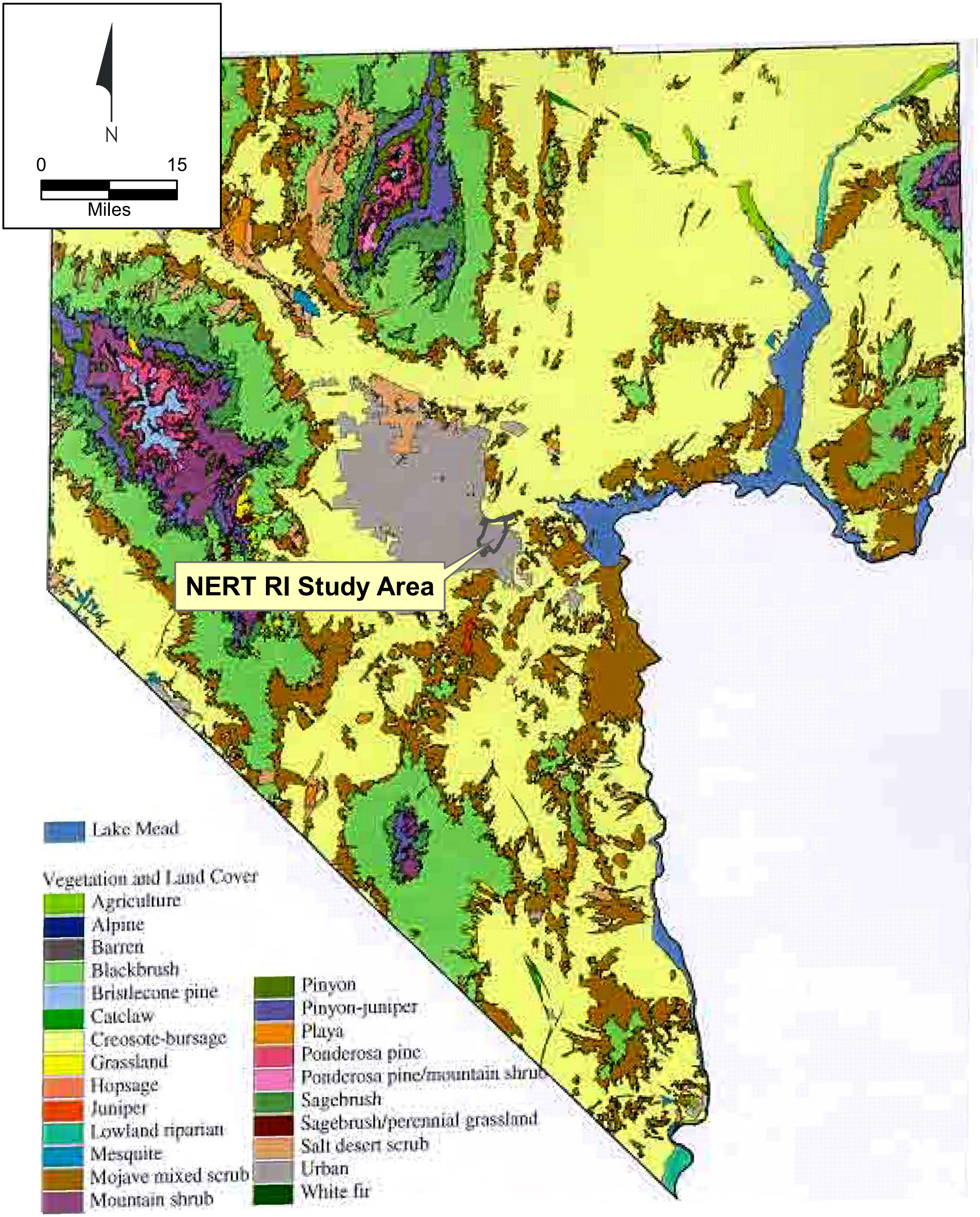
Path: \\wcevlfps1\eng\LePetomane\NERT\GIS\EcoRisk Figures\Maps\Fig 2-2.mxd

Clark County Mojave Desert Scrub Ecosystem

Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
2-2

Drafter: RS Date: 5/29/2018 Contract Number: 169000 6943 Approved by: Revised:



Source: Clark County Desert Conservation Program Multiple Species Habitat Conservation Plan and Environmental Impact Statement
http://www.clarkcountynv.gov/airquality/dcp/Pages/CurrentHCP.aspx (Accessed February 2018)

Clark County Distribution of Vegetation and Extent of Urbanization in and around Henderson, NV

Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
2-3

Drafter: RS Date: 5/29/2018 Contract Number: 169000 6943 Approved by: Revised:

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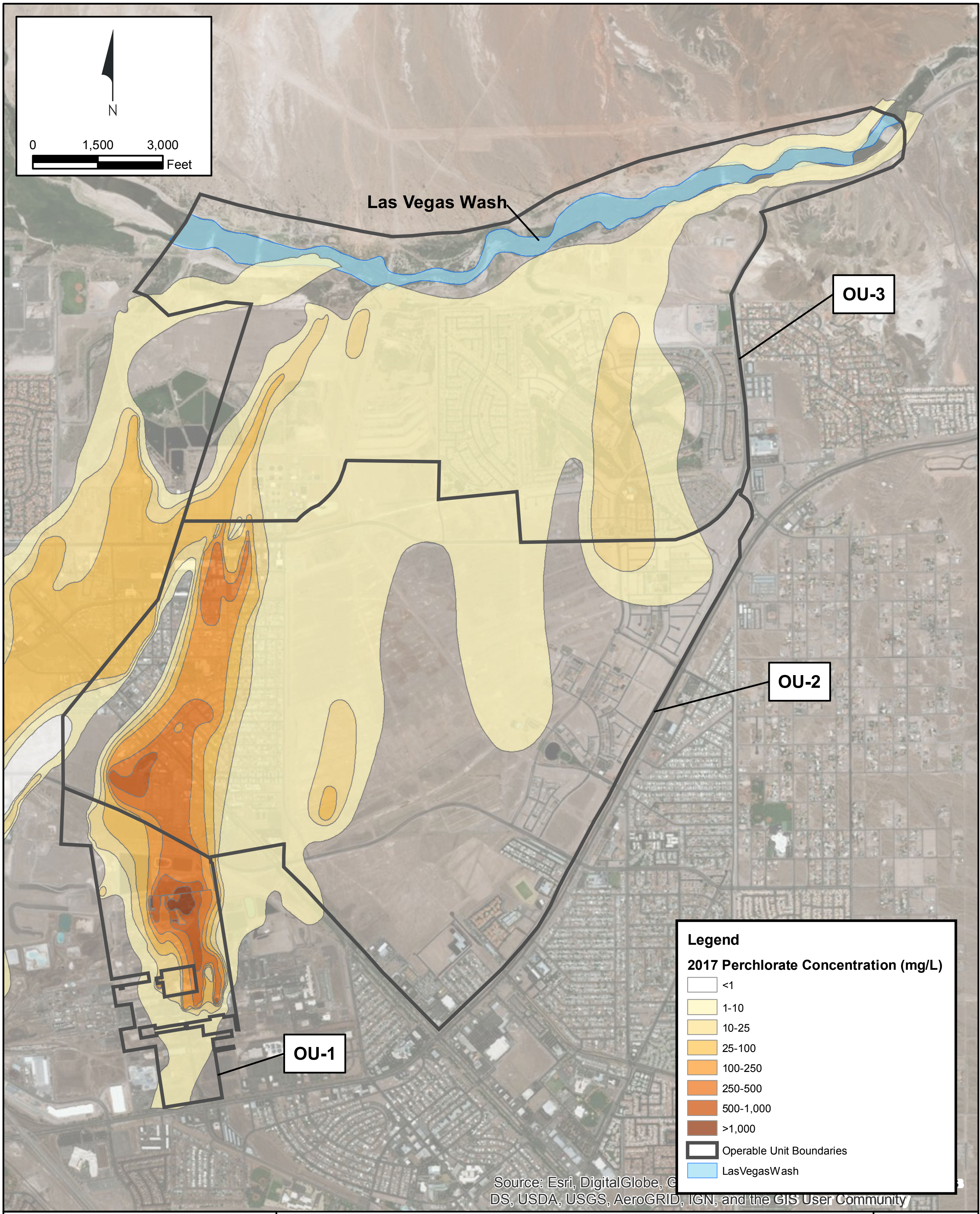


Source: Esri, DigitalGlobe, G
DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Path: \\wcevlfps1\eng\LePetomane\NERT\GIS\EcoRisk Figures\Maps\Fig 2-4 Perchlorate Plume.mxd

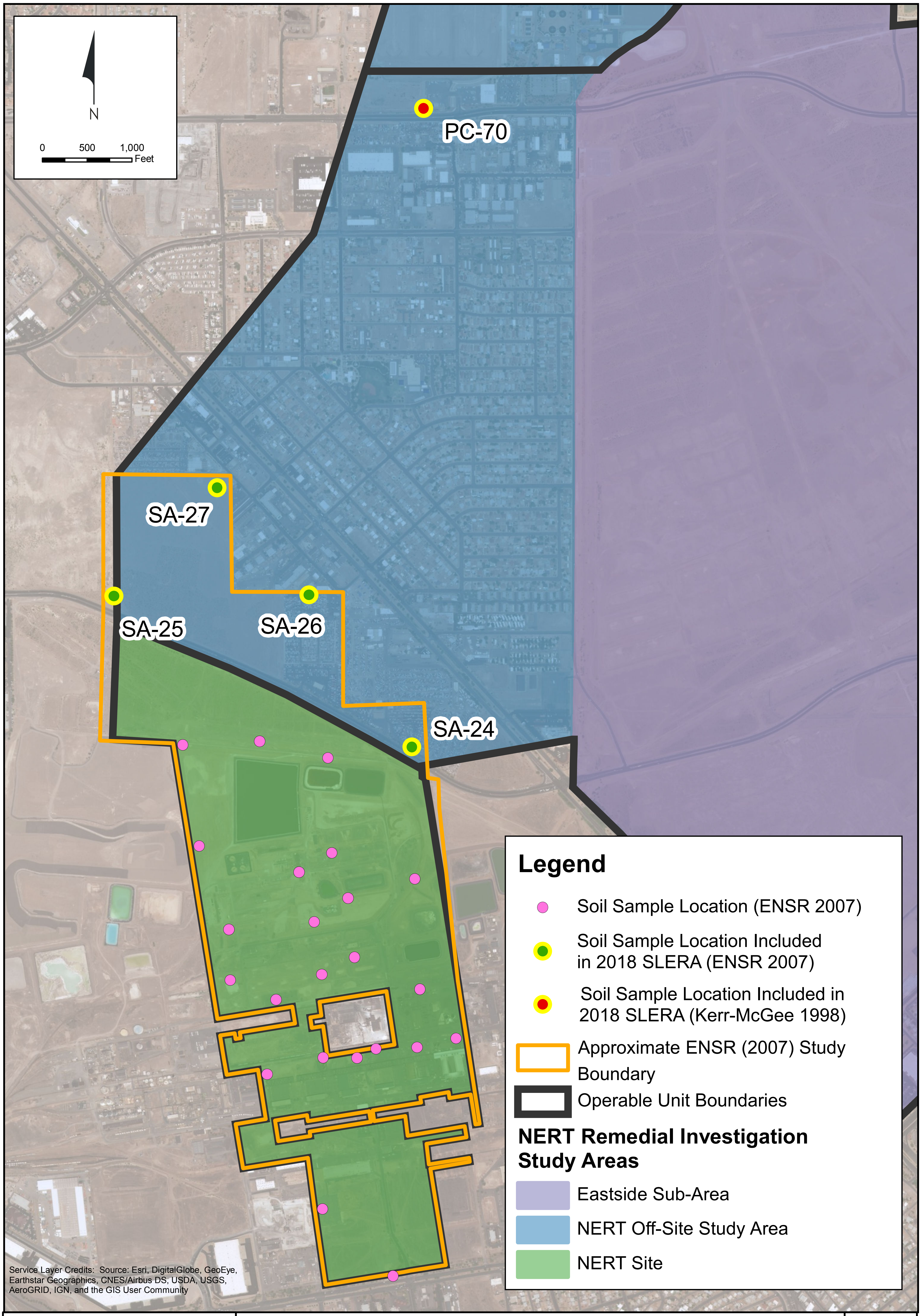
RAMBOLL

Perchlorate Groundwater Plume

Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
2-4

Drafter: RS
Date: 5/29/2018
Contract Number: 169000 6943
Approved by:
Revised:



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

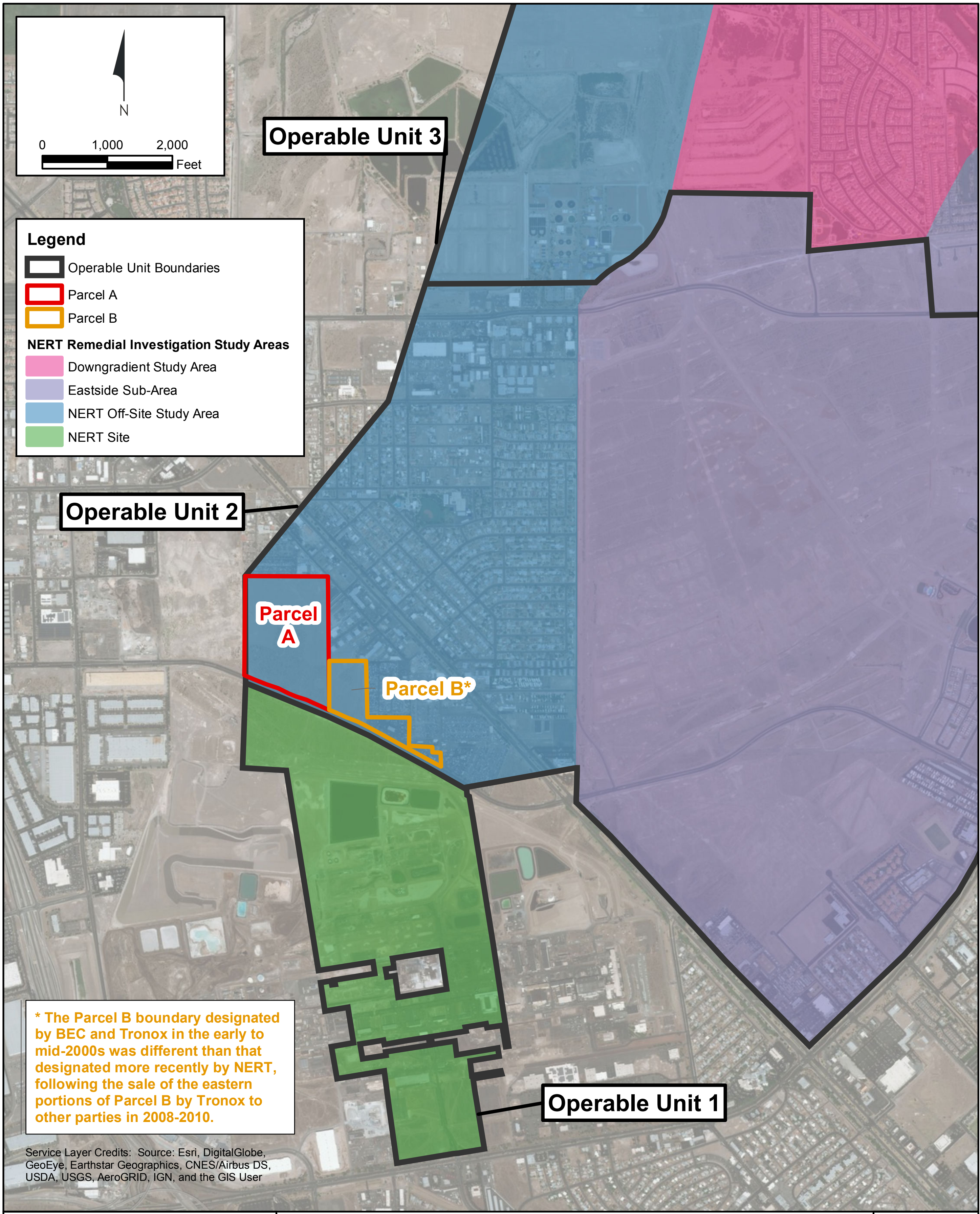
Path: \\wcevlfps1\eng\LePetomane\NERT\GIS\EcoRisk Figures\Maps\Fig 2-5. ENSR (2006) Soil Sample Locations.mxd

RAMBOLL

Soil Sample Locations to be Used in the NERT Off-Site Study Area
Nevada Environmental Response Trust Site
Henderson, Nevada

Figure
2-5

Drafter: MV
Date: 5/30/2018
Contract Number: 169000 6943
Approved by:
Revised:



* The Parcel B boundary designated by BEC and Tronox in the early to mid-2000s was different than that designated more recently by NERT, following the sale of the eastern portions of Parcel B by Tronox to other parties in 2008-2010.

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User

Path: \\wcevlfps1\eng\LePetomane\NERT\GIS\EcoRisk Figures\Maps\Fig 2-6. Parcels A and B in the Southern portion of the NERT Off-Site Study Area.mxd

Locations of Parcels A and B

Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
2-6

Drafter: RS Date: 5/29/2018 Contract Number: 169000 6943 Approved by: Revised:

● Proposed Sampling Location

⊕ Monitoring Well

▨ Gravel Pile

☐ 4-Acre Random Sampling Grid (Grid ID = "A-X#")

🟥 Parcel A Boundary

Note:
Figure obtained from Basic Environmental Company (BEC). 2007. Phase 2 Sampling and Analysis Plan. August.
Actual sample locations could not be confirmed.

TSB-BR(J)-01
Sample Number
Judgemental Sample
Parcel ID
Random Sample

BEC 2007 Soil Sample Locations - Parcel A

Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
2-7

Drafter: EF Date: 5/3/2018 Contract Number: 169000 6943 Approved by: Revised:

● Proposed Sampling Location

⊕ Monitoring Well

▨ Approximate Fill Pile Location

▨ Approximate Debris Pile Location

▨ Approximate Concrete/Asphalt Pile Location

🟧 Parcel B Boundary

☐ 4-Acre Random Sampling Grid (Grid ID = "B-X#")

TSB-BR(J)-01

Sample Number

Judgemental Sample

Random Sample

Parcel ID

Note:
Figure obtained from Basic Environmental Company (BEC). 2007. Phase 2 Sampling and Analysis Plan. August.
Actual sample locations could not be confirmed.

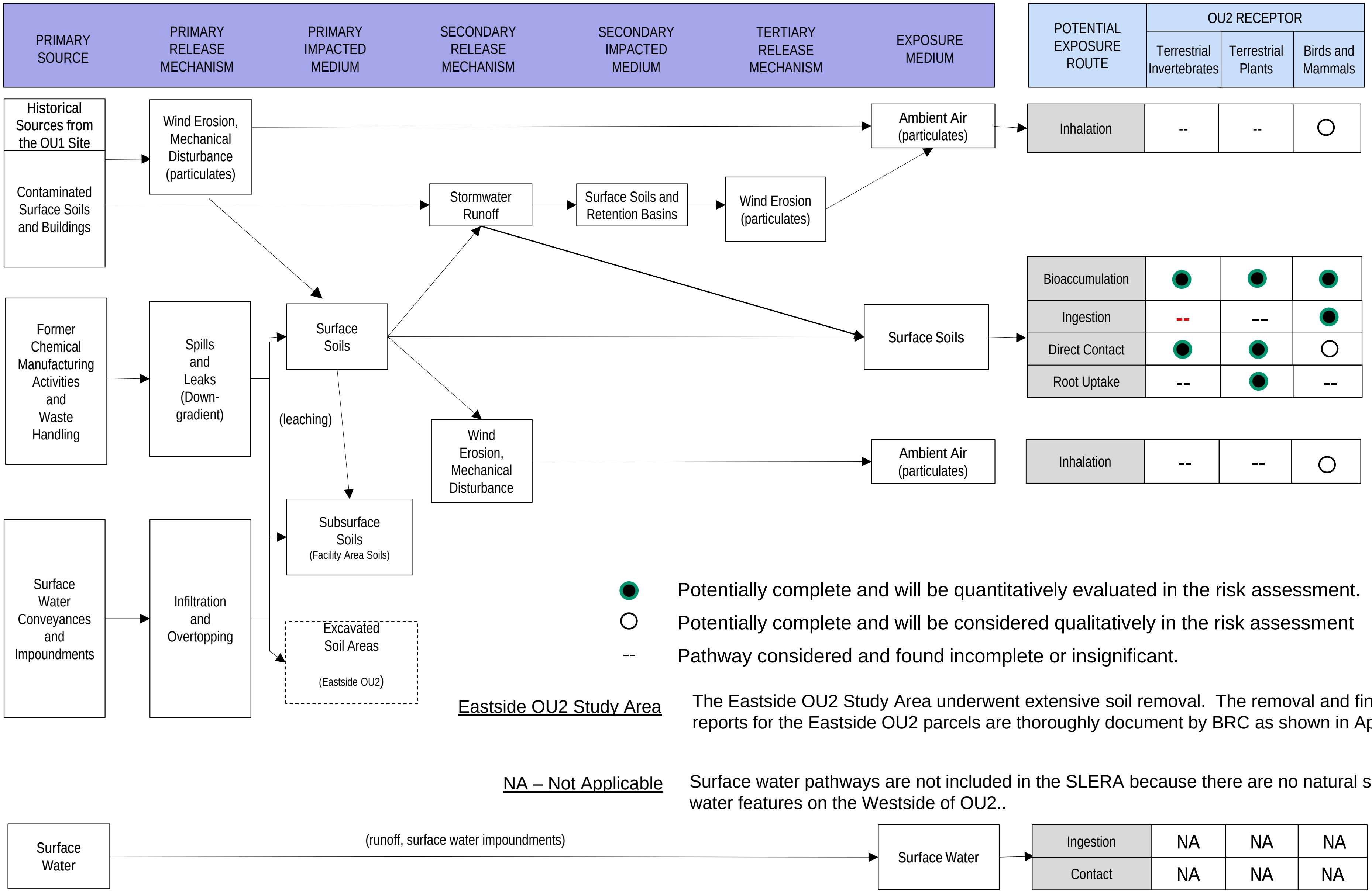
RAMBOLL

BEC 2007 Soil Sample Locations - Parcel B

Nevada Environmental Response Trust Site, Henderson, Nevada

Figure
2-8

Drafter: RS Date: 5/8/2018 Contract Number: 169000 6943 Approved by: Revised:



POTENTIAL EXPOSURE ROUTE	OU2 RECEPTOR		
	Terrestrial Invertebrates	Terrestrial Plants	Birds and Mammals
Inhalation	--	--	○
Bioaccumulation	●	●	●
Ingestion	--	--	●
Direct Contact	●	●	○
Root Uptake	--	●	--
Inhalation	--	--	○
Ingestion	NA	NA	NA
Contact	NA	NA	NA

● Potentially complete and will be quantitatively evaluated in the risk assessment.

○ Potentially complete and will be considered qualitatively in the risk assessment

-- Pathway considered and found incomplete or insignificant.

Eastside OU2 Study Area The Eastside OU2 Study Area underwent extensive soil removal. The removal and final closure reports for the Eastside OU2 parcels are thoroughly document by BRC as shown in Appendix C.

NA – Not Applicable Surface water pathways are not included in the SLERA because there are no natural surface water features on the Westside of OU2..

H:\LePetomane\NERT\BHRA\Report\Figures

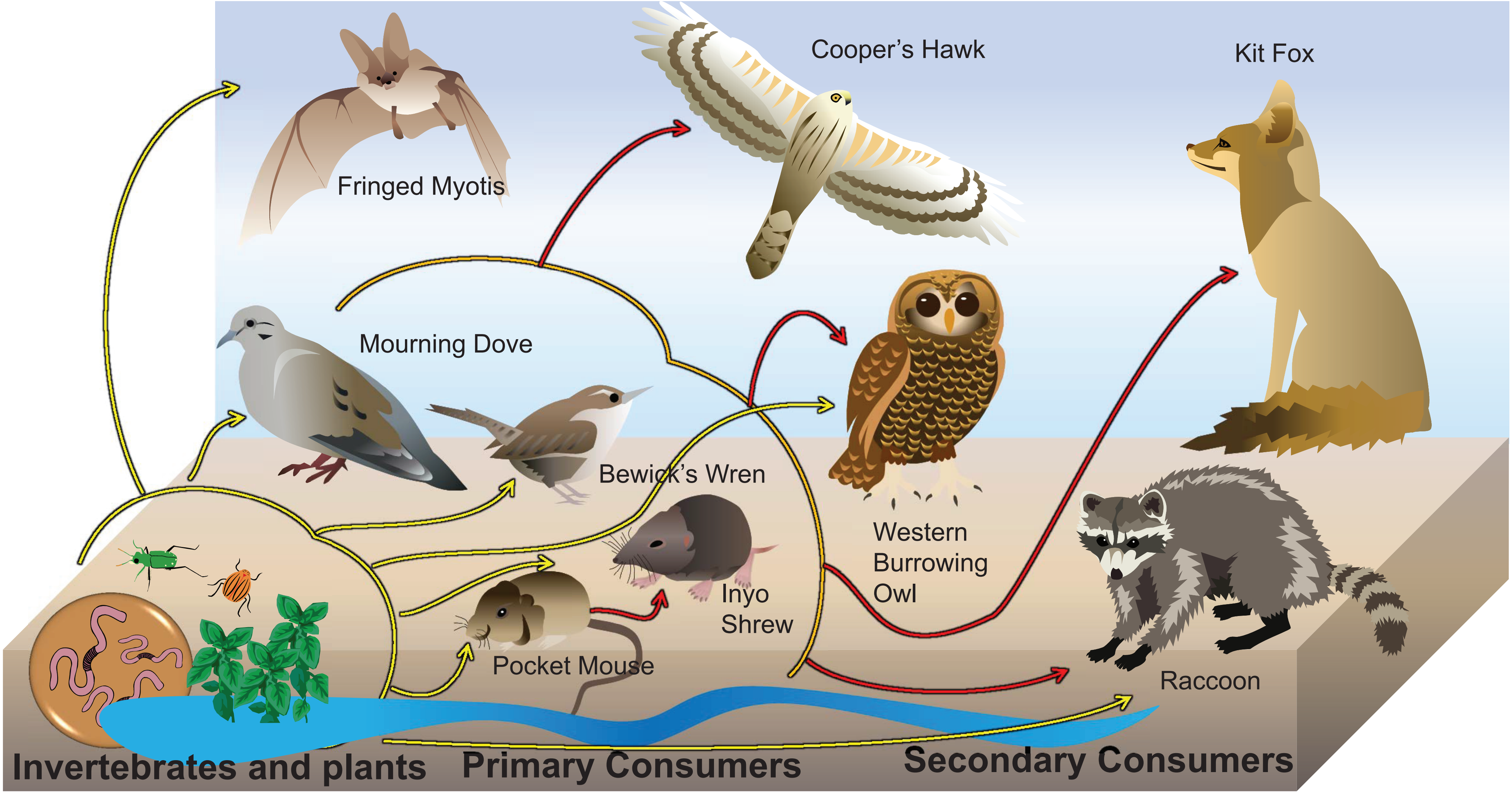
RAMBOLL

Ecological Conceptual Site Model for OU-2

Nevada Environmental Response Trust Site, Henderson, Nevada

Figure 2-9

Drafter: EL Date: 5/7/2018 Contract Number: 169000 6943 Approved By: Revised:



RAMBOLL

Desert Food Web

Nevada Environmental Response Trust Site, Henderson, Nevada

Figure 4-1

Drafter: RS
Date: 5/8/2018
Contract Number: 169000 6943
Approved by:
Revised:

APPENDIX A
USEPA ECOLOGICAL SITE VISIT CHECKLIST FOR OU-2

CHECK LIST FOR ECOLOGICAL ASSESSMENT/SAMPLING

Introduction

The checklist that follows provides guidance in making observations for an ecological assessment. It is not intended for limited or emergency response actions (e.g., removal of a few drums) or for purely industrial settings with no discharges. The checklist is a screening tool for preliminary site evaluation andmay also be useful in planning more extensive site investigations. It must be completed as thoroughly as time allows. The results of the checklist will serve as a starting point for the collection of appropriate biological data to be used in developing a response action. It is recognized that certain questions in this checklist are not universally applicable and that site-specificconditions will influence interpretation. Therefore. a site synopsis 1s requested to facilitate final review of the checklist by a trained ecologist.

Checklist

The checklist has been divided into sections that correspond to data collection methods and ecosystem types. These sections are:

I. Site Description
  IA. Summary of Observations and Site Setting

II. Terrestrial Habitat Checklist
  IIA. Wooded
  IIB. Shrub/Scrub
  IIC. Open Field
  IID. Miscellaneous

III. Aquatic Habitat Checklist - Non-Flowing Systems

IV. Aquatic Habitat Checklist - Flowing Systems

V. Wetlands Habitat Checklist

Checklist for Ecological Assessment/Sampling

I. SITE DESCRIPTION

1. Site Name: Nevada Environmental Trust Site Operable Unit 02

Location: Henderson, Nevada

Black Mountain Industrial, Lake Mead Parkway

County: Clark City: Henderson State: Nevada

✓ 2. Latitude: ________ Longitude: ________

✓ 3. What is the approximate area of the site: ________

4. Is this the first site visit? 9 Yes 9 [✓ No] If no, attach trip report of previous site visit(s), if available.

Date(s) of previous site visit(s): December 10-11, 2015

✓ 5. Please attach to the checklist USGS topographic map(s) of the site, if available.

6. Are aerial or other site photographs available? 9 Yes 9 No. If yes, please attach any available photo(s) to the site map at the conclusion of this section.

A photo log is provided as Appendix B for OU2 (eastside + westside).

A photo log for OU1 is provided as Appendix B in the Refined SLERA Work Plan. Maps are also provided.

7.

The land use of the site is:	The area surrounding the site is:
	______ mile radius
Westside OU2	
10 % Urban	30 % Urban
____ % Rural	____ % Rural
75 % Residential	20 % Residential
10 % Industrial (✓ light ___ heavy)	50 % Industrial (✓ light ✓ heavy)
____ % Agricultural	____ % Agricultural
(Crops: 0)	(Crops: ______)
5 % Recreational	____ % Recreational
(Describe: note if it is a park etc.)	(Describe: note if it is a park, etc.)
____ % Undisturbed	____ % Undisturbed
____ % Other	____ % Other

Eastside OU2

20 %.

80% of the Eastside of OU2 is graded dirt in prep for Cadence development

8. Has any movement of soil taken place at the site? 9 [✓ Yes] 9___ No. If yes, please identify the most likely cause of this disturbance:

9 Agricultural Use [✓ 9 Heavy Equipment] 9 Mining

9 Natural Events 9 Erosion 9 Other

Please describe:

Contaminated soil has been removed from the Eastside OU2.

Soil has not been removed from the Westside of OU2 as the Westside had established neighborhoods + light industry.

9. Do any potential sensitive environmental areas exist adjacent to or in proximity to the site, e.g., Federal and State parks, National and State monuments, wetlands, prairie potholes? *Remember, flood plains and wetlands are not always obvious; do not answer "no" without confirming information.*

Las Vegas Wash (approx. 1-3 miles from OU2), Clark County Wetlands Park (approx 5-6 miles from OU2), Henderson Bird Viewing Preserve (approx. 4-6 miles from OU2).

Please provide the source(s) of the information used to identify these sensitive areas, and indicate their general location on the site map.

Google Earth, USGS Topo maps, area maps, site maps, Clark County Multi Species Habitat Conservation Plan

10 What type of facility is located at the site?

OU1 [✓ 9 Chemical] [✓ 9 Manufacturing] 9 Mixing 9 Waste disposal

9 Other (specify) OU2 - residential and residential development

11. What are the suspected contaminants of concern at the site? If know, what are the maximum concentration levels?

OU1 → perchlorate, metals, dioxins, PAHs, Chloroform
OU2 → light industry chemicals only

12. Check any potential routes of off-site migration of contaminants observed at the site:

9 Swales 9 Depressions [✓ 9 Drainage ditches] from OU1 ⊛

9 Runoff 9 Windblown particulates 9 Vehicular traffic

9 Other (specify)____

13. If known, what is the approximate depth to the water table?__________________________

14. Is the direction of surface runoff apparent from site observations? 9 yes [✓ 9 no]. If yes, to which of the following does the surface runoff discharge? Indicate all that apply.

9 Surface water 9 Groundwater 9 Sewer 9 Collection impoundment

15. Is there a navigable waterbody or tributary to a navigable waterbody? 9 yes [✓ 9 no]

⊛ The facility area was graded so that stormwater would be captured on-site. There are also two main designated retention basins and a drainage channel to collect stormwater.

16. Is there a waterbody anywhere on or in the vicinity of the site? If yes, also complete Section III: Aquatic Habitat Checklist – Non-Flowing Systems and/or Section IV: Aquatic Habitat Checklist – Flowing Systems.

9 yes (approx. distance ______________________) [✓ 9 no] The only waterbody on OU2 is a man made pond for the Cadence development.

17. Is there evidence of flooding? 9 yes [✓ 9 no] *Wetlands and flood plains are not always obvious; do not answer "no" without confirming information.* If yes, complete Section V: Wetland Habitat Checklist.

18. If a field guide was used to aid any of the identifications, please provide a reference. Also, estimate the time spent identifying fauna. [Use a blank sheet if additional space is needed for text.]

- The Site recon for OU1 + OU2 was conducted by a certified biologist.
- The Peterson Field Guides were used during each of the Site Recon.

19. Are any threatened and/or endangered species (plant or animal) known to inhabit the area of the site? 9 yes 9 no *If yes, you are required to verify this information with the U.S. Fish and Wildlife Service.* If species' identities are known, please list them next.

There are currently three federally listed species (threatened/endangered) in the vicinity of the study areas. These include the desert tortoise, southwest willow flycatcher, Yellow-billed cuckoo and the Yuma Clapper rail. These species may be found at Clark Co Wetlands Park, the Las Vegas Wash or the City of Henderson bird preserve but are not expected in or around the OU2 study areas do to the lack of riparian habit and highly disturb character of OU2.

20. Record weather conditions at the time this checklist was prepared:

Date: April 23, 2018

~ 80 Temperature (EC/[✓ EF])

7mph NW Wind (direction/speed)

10 % Cloud cover

71°F Normal daily high temperature

0 Precipitation (rain,snow)

II TERRESTRIAL HABITAT CHECKLIST

IIA. WOODED

1. Are there any wooded areas at the site? 9 yes [✓ 9 no] If no, go to Section IIB: Shrub/Scrub.

2. What percentage or area of the site is wooded? (________ % _________ acres). Indicate the wooded area on the site map which is attached to a copy of this checklist. Please identify what information was used to determine the wooded area of the site.

   N/A The only vegetation is occassional and spotty desert scrub. Several planted trees in Pittman Neighborhoo

3. What is the dominant type of vegetation in the wooded area? (Circle one: Evergreen/Deciduous/Mixed) Provide a photograph, if available.

   Dominant plant, if known: N/A

4. What is the predominant size of the trees at the site? Use diameter at breast height.

   9 0 - 6 in. 9 6 - 12 in. 9 >12 in. N/A

5. Specify type of understory present, if known. Provide a photograph, if available.

   Photos of the desert scrub vegetation is provided in the photo log Appendix B.

IIB. SCHRUB/SCRUB

1. Is shrub/scrub vegetation present at the site? [✓ 9 yes] 9 no If no, go to Section IIC: Open Field.

2. What percentage of the site is covered by scrub/shrub vegetation? (5 % _____ acres). Indicate the areas of shrub/scrub on the site map. Please identify what information was used to determine this area.

   Scrub occurs intermittently but sparsely across the OU2 Study area. Highly infrequent in the Westside OU2 area that is residential / light industry.

3. What is the dominant type of scrub/shrub vegetation, if known? Provide a photograph, if available.

   Creosote bush, desert scrub, sagebrush

4. What is the approximate average height of the scrub/shrub vegetation?

   [✓ 9 0 - 2 ft.] 9 2 - 5 ft. 9 > 5 ft.

5. Based on site observations, how dense is the scrub/shrub vegetation?

9 Dense 9 Patchy [✓ 9 Sparse] very sparse

IIC. OPEN FIELD

1. Are there open (bare, barren) field areas present at the site? 9 yes [✓ 9 no] If yes, please indicate the type below:

9 Prairie/plains 9 Savannah 9 Old field 9 Other (specify) ________________

2. What percentage of the site is open field? (__________ % _______ acres). Indicate the open fields on the site map.

3. What is/are the dominant plant(s)? Provide a photograph, if available.

No open fields - See Appendix B.

4. What is the approximate average height of the dominant plant? N/A

5. Describe the vegetation cover: 9 Dense 9 Sparse 9 Patchy

IID. MISCELLANEOUS

1. Are other types of terrestrial habitats present at the site, other than woods, scrub/shrub, and open field? 9 yes 9 [✓ no] If yes, identify and describe them below.

2. Describe the terrestrial miscellaneous habitat(s) and identify these area(s) on the site map.

See the photo log provided as Appendix B in the OU2 SLERA Work Plan.

3. What observations, if any, were made at the site regarding the presence and/or absence of insects, fish, birds, mammals, etc.?

A coyote and small songbirds were observed. There are no waterbodies so no fish were observed. Insects were nearly nonexistent.

4. Review the questions in Section I to determine if any additional habitat checklists should be completed for this site.

N/A.

IA. SUMMARY OF OBSERVATIONS AND SITE SETTING

The ecology of the Eastside/Westside OU2 Study Areas are primarily barren + dry. On the Westside OU2 the area is residential + light industry. The vegetation is man-made landscaping with a few patches of desert scrub less than 2-4 feet high. No mammals were observed. Few song birds.

On the Eastside OU2 Study area there was no vegetation except a few scattered desert scrub. The soil is highly disturbed, removed and graded for the Master-planned Communities (Cadence). There was a higher density of scrub/vegetation to the north end of the Eastside OU2.

A coyote was observed on the north end of Eastside OU2. Several red tailed hawks were also observed to the north nearer to the Las Vegas Wash.

Completed by Linda Martello PhD Affiliation Ramboll

Additional Preparers —

Site Manager John Pekala

Date April 4, 2018

III AQUATIC HABITAT CHECKLIST

Note: Aquatic systems are often associated with wetland habitats. Please refer to Section V, Wetland Habitat Checklist.

1. What type of open-water, non-flowing system is present at the site?

9 Natural (pond, lake)
9 Artificially created (lagoon, reservoir, canal, impoundment) Pond as landscape feature at Cadence development

2. If known, what is the name(s) of the waterbody(ies) on or adjacent to the site?

Cadence Pond

3. If a waterbody is present, what are its known uses (e.g., recreation, navigation, etc.)?

aesthetics

4. What is the approximate size of the waterbody(ies)? <1 acre(s).

5. Is any aquatic vegetation present? 9 yes [✓ 9 no] If yes, please identify the type of vegetation present if known. The only vegetation is the landscaping around the pond

9 Emergent
9 Submergent
9 Floating

6. If known, what is the depth of the water? unknown

7. What is the general composition of the substrate? Check all that apply.

9 Bedrock
9 Boulder (>10 in.)
9 Cobble (2.5 - 10 in.)
9 Gravel (0.1 - 2.5 in.)
[✓ 9 Sand (coarse)]
[✓ 9 Silt (fine)]
9 Marl (shells)
9 Clay (slick)
9 Muck (find/black)
9 Debris
9 Detritus
9 Concrete
9 Other (specify) ______

8. What is the source of water in the waterbody?

9 River/Stream/Creek
9 Surface runoff
9 Groundwater
9 Other (specify) unknown
9 Industrial discharge

9. Is there a discharge from the site to the waterbody? 9 yes [✓ 9 no] If yes, please describe this discharge and its path.

10. Is there a discharge from the waterbody? 9 yes [✓ 9 no] If yes, and the information is available, identify from the list below the environment into which the waterbody discharges.

9 River/Stream/Creek	9 onsite	9 offsite	Distance ________________
9 Groundwater	9 onsite	9 offsite	
9 Wetland	9 onsite	9 offsite	Distance ________________
9 Impoundment	9 onsite	9 offsite	

11. Identify any field measurements and observations of water quality that were made. For those parameters for which data were collected provide the measurement and the units of measure below:

No measurements of this man-made pond were made during the site Recon.

________ Area

________ Depth (average)

________ Temperature (depth of the water at which the reading was taken) __________

________ pH

________ Dissolved oxygen

________ Salinity

________ Turbidity (clear, slightly turbid, turbid, opaque) (Seecchi disk depth _________)

________ Other (specify)

12. Describe observed color and area of coloration.

Dark

13. Mark the open-water, non-flowing system on the site map attached to this checklist.

N/A

14. What observations, if any, were made at the waterbody regarding the presence and/or absence of benthic macroinvertebrates, fish, birds, mammals, etc.?

No organisms were observed. No wildlife was observed as characteristics of pond + landscaped vegetation was non-native or artificially landscaped.

IV AQUATIC HABITAT CHECKLIST – FLOWING SYSTEMS

Not Applicable

Note: Aquatic systems are often associated with wetland habitats. Please refer to Section V, Wetland Habitat Checklist.

1. What type(s) of flowing water system(s) is (are) present at the site? None

9 River
9 Dry wash
9 Artificially created (ditch, etc.)
9 Stream
9 Arroyo
9 Intermittent Stream
9 Creek
9 Brook
9 Channeling
9 Other (specify) ______________________

2. If known, what is the name of the waterbody? ______________________

3. For natural systems, are there any indicators of physical alteration (e.g. channeling, debris, etc.)? 9 yes 9 no If yes, please describe indicators that were observed.

4. What is the general composition of the substrate? Check all that apply.

9 Bedrock
9 Boulder (>10 in.)
9 Cobble (2.5 - 10 in.)
9 Gravel (0.1 - 2.5 in.)
9 Sand (coarse)
9 Silt (fine)
9 Marl (shells)
9 Clay (slick)
9 Muck (find/black)
9 Debris
9 Detritus
9 Concrete
9 Other (specify) ______________________

5. What is the condition of the bank (e.g., height, slope, extent of vegetative cover)?

6. Is the system influenced by tides? 9 yes 9 no What information was used to make this determination?

7. Is the flow intermittent? 9 yes 9 no If yes, please note the information that was used in making this determination.

8. Is there a discharge from the site to the waterbody? 9 yes 9 no If yes, please describe the discharge and its path.

9. Is there a discharge from the waterbody? 9 yes 9 no If yes, and the information is available, please identify what the waterbody discharges to and whether the discharge is on site or off site.

10. Identify any field measurements and observations of water quality that were made. For those parameters for which data were collected, provide the measurement and the units of measure in the appropriate space below:

________ Area

________ Depth (average)

________ Temperature (depth of the water at which the reading was taken) ________

________ pH

________ Dissolved oxygen

________ Salinity

________ Turbidity (clear, slightly turbid, turbid, opaque) (Seecchi disk depth ________)

________ Other (specify)

11. Describe observed color and area of coloration.

12. Is any aquatic vegetation present? 9 yes 9 no If yes, please identify the type of vegetation present, if know.

9 Emergent 9 Submergent 9 Floating

13. Mark the flowing water system on the attached site map.

14. What observations were made at the waterbody regarding the presence and/or absence of benthic macroinvertebrates, fish, birds, mammals, etc.?

V. WETLAND HABITAT CHECKLIST

1. Based on observation and/or available information, are designated or known wetland definitely present at the site? 9 yes [✓ 9 no] No wetland is present at the Site

   Please note the sources of observations and information used (e.g., USGS Topographic Maps, National Wetland Inventory, Federal or State Agency, etc.) To make this determination.

   Site Reconnaissance, Google Earth Maps, historical documents, Site/area reports

2. Based on the location of the site (e.g., along a waterbody, in a floodplain) and site conditions (e.g. standing water, dark, wet soils; mud cracks; debris line; water marks), are wetland habitats suspected? 9 yes [✓ 9 no] If yes, proceed with the remainder of the wetland habitat identification checklist.

3. What type(s) of vegetation are present in the wetland? N/A

   9 Submergent 9 Emergent 9 Scrub/Shrub 9 Wooded

   9 Other (specify) ______

4. Provide a general description of the vegetation present in and around the wetland (height, color, etc.). Provide a photograph of the known or suspected wetlands, if available.

5. Is standing water present? 9 yes 9 no If yes, is water: 9 Fresh 9 Brackish

   What is the approximate area of the water (sq. ft.) ______

   Please complete questions 4, 11, 12 in Checklist III - Aquatic Habitat – Non-Flowing Systems.

6. Is there evidence of flooding at the site? What observations were noted?

   9 Buttressing 9 Water marks 9 Mud cracks

   9 Debris line 9 Other (describe below)

7. If known, what is the source of the water in the wetland? N/A

9 Stream/River/Creek/Lake/Pond 9 Groundwater

9 Flooding 9 Surface Runoff

8. Is there a discharge from the site to a known or suspected wetland? 9 yes [✓ 9 no] If yes, please describe.

Potential impacted Groundwater discharged from the OU1 site to Surface Water at Las Vegas Wash (2.5 miles). Mitigation measures in the form of extraction + treatment system is in place.

9. Is there a discharge from the wetland? 9 yes 9 no If yes, to what waterbody is discharge released?

9 Surface Stream/River 9 Groundwater [✓ 9 Lake/Pond] 9 Marine

The Las Vegas Wash (OU3) empties into Lake Mead

10. If a soil sample was collected, describe the appearance of the soil in the wetland area. Circle or write in the best response. Only historical soil samples will be used

Color (blue/grey, brown, black, mottled) in the OU2 SLERA.

Water content (dry, wet, saturated/unsaturated) ____________________

11. Mark the observed area(s) on the attached site map.

Historical Sampling Locations are shown on Figure 2-4.

APPENDIX B

APRIL 2018 SITE REONNAISSANCE PHOTO LOG FOR OU-2

APPENDIX B-1
EASTSIDE SUB-AREA PHOTO LOG

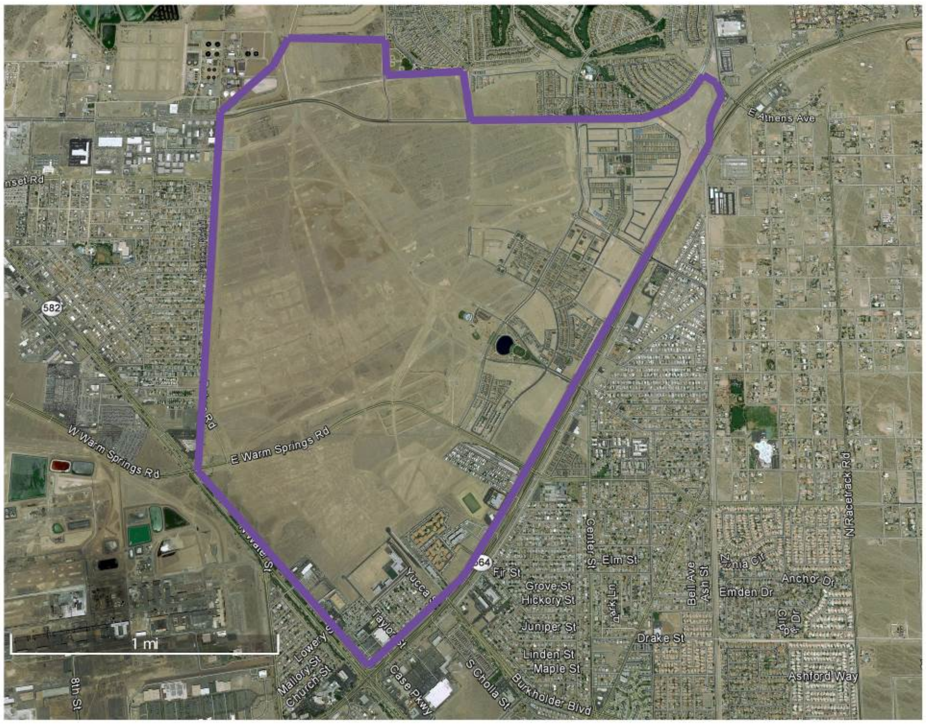


Photo 1: Overview of the Eastside Sub-Area Within OU-2.

Photo 2: Prelude at the Park Apartments. Entrance is just off Lake Mead Pkwy (south end of OU-2) at the corner of Grand Cadence Dr. and Saguaro St.

RAMBOLL	**Site Photographs** Eastside Sub-Area Nevada Environmental Response Trust Site Henderson, Nevada

Photo 3: Pinecrest Academy (Cadence Campus) 225 Grande Cadence Dr. across from the south end of OU-2.

Photo 4: Excavated areas near former BMI ponds.

Photo 5: Excavated areas near former BMI ponds.

Photo 6: Eastside Sub-Area looking south showing soil removal areas.

Photo 7: Eastside Sub-Area looking south.

Photo 8: Eastside Sub-Area – Future Cadence Master-Planned Community.

Photo 9: Eastside Sub-Area – Future Cadence Master-Planned Community.

Photo 10: Eastside Sub-Area – Future Cadence Master-Planned Community.

Photo 11: Sections of Eastside Sub-Area slated for the master-planned community.

Photo 12: Sections of Eastside Sub-Area slated for the master-planned community.

Photo 13: Sections of Eastside Sub-Area slated for the master-planned community.

Photo 14: Looking East across Eastside Sub-Area.

APPENDIX B-2
NERT OFF-SITE STUDY AREA PHOTO LOG

Photo 1: Overview of NERT Off-Site Study Area in OU-2

Photo 2: Illustration of residential neighborhood in the NERT Off-Site Study Area in OU-2

Site Photographs
NERT Off-Site Study Area
Nevada Environmental Response Trust Site
Henderson, Nevada

Photos 3 and 4: Illustration of residential neighborhood in the NERT Off-Site Study Area in OU-2

Photos 5 and 6: Illustration of residential neighborhood and park -- NERT Off-Site Study Area in OU-2