

GEOTECHNICAL RESEARCH REPORT

for

1 ERIC CIRCLE

Verdi, Nevada

Prepared for:

**Gray and Associates
3680 Grant Drive, Ste. B
Reno, NV 89509**

Prepared by:

LUMOS and ASSOCIATES, INC.

800 E. College Parkway
Carson City, Nevada 89706

Tel: (775) 883-7077

Fax: (775) 883-7114

May, 2018

JN: 9400.058



May 14, 2018

Carson City • Fallon • Lake Tahoe • Reno

www.LumosInc.com

Reno
9222 Prototype Drive
Reno, Nevada
775.827.6111

Gray and Associates
3680 Grant Drive, Ste. B
Reno, NV 89506

**RE: Executive Summary
Geotechnical Research Report for the 1 Eric Circle
Verdi, Nevada**

Lumos and Associates (Lumos) has completed its Geotechnical Research Report for the above mentioned project. According to the Soils Survey of Washoe County, Nevada, South Part, the soils on site consist of Dressler loamy sand and Orr stony sandy Loam. These soils are formed in alluvium derived from mixed rock sources. These soils consist of silty sands (SM), clayey sands (SC), poorly graded sands with silt (SP-SM), silty gravels (GM), and poorly graded gravels with silt (GP-GM). According to the Verdi Quadrangle Geologic Map, the soil consists of outwash and terrace deposits of the Truckee River deposits. The site is relatively flat with an estimated inclination of between 2-4%. The site soils, which may be encountered during grading, are potentially susceptible to frost heave and/or shrinkage and swell. These conditions are not uncommon in northwestern Nevada and can be mitigated. The depth to groundwater can be as shallow as 2.5'-3.5' according to the Soils Survey of Washoe County, Nevada, South Part, and therefore, may affect the stability of site soils, and will likely be encountered during utility construction. Potentially active faults (movement within the last 1.8 million to 750,000 years) are mapped within $\frac{3}{4}$ of a mile northeast of the site. These seismic conditions are not uncommon in the northwestern Nevada area.

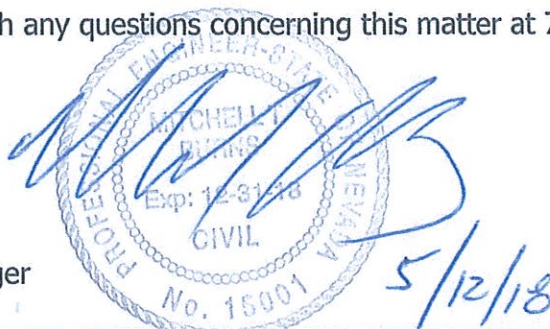
According to aerial photography of the area, the site was developed sometime between 1966 and 1967. The site contains previously placed fill soils, estimated to be on the order of 10 to 15 feet. We understand that a portion of the fill soils contain nickel; however, it is our understanding that these areas are known to the owners and that future development will not encroach on these areas. If these soils are encountered during construction, the owners have a procedure to be followed which is included in a report provided in the appendix. The site currently contains an industrial building, an office building, and four other buildings. Therefore, in order to determine the existing soil conditions underlying the area proposed for expansion, it is advisable that a subsurface exploration be done in the area of the proposed structure to determine the existing conditions of the site soils and recommend mitigation techniques, if warranted, before construction.

In closing, the mapped geotechnical/geological conditions of this site are not uncommon to northwestern Nevada and can be mitigated utilizing conventional engineering and construction practices in the area; therefore the site is suitable for construction subject to further studies.

Please contact our office with any questions concerning this matter at 775-883-7077.

Sincerely,

Mitch Burns, P.E., C.E.M.
Materials Engineering Manager
Lumos & Associates, Inc.



GEOTECHNICAL RESEARCH REPORT

1 Eric Circle

Verdi, Nevada

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GEOTECHNICAL RESEARCH REPORT

for

1 ERIC CIRCLE

Verdi, Nevada

INTRODUCTION

Submitted herewith are the results of Lumos and Associates, Inc. (Lumos) geotechnical research report for the site located in Section 8 of Township 19N Range 18E at 1 Eric Circle located in Verdi, Nevada. The target property consists of one parcel with a hydroelectric power plant to the north, industrial development to the west, U.S. 40 to the south, and the Truckee River to the east. The parcel is identified by the Washoe County Assessor's Office as Assessor Parcel Number (APN) 038-060-36. The entire area is approximately 21.377 acres. The property is currently developed and contains 6 buildings for industrial purposes. A vicinity map and site map are included in this report as Plates 1 and 2.

The purpose of our investigation was to research the general soil conditions and to identify any adverse geologic, soil, or groundwater table conditions. The current scope of work did not include soil sampling, a fault study or any investigation into soil and/or groundwater contamination at the site.

It is possible that subsurface discontinuities are concealed. Such discontinuities are beyond the evaluation of the Engineer at this time. No guarantee of the consistency of site geology and soil conditions is implied or intended.



GEOLOGIC SETTING

The site is located on the eastern flank of the Sierra Nevada Mountains. Verdi is bounded on the west by the tall granite peaks of the Sierra Nevada Mountains along the Truckee River. Volcanic rocks confine Verdi to the north (Peavine Peak). Faults separate Verdi from the surrounding mountains, which is typical of the Basin and Range geomorphic province. Sediments have filled valleys from a number of tributaries and ancestral lakes during the Quaternary period (2 million years to the present). The dominant sediment source has been, and continues to be, the Truckee River and its ancestral counterparts. Stream deposits were particularly voluminous during the past 2 million years after glacial periods. Since the end of the last glacial periods, some 10,000 years ago, arid erosional forces combined with faulting have been the predominant processes to shape the region. These processes have created large alluvial fans that surround the Eagle Valley basin.

The surface geology of the project area has been mapped by John W. Bell and Larry J. Garside, (1987). The mapping indicates outwash and terrace deposits of the Truckee River (Qt_1 and Qt_2) underlie the site. These deposits are known to contain large granite boulders (>3m). Refer to Plate 6

In general, according to the Soil Survey of Washoe County, Nevada, South Part, (1979) the site consists of Dressler loamy sand and Orr stony sandy loam. These soils are formed in alluvium derived from mixed rock sources. According to the Soil Survey of Washoe County, Nevada, South Part, the area has a depth to groundwater of as low as between 2.5 and 3.5 feet. The soils are susceptible to frost heave, and have a low to moderate shrink swell potential. Bedrock is generally located at a depth of greater than 60 inches below existing ground surface. The soils are also characterized as having a moderate to high risk of corrosion to uncoated steel and low risk of corrosion toward concrete.

According to the Flood Insurance Rate Map of the area, a majority of the site is located



in "Zone X", "Areas of Minimal Flood Hazard". The southeastern portion of the site is located in Zone AE, "Special Hazard Area". Refer to Plate 7.

SEISMIC CONSIDERATIONS

Verdi, similar to many areas in Nevada, is located near active faults that are capable of producing significant earthquakes. Refer to Plate 4. Additionally, faults are located as close as approximately $\frac{1}{2}$ to $\frac{3}{4}$ of a mile to the northeast of the site. The faults are Quaternary age faults, which are considered potentially active, having their last movement between 1.8 million and 750,000 years. Refer to Plate 5. The maximum credible earthquake (MCE) for the vicinity of the project is estimated at 7.5 in moment magnitude. This correlates to a modified Mercalli scale of IX-X. Refer to Plate 3.

2012/15 IBC Design: The mapped maximum considered earthquake spectral response acceleration at short periods (S_s) is 1.425g corresponding to a 0.2 second spectral response acceleration at five percent (5%) of critical damping and for a Site Class B (IBC Figure 1613.3.1(1)). The mapped maximum considered earthquake spectral response acceleration at a 1-second period (S_1) is 0.476g corresponding to a 1.0 second spectral response acceleration at five percent (5%) of critical damping and for a Site Class B (IBC Figure 1613.3.1(2)). At this time, the soil conditions are not known in sufficient detail to a depth of 100 feet, thus, a Site Class D may be assumed per the IBC. These spectral response accelerations are adjusted for site class effects because Site Class D is assumed instead of Site Class B. The site coefficient for spectral response accelerations adjustment at short periods (F_a) is 1.00 (IBC Table 1613.3.3(1)). The site class effect for spectral response acceleration adjustment at 1-second periods (F_v) is 1.524 (IBC Table 1613.3.3(2)). The maximum considered earthquake spectral response acceleration parameter for short period (S_{MS}) is 1.425g and for 1-second period (S_{M1}) is 0.725g. This corresponds to design spectral response acceleration parameters of 0.950g for short period (S_{DS}) and of 0.484g for 1-second period (S_{D1}). Refer to Plate 8.



It is emphasized that the above values are the minimum requirements intended to maintain public safety during strong ground shaking. These minimum requirements are meant to safeguard against loss of life and major structural failures. However, they are not intended to prevent damage or insure the functionality of the structure during and/or after a large seismic event.

In conclusion, seismic concerns for this site are not unlike other sites in the area. However, due to the proximity of the site to a number of faults that are considered active, as noted above, strong seismic shaking should be anticipated during the life of any structures.



SITE CONDITIONS

Our scope of work included a site reconnaissance and map studies. During the site reconnaissance, the Geotechnical Engineer walked the site to note site conditions. At the time of our reconnaissance, the site was developed with multiple industrial buildings. The site contains up to between 10' and 15' of previously placed fill. We were notified that a portion of the fill soils contain nickel, however, areas containing nickel affected soil will be avoided for future development. The area of the property proposed for expansion is currently being used as a storage area of old equipment and tools. The area is relatively flat and a portion of the site has asphalt grindings. Stockpiles of site soils, containing a high percentage of cobbles and boulders were also noted during the site visit. Additionally, there is a canal traversing the property flowing from east to west and an "overflow ditch" along the western border of the site. A lined pond is on the eastern portion of the site and monitoring wells are located near this pond. While reviewing the aerial photos of the site, it was noted that the site was developed for industrial use between 1966 and 1967. Prior to that, the site was in agricultural use. A subsurface investigation should be done to further characterize the subsurface conditions.



References

Bell, John W. and Larry J. Garside, 1987, Verdi Quadrangle Geologic Map, Nevada Bureau of Mines and Geology, Reno, NV

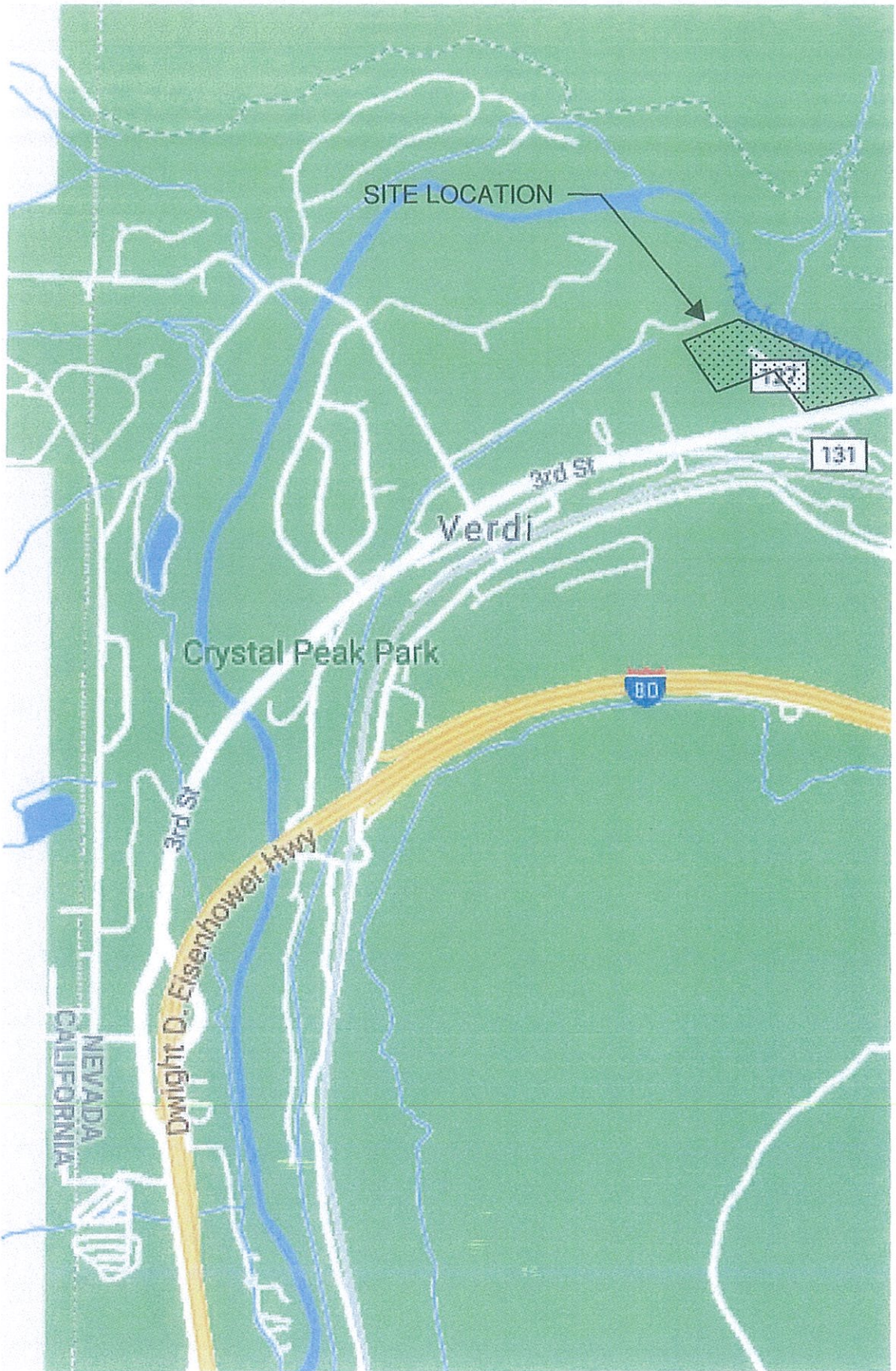
Livermore, Robert, Ramboli, Environ vs Corporation, August 2017 Remediation Report 1 Erik Circle, Verdi Nevada

National Flood Insurance Program (NFIP), Flood Insurance Rate Map (FIRM), Washoe County, Nevada and Incorporated Areas Map Number 32031C3061G

Quaternary Fault Map of Nevada, Nevada Bureau of Mines and Geology Website, <https://gisweb.unr.edu/QuaternaryFaults>

United States Department of Agriculture, Soil Conservation Service, 1979, Soil Survey of Washoe County Area, Nevada, South Part

USGS 2012\15 Website, www.eqdesign.cr.usgs.gov



Lumos and Associates
 800 E. College Parkway
 Carson City, NV 89706
 (775) 883-7077
 Fax: (775) 883-7114
 bsxton@lumosinc.com

1 Eric Circle
VICINITY MAP

Job Number: 9400.058

Date: May, 2018

PLATE

1



SITE LOCATION

NOT TO SCALE



Lumos and Associates
800 E. College Parkway
Carson City, NV 89706
(775) 883-7077
Fax: (775) 883-7114
bsexton@lumosinc.com

1 Eric Circle

SITE MAP

Job Number: 9400.058

Date: May, 2018

PLATE

2

MODIFIED MERCALLI INTENSITY SCALE

INTENSITY

EFFECTS

- I Not felt except by a very few under especially favorable circumstances.
- II Felt only by a few persons at rest, especially on upper floors of buildings. Delicately suspended objects may swing.
- III Felt quite noticeable indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibration like passing of truck. Duration estimated.
- IV During the day felt indoors by many, outdoors by few. At night some awaken. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building; standing motor cars rock noticeably.
- V Felt by nearly everyone; many awakened. Some dishes, windows, etc., broken; a few instances of cracked plaster; unstable objects overturned. Disturbance of trees, poles, and other tall objects sometimes noticed. Pendulum clocks may stop.
- VI Felt by all; many frightened and run outdoors. Some heavy furniture moved; a few instances of fallen plaster or damaged chimneys. Damage slight.
- VII Everybody runs outdoors. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.
- VIII Damage slight in specially designed structures; considerable in ordinary substantial buildings with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Disturbs persons driving motor cars.
- IX Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.
- X Some well-built wooden structures destroyed; most masonry and frame structures with foundations destroyed; ground badly cracked. Rails bent. Landslides considerable from river banks and steep slopes. Shifted sand and mud. Water splashed (sloped) over banks.
- XI Few, if any (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipe lines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.
- XII Damage total. Waves seen on ground surfaces. Lines of sight and level distorted. Objects thrown upward into the air.

From Wood and Newman, 1931, by U.S. Geological Survey, 1974, Earthquake Information Bulletin, v. 6, no. 5, p. 28

Richter Magnitude	Intensity (maximum expected Modified Mercalli)
3.0 - 3.9	II - III
4.0 - 4.9	IV - V
5.0 - 5.9	VI - VII
6.0 - 6.9	VII - VIII
7.0 - 7.9	IX - X
8.0 - 8.9	XI - XII

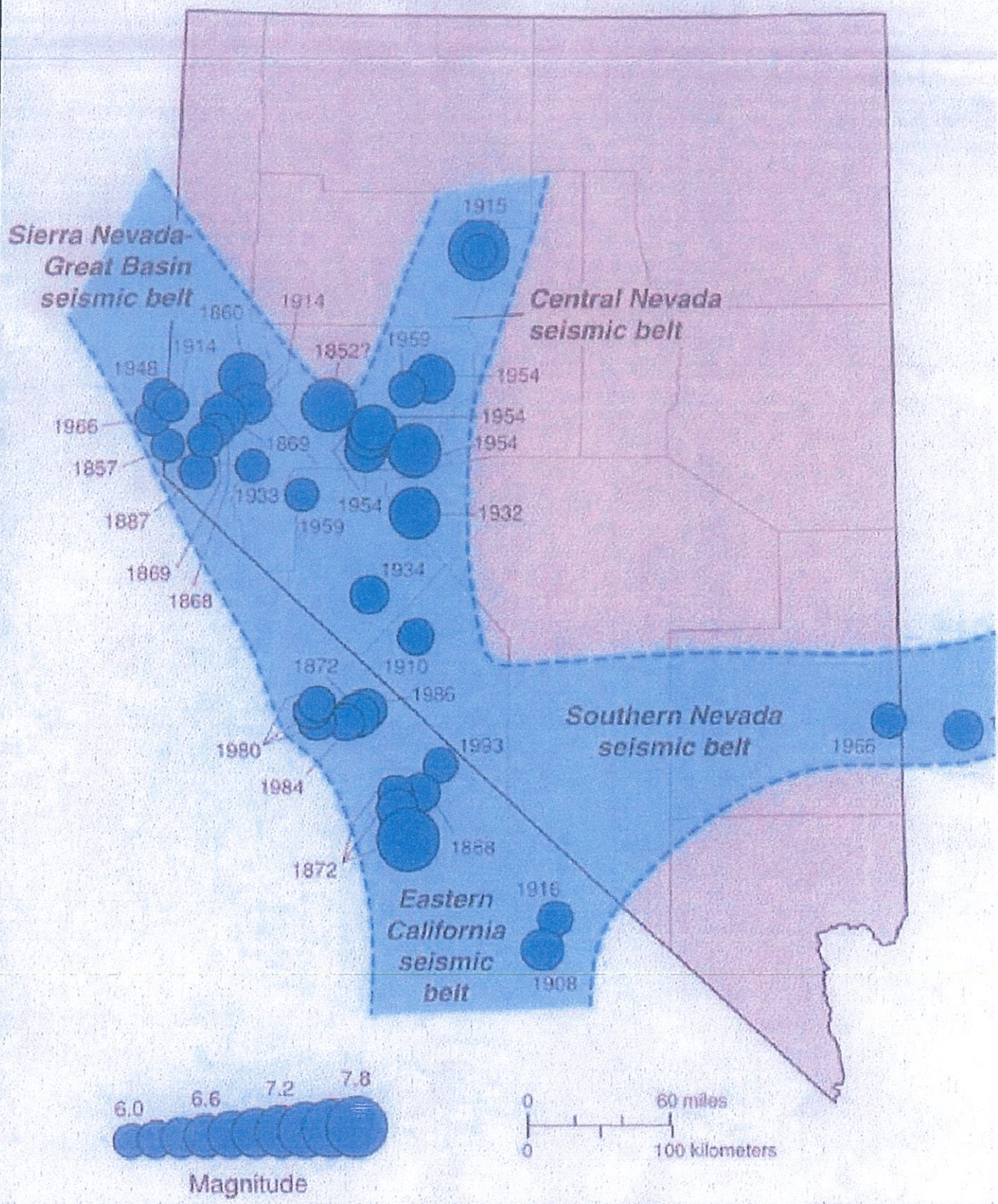


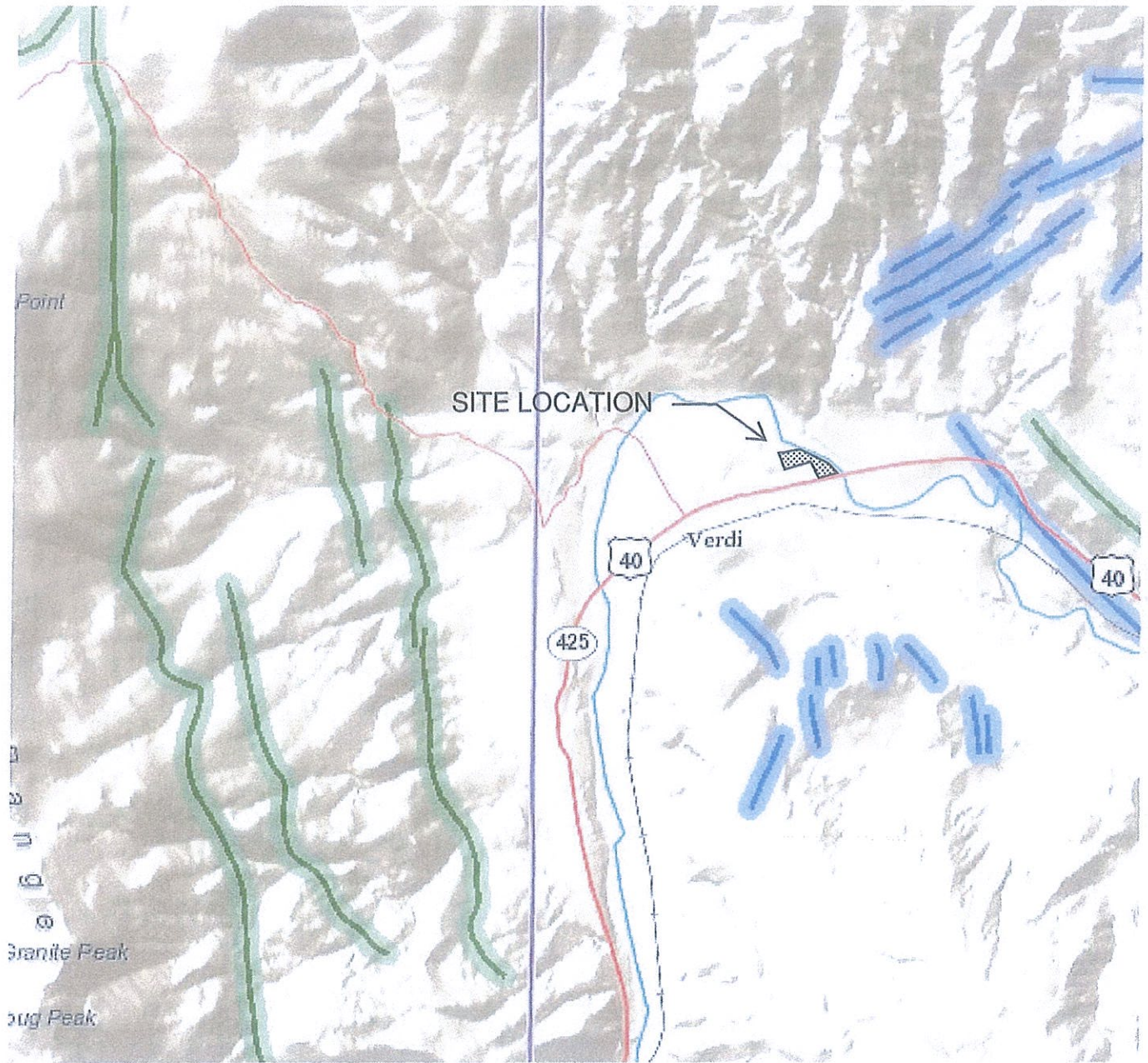
Lumos and Associates
 800 E. College Parkway
 Carson City, NV 89706
 (775) 883-7077
 Fax: (775) 883-7114
 bsxeton@lumosinc.com

1 Eric Circle
**MODIFIED MERCALLI
 SCALE**

**PLATE
 3**

MAJOR EARTHQUAKES AND SEISMIC BELTS





Quaternary Faults

- Historical Ruptures
- <150 years
- Quaternary Faults by Age
- <15,000 years
- <130,000 years
- <750,000 years
- <1.8 million years
- Class B faults
- Unclassified

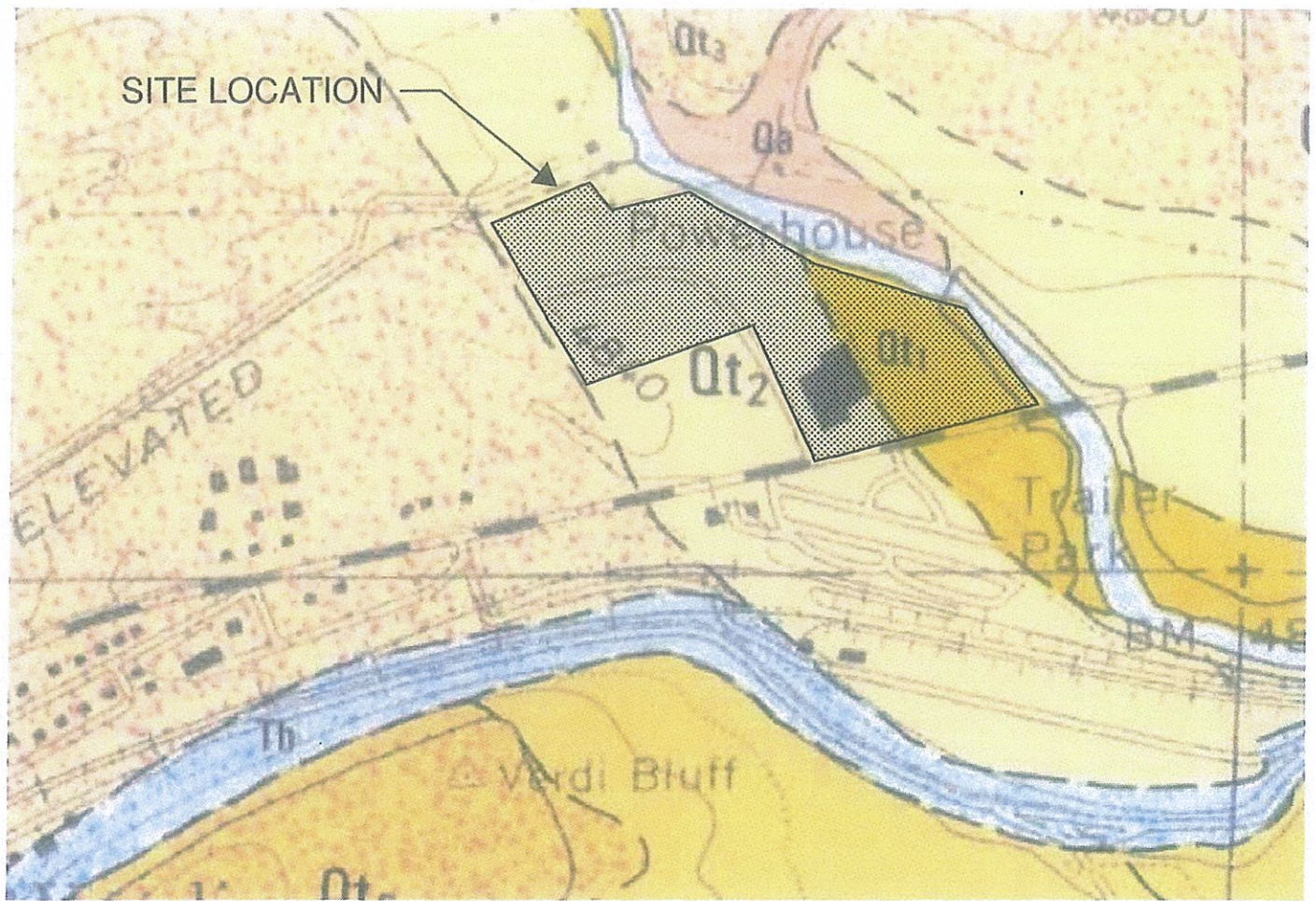
100m Buffer

- Historical Ruptures - 100m Buffer
- <150
- Quaternary Faults by Age - 100m Buffer
- <15,000
- <130,000
- <750,000
- <1,800,000
- Class B faults
- Unclassified

Lumos and Associates
 800 E. College Parkway
 Carson City, NV 89706
 (775) 883-7077
 Fax: (775) 883-7114
 bsxton@lumosinc.com

1 Eric Circle
EARTHQUAKE HAZARDS MAP
 Job Number: 9400.055 Date: May, 2018

PLATE
5



Outwash and terrace deposits of the Truckee River Consist of a sequence of fluvial terraces in ascending order above the present river level: Qt_1 , lowest; Qt_4 , highest. Each deposit consists of a similar pale-brown to light-brownish-gray to brown sandy cobble to boulder gravel and gravelly sand. Clasts consist dominantly of subrounded to rounded andesite and granite with subordinate basalt and metamorphic rocks; moderately to poorly sorted; slightly to moderately consolidated. Qt_1 : late Holocene to modern deposits with little or no soil development. Qt_2, Qt_3 : Tahoe Outwash (Qt_0) contains strong reddish-brown argillic B horizon 0.6-1 m thick; locally contains large (> 3 m diameter) granitic boulders. Qt_4 : Donner Lake Outwash (Qdo) contains strong



Lumos and Associates

800 E. College Parkway
 Carson City, NV 89706
 (775) 883-7077
 Fax: (775) 883-7114
 bsxton@lumosinc.com

1 Eric Circle

GEOLOGIC MAP

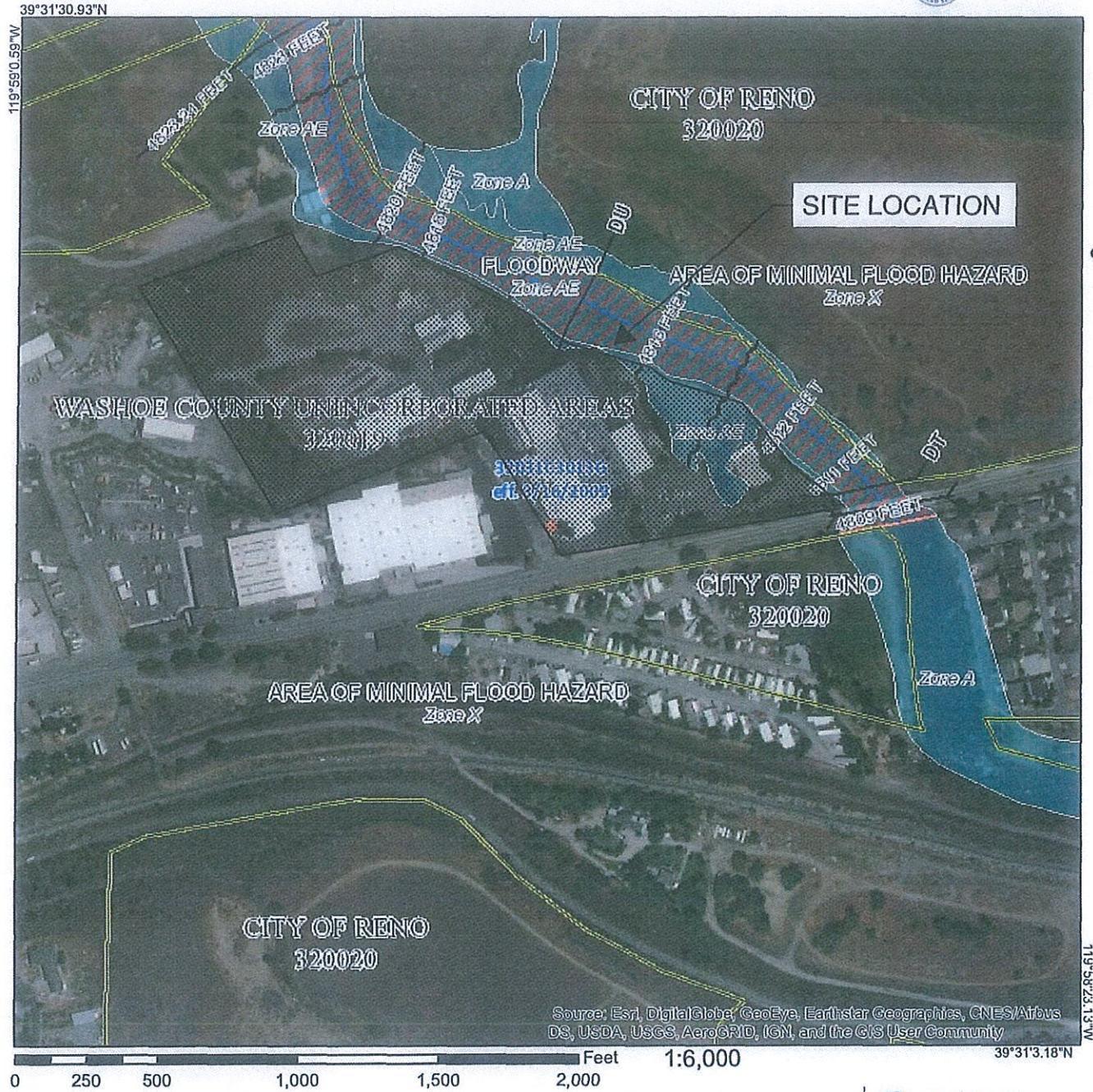
Job Number: 9400.058

PLATE

6

Date: May, 2018

National Flood Hazard Layer FIRMette



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

Legend

SEE HIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth
OTHER AREAS OF FLOOD HAZARD		Regulatory Floodway Zone AE, AO, AH, VE, AR
		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Roodwall
- Cross Sections with 1% Annual Chance
- Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

OTHER FEATURES

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/22/2018 at 12:12:18 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: base map imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Lumos and Associates
 800 E. College Parkway
 Carson City, NV 89706
 (775) 883-7077
 Fax: (775) 883-7114
 bsxeton@lumosinc.com

1 Eric Circle
FLOOD INSURANCE RATE MAP
 Job Number: 9400.058 Date: May, 2018

PLATE
7

USGS Design Maps Summary Report

User-Specified Input

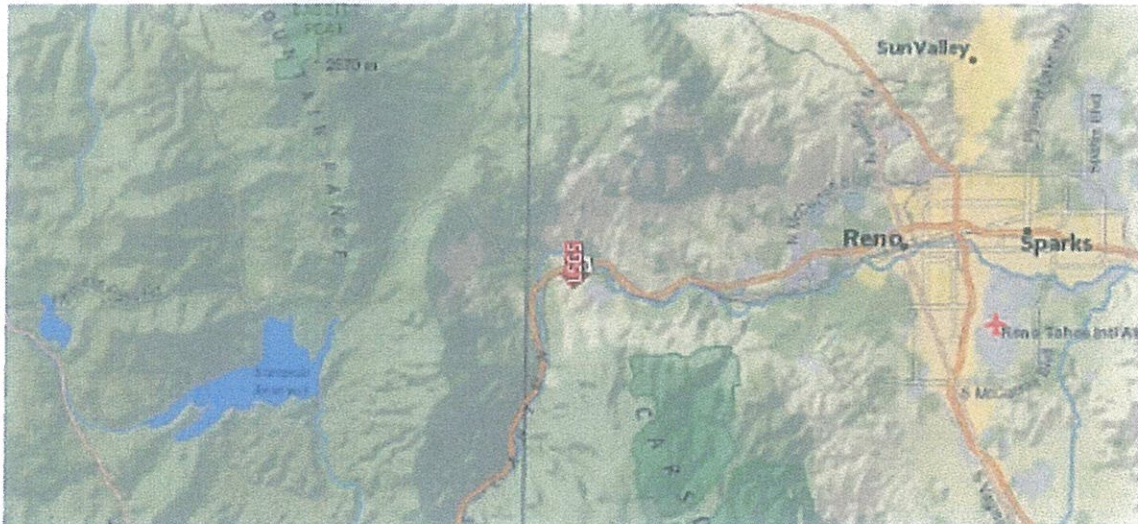
Report Title 1 Eric Circle
Sat May 12, 2018 18:15:05 UTC

Building Code Reference Document 2012/2015 International Building Code
(which utilizes USGS hazard data available in 2008)

Site Coordinates 39.52173°N, 119.97853°W

Site Soil Classification Site Class D - "Stiff Soil"

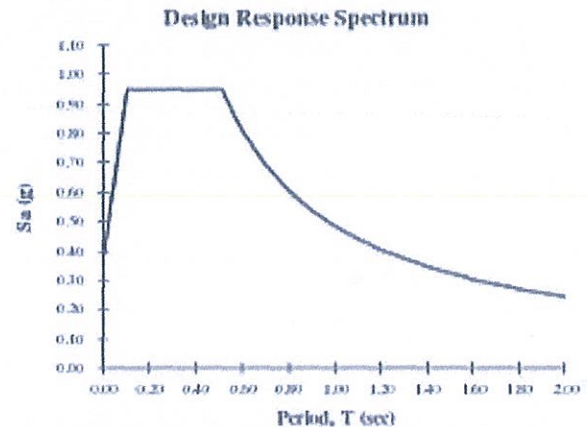
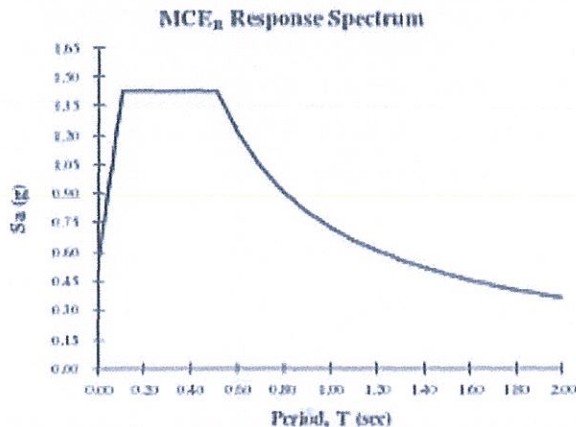
Risk Category I/II/III



USGS-Provided Output

$S_5 = 1.425 \text{ g}$	$S_{M5} = 1.425 \text{ g}$	$S_{D5} = 0.950 \text{ g}$
$S_1 = 0.476 \text{ g}$	$S_{M1} = 0.725 \text{ g}$	$S_{D1} = 0.484 \text{ g}$

For information on how the S_5 and S_1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.



Although this information is a product of the U.S. Geological Survey, we provide no warranty, expressed or implied, as to the accuracy of the data contained therein. This tool is not a substitute for technical subject-matter knowledge.



Lumos and Associates
800 E. College Parkway
Carson City, NV 89706
(775) 883-7077
Fax: (775) 883-7114
bsexton@lumosinc.com

1 Eric Circle
**DESIGN RESPONSE
SPECTRUM**

Job Number: 9400.058

Date: May, 2018

PLATE

8

APPENDIX

Prepared for Submission to:
Washoe County Health District

Prepared on Behalf of:



Prepared By:
Ramboll Environ US Corporation
Arlington, Virginia

Date
August 2017

Project Number
01-40267B

REMEDIATION REPORT

1 ERIK CIRCLE, VERDI, NEVADA

REMEDICATION REPORT
1 ERIK CIRCLE, VERDI, NEVADA

Revision **00**
Date **August 2017**
Made by **Christopher Bowles**
Checked by **Sarah Stoneking**
Approved by **Adam Johnston**
Description **Remediation Report**
 Former Schlosser Forge Company – Viking Metallurgical
 1 Erik Circle, Verdi, NV

Ref 01-40267B

Ramboll Environ
4350 North Fairfax Drive
Suite 300
Arlington, VA 22203
USA

T +1 703 516 2300
F +1 703 516 2345
www.ramboll-environ.com

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- Figure 1: Site Layout
Figure 2: Extent of Excavation Areas
Figure 3: Soil Management Area

APPENDICES

- Appendix A: Soil Disposal Documentation
Appendix B: Photolog
Appendix C: Dig Permit
Appendix D: Soil Management Plan

1. INTRODUCTION

At the request of Washoe County Health District, and on behalf of Arconic, Ramboll Environ US Corporation (Ramboll Environ) provided technical oversight of remediation activities conducted at the Schlosser Forge Company – former Viking Metallurgical property located at 1 Erik Circle in Verdi, Nevada (Figure 1; the “Site”). The remediation activities included the excavation and off-site disposal of nickel impacted surface soils in three areas of the site, located north of the Former RAM building, to address potential direct contact hazards (Figure 2). Remediation activities were conducted in accordance with, *Remediation Plan, 1 Erik Circle, Verdi, Nevada*, prepared by Ramboll Environ and dated November 2016; the Remediation Plan was approved by the Washoe County Health District in a letter dated December 1, 2016.

An overview of the facility background including current and historical operations and ownership is provided in Section 2 of this document. Section 3 provides information relating to prior site investigations and Section 4 provides a summary of site remediation activities.

2. FACILITY BACKGROUND

2.1 Current Operations

Schlosser Forge Company operates the site for the manufacture of metal rings used in jet engines. Specific operations include coating of pre-cut metal billets with a silica-based forging lubricant; pre-heating of coated metal in 19 natural gas-fired furnaces; grinding and conditioning; waterjet cutting and other machine shop operations (four computer-numeric control [CNC] machines and seven manual machines); molding of metal rings using hydraulic ring rolling mills and expanders; heat treating of parts in belowground water baths containing corrosion inhibitors; and finishing. The site also conducts a number of activities in support of the major operations, including operation of an oil-water separator; cooling tower operations; quality control testing in an on-site laboratory; general building and machinery/equipment maintenance; and operation of approximately 15 forklifts or industrial trucks (forge area trucks are diesel-fueled and machine shop/maintenance area trucks are propane-fueled). The facility also performs associated packaging, shipping, and administrative activities, which do not involve the use of significant quantities of chemicals.

The primary raw materials used at the site include pre-cut metal billets (namely, titanium and several alloys), lubricant oils, hydraulic oils, coolant, and welding gases. The site also uses non-chlorinated petroleum distillate solvents for parts washing, as well as maintenance quantities of paints, lubricants, sealants, cleaners, and adhesives.

According to facility personnel, operations at the site have remained generally consistent over time during Schlosser Forge Company's period of occupancy at the facility and occupancy by the previous site operators. However, a number of operational changes have occurred in recent years, including the decommissioning of a cogging press, formerly located in the Former RAM Building and decommissioning of a titanium chip washing unit located in the Former RAM Building. Three USTs, which historically collected oily wastewater from the chip washing unit were removed in 2011.

2.2 Historical Operations

The site was first developed as a ranch (Katz Ranch) prior to the late 1960s. In the late 1960s, the first site building was constructed and the site was used for forging-related operations. The site was used as a forge from 1967 to the mid-1970s. While the exact site owners/operators and dates of occupancy during this time are not known, during the mid-1970s the site was operated by Viking Metallurgical Corporation (Viking). Viking was acquired by Quanex Corporation (Quanex; formerly known as Michigan Seamless Tube Company) in 1976. In 1993, Firth Rixson purchased the site from Quanex. Based on historical aerial photographs and a prior Phase I ESA from 2007, the original Forge Building was expanded between 1967 and 1973 to include the current shipping and machine shop areas. By 1980, the Forge Building had been further expanded to include the current maintenance area and office areas, and by 1990 the Conditioning Building and Former RAM Building had been constructed. In the 1990s, the Heat Treat Building and Former Office Buildings were constructed and the Forge Building was expanded. Alcoa, Inc., (Alcoa) acquired Firth Rixson in November 2014. In late 2016, Alcoa split into two companies – Alcoa and Arconic. The facility is currently owned by Arconic and operated by Schlosser Forge Company.

3. SUMMARY OF INVESTIGATION ACTIVITIES

3.1 July and August 2015

Alcoa acquired the site in November 2014. Ramboll Environ was retained by Alcoa to conduct limited soil and groundwater testing at the site as part of post-acquisition due diligence activities in July and August 2015. On September 3, 2015, Alcoa contacted the Nevada Division of Environmental Protection (NDEP) to report the discovery of chemical compounds in site soil and groundwater at concentrations in excess of allowable concentrations. More specifically:

- Nickel, total petroleum hydrocarbons (TPH)-diesel range organics (DRO), and TPH-oil range organics (ORO) were identified in soil samples, in excess of NDEP reportable concentrations for these compounds, from soil borings drilled in an area north of the former RAM building where three former oily wastewater underground storage tanks (USTs) were historically located. The former tanks were removed in 2011 by a prior site owner/operator. Maximum detected concentrations in soil were:
 - Nickel – 15,000 milligrams per kilogram (mg/kg).
 - TPH-DRO – 810 mg/kg.
 - TPH-ORO – 9,000 mg/kg.

TPH was not detected in groundwater in this area of the site. Groundwater at this location was not analyzed for the presence of metals (note that, no reportable concentration has been established for nickel in groundwater due to its low toxicity).

- Bis (2-ethylhexyl) phthalate was identified in groundwater in excess of the NDEP reportable concentration for the compound on the southeast side of the main site building at a concentration of 40 micrograms per liter ($\mu\text{g/L}$). This compound was identified in only one of five groundwater samples and was not detected in soil. Arconic is not aware of a potential source at the site for the bis (2-ethylhexyl) phthalate, which is commonly used in industrial settings as a plasticizer.

Alcoa provided an initial response to the NDEP Request for Information to the Washoe County Health District in a letter dated October 29, 2015. The NDEP subsequently issued a Request for Information, including the preparation of a work plan to further evaluate the nature and extent of nickel and petroleum hydrocarbons in soil. In response to the Request for Information, Ramboll Environ prepared and submitted to Washoe County Health District a Work Plan for Supplemental Investigation dated December 3, 2015; the Work Plan for Supplemental Investigation was approved by Washoe County Health District in a letter dated December 15, 2016.

3.2 March 2016 Investigation Activities

In March 2016, Ramboll Environ conducted supplemental site investigation activities, as described in the December 2015 Work Plan, to further investigate the nature and extent of nickel and petroleum hydrocarbons in soil near the former oily wastewater USTs located north of the Former RAM Building, and to further evaluate the presence of bis (2-ethylhexyl) phthalate in groundwater near the southeast side of the main site building. A summary of the investigation activities including a discussion of the analytical results was provided to the

Washoe County Health District in the *Supplemental Investigation Report, Former Firth Rixson Site, Verdi, Nevada*, dated June 2016. Conclusions in the Supplemental Investigation Report include the following:

TPH-DRO

No TPHs were identified in surface soil (based on field screening) and detections at-depth appear to be sporadically located within the investigation area. The distribution of exceedances of applicable regulatory criteria for TPH is not indicative of a significant release, but rather is more likely indicative of the sporadic presence of this compound in fill material or minor historical releases. Although measured concentrations of TPH-DRO exceed the United States Environmental Protection Agency (USEPA) Soil Screening Level (SSL) for protection of groundwater at some locations, TPH-DRO was not identified in groundwater beneath this area of the site during the 2015 investigation. As such, neither direct contact with TPH-affected soil, nor migration to groundwater, appear to be complete pathways and remediation to address TPH was not warranted. Washoe County Health District and NDEP concurred with this conclusion.

Bis (2-ethylhexyl) Phthalate

Bis (2-ethylhexyl) phthalate was identified in groundwater at location BH-7 at a concentration that exceeds the NDEP reportable concentration during 2015 activities. At the request of NDEP and Washoe County Health District, an additional groundwater sample was collected for analysis of semi-volatile organic compounds (SVOCs) at a location downgradient of BH-7 (BH-21). No SVOCs, including bis (2-ethylhexyl) phthalate, were detected in soil or groundwater at BH-21. Ramboll Environ nor Schlosser Forge Company are aware of potential current or historical sources of bis (2-ethylhexyl) phthalate at the plant. Based on the results of the investigation activities and the absence of an identified source for bis (2-ethylhexyl) phthalate, no further action is warranted to address the prior detection.

Nickel

Nickel was identified in soil in the area of the former RAM Building and former oily wastewater USTs at concentrations exceeding the USEPA Industrial Regional Screening Level (RSL) (2,200 mg/kg) and SSL for protection of groundwater (2.6 mg/kg). Concentrations of nickel in surface soil samples at four locations exceeded the Industrial RSL.

Within the subsurface, soils with concentrations of nickel exceeding the Industrial RSL were detected at depths of up to 10 feet below ground surface (bgs). Nickel concentrations in soil appear to decrease significantly with depth prior to reaching the groundwater table. As such, vertical delineation of nickel in excess of the Industrial RSL has been achieved. Although measured concentrations of nickel exceed the SSL for protection of groundwater in select soil samples, no MCLs have been established by NDEP or the USEPA for nickel due its low toxicity.

Washoe County Health District approved the *Supplemental Sampling Report* in a letter dated June 27, 2016 and requested the preparation of a remediation plan to address surface soil nickel contamination. Following further review of the data, representatives of Alcoa (now Arconic) and Ramboll Environ determined that development of the remediation plan would further benefit from additional delineation sampling. Following a verbal discussion with

Washoe County Health District, Alcoa submitted a Conceptual Remediation Work Plan dated August 5, 2016¹ to Washoe County Health District that provided a work plan for the collection of additional delineation soil samples and also outlined a conceptual remediation strategy for the nickel-impacted soils. The Conceptual Remediation Work Plan was approved by Washoe County Health District on August 24, 2016 and the additional delineation sampling was conducted in September 2016.

3.3 September 2016 Delineation Sampling

Sampling activities conducted in September 2016 focused on further delineating the extent of nickel-impacted surface soils to aid in the development of a remediation work plan. An additional 17 soil samples were collected from the upper six inches of soil for analysis of nickel. Of the 17 samples, 9 soil samples were submitted to the analytical laboratory for immediate analysis of nickel; the remaining 8 soil samples were placed on hold at the analytical laboratory for potential analysis, pending results for the other samples. Following receipt of preliminary analytical results, two additional soil samples were released for analysis, resulting in the analysis of 11 soil samples.

Of the eleven soil samples submitted for analysis, nickel was detected in one sample at a concentration (17,000 mg/kg) exceeding the Industrial RSL. The remaining ten samples contained nickel at concentrations below the Industrial RSL. Based on the delineation sample results, in combination with prior sample results, Ramboll Environ identified three distinct areas where the surface soils appeared to be impacted by nickel (Figure 2); the results of the multiple sampling events provided horizontal delineation of impacts in surface soils. The three areas are designated as Area 1, Area 2, and Area 3 and were described in greater detail in the Remediation Work Plan, which was approved by Washoe County Health District on December 1, 2017; the Remediation Work Plan also presents the results of the September 2016 delineation sampling in greater detail.

¹ *Conceptual Remediation Work Plan, 1 Erik Circle, Verdi, Nevada, Facility ID D-001120, Activity 4, Spill Report No. 150903-04*, prepared by Ramboll Environ and dated August 2016.

4. SUMMARY OF REMEDIATION ACTIVITIES

4.1 Remedial Action Objectives

Based on the results of the investigation activities described in Section 3 of this report, the following remedial action objectives were identified:

- Protection of current site workers from direct contact with or inhalation of soils containing nickel in excess of the Industrial RSL;
- Protection of future site workers or construction workers based on direct contact with or inhalation of soils containing nickel in excess of the Industrial RSL; and
- Conformance with regulations and guidance established by the NDEP and Washoe County Health District.

In order to meet the remedial action objectives, the Remediation Plan called for the excavation and off-site disposal of nickel-affected surface soils in three areas of the site in conjunction with the establishment of institutional controls to manage risk to current site workers. The Remediation Plan also included provisions for the use of institutional controls including a dig permit process, a soil management plan and land use restrictions, to mitigate risk to future site workers. These actions conform to regulations and guidance established by NDEP and Washoe County Health District.

Remediation activities were conducted in accordance with the approved Remediation Plan on July 24 to July 28, 2017. Soil excavation activities were conducted by Tetra Tech, and oversight was provided by Ramboll Environ. Nickel-affected soils within the upper two feet were excavated and disposed off-site, and were subsequently replaced with clean fill. This action effectively eliminated potential exposure pathways for routine site workers (i.e., direct contact with, ingestion of, or inhalation of nickel-affected soils, and is also intended to be compliant with rules and guidance established or adopted by NDEP and Washoe County Health District. A Soil Management Plan and dig permit process have been established for the site and Schlosser Forge Company is in the process of establishing a land use restriction for the property. These actions are described below.

4.2 Pre-Excavation Planning

Prior to the initiation of the remediation activities, Ramboll Environ attended an on-site meeting with facility personnel, and with representatives of Tetra Tech, to review health and safety procedures and the proposed soil excavation activities, and to coordinate with facility personnel to minimize disturbance to facility operations during the remediation activities. Ramboll Environ and Tetra Tech also collected additional soil characterization samples to meet the landfill requirements for documentation of soil quality.

The extent of each excavation area was marked out using ArcGIS Collector in connection with a hand-held Trimble global positioning satellite (GPS) unit. Spectrum Geophysics was retained to check for the presence of subsurface utilities within and immediately surrounding each of the excavation areas.

4.3 Excavation and Off-Site Disposal of Nickel-Impacted Surface Soils

Affected surface soil was excavated from the upper two feet of Areas 1, 2 and 3 (Figure 2) using a combination of a hydraulic excavator and hand digging. A water spray was used to control dust during excavation activities. Throughout the excavation process, Ramboll Environ confirmed the depth of soil excavation to be a minimum of two feet. The depth of excavation was also re-confirmed prior to backfilling. Due to the very rocky nature of the site soils, the overall depth of excavation was closer to 2.3 to 2.5 feet over portions of the excavations. Large boulders encountered during the excavation were hand scraped and returned to the excavations. Soils were loaded directly into dump trucks and were transported by Sierra Rental and Transport (SRT) to Lockwood Regional Landfill in Sparks, Nevada; soils from Area 2 were placed into a biotreatment cell at Lockwood Regional Landfill due to the additional presence of total petroleum hydrocarbons. A total of 23 truckloads carrying an estimated 15 to 18 cubic yards of soil each, were transported off-site for disposal.² This resulted in excavation areas measuring approximately 912 square feet (Area 1); 1,114 square feet (Area 2) and 1,945 square feet (Area 3). The extent of the excavated areas is depicted on Figure 2. Following excavation of impacted soils to the target depth, each excavation was lined with blaze orange polyvinyl snow fencing to create a visible marker, and backfilled with clean fill material obtained from Rilite Aggregate Company. A total of 23 truckloads of clean fill material, totaling approximately 480.4 tons, was imported to the site to backfill the excavation areas. Fill material was compacted using the weight of the excavator and the excavator bucket. Material was subsequently graded to promote runoff of storm water and prevent pooling. Soil Disposal documentation is included in Appendix A.

The horizontal extent of each excavation was confirmed by a Nevada licensed land surveyor working for Battle Born Ventures. The final grade of the ground surface was also checked to ensure that the grade would allow for future surface water drainage during rain events. A photolog documenting the work is included as Appendix B.

4.4 Digging Permit and Soil Management Plan

Surface soils containing nickel in excess of the USEPA Industrial RSL were excavated and disposed off-site as described in Section 5.1. Remaining soils containing nickel at concentrations exceeding the USEPA Industrial RSL for nickel, and present at depths in excess of 2 feet bgs, will be managed under a Digging Permit and Soil Management Plan, which will be implemented and maintained by Schlosser Forge Company. The newly implemented dig permit process at the site requires that a dig permit be obtained from the EHS Manager for the site prior to the conduct of activities that penetrate the ground surface at the Verdi facility; a copy of the dig permit is included as Appendix C. During the Digging Permit review process, the proposed work area will be checked against the designated Soil Management Area (SMA). If the proposed activities include subsurface work within the SMA, the SMP includes specific provisions that must be followed in order to protect worker safety; characterize the soils that will be disturbed; provide for appropriate management of potentially impacted soils, and ensure that such activities are appropriately documented. A

² Volumes are approximate. The landfill charged disposal fees on a per truckload basis; the first truckload of soil was estimated at 18 cubic yards and arrived at the landfill overweight. Subsequent trucks were loaded with approximately 16 cubic yards of soil in order to meet weight limitations. The last truckload was estimated at 15 cubic yards.

copy of the Digging Permit is included as Appendix C and a copy of the Soil Management Plan is included as Appendix D; the SMA is shown on Figure 3. Ramboll Environ is in the process of working with a Nevada Licensed Land Surveyor to prepare a certified drawing depicting the extent of the SMA; a copy of the survey figure will be provided to Washoe County Health District upon receipt.

The Digging Permit and Soil Management Plan will be implemented any time subsurface and/or invasive work is being conducted within the designated Soil Management Area. As such, in-situ management of remaining nickel affected soils under the proposed Digging Permit and Soil Management Plan will be protective of current and future site workers, construction workers, or utility workers in the event that soils at depths greater than two feet bgs must be disturbed in the future. A final copy of the Digging Permit and Soil Management Plan will be provided in the final report.

4.5 Institutional Controls

Schlosser Forge Company is in the process of implementing a land use deed restriction that will limit future site use to non-residential use. A land use deed restriction will ensure that the post-remediation site conditions remain protective of human health. Implementation of the land use deed restriction will ensure that land use will not be modified to residential use in the future without further evaluation (and, potentially, remediation) of site conditions. Schlosser Forge Company is waiting on the receipt of a survey drawing which is necessary in order to establish the land use restriction. A copy of the land use deed restriction will be forwarded to Washoe County Health District upon receipt.

5. REFERENCES

Ramboll Environ. 2016. *Remediation Plan, 1 Erik Circle, Verdi, Nevada*. November.

Ramboll Environ. 2016. *Supplemental Investigation Report, Former Firth Rixson Site, Verdi, Nevada*. June.

Ramboll Environ. 2015. *Work Plan for Supplemental Investigation, 1 Erik Circle, Verdi, Nevada, Facility ID D-001120, Activity 4, Spill Report No. 150903-04*. December 3.

Ramboll Environ. 2015. *Letter re: Request for Release/Spill Information, 1 Erik Circle, Verdi, Nevada, Facility ID D-001120, Activity 4, Spill Report No. 150903-04*. October 29.

01-40267B\PRIN_WP\44340v1

REMEDIATION REPORT

Former Schlosser Forge Company – Viking Metallurgical Facility Verdi, 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.



Robert Livermore, CEM
Principal

August 10, 2017

Date

Certified Environmental Manager
Ramboll Environ US Corporation
CEM Certificate Number: 1050
CEM Expiration Date: November 23, 2018

The following individuals provided input to this document:

Sarah E. Stoneking
Robert Livermore, CEM
Rohan Chaudhary

FIGURES

DRAWN BY: RCM

DATE: 8/4/17



SITE LAYOUT
FORMER SCHLOSSER FORGE COMPANY
1 ERIK CIRCLE
VERDI, NEVADA

#

FIGURE 1
013772C



RAMBOLL ENVIRON

DRAFTED BY: RGM DATE: 8/3/2017



EXTENT OF EXCAVATED AREAS (JULY 2017)
 FORMER SCHLOSSER FORGE COMPANY
 1 ERIK CIRCLE
 VERDI, NEVADA

SOURCE:
 AERIAL IMAGERY: Google Earth, July, 2017.
 0 30
 SCALE IN FEET

FIGURE 2

PROJECT: 01-37772

DRAFTED BY: RGN

DATE: 8/2/2017

RAMBOLL ENVIRON

SOIL MANAGEMENT AREA
FORMER SCHLOSSER FORGE COMPANY
1 ERIK CIRCLE
VERDI, NEVADA

PROJECT: 01-3772C

FIGURE 3



SOURCE:
AERIAL IMAGERY: Google Earth, July, 2017.
Note: Location of the ground surface within the Soil Management Area depicted herein requires prior written approval to Arcenic Health and safety lead and is subject to specific work considerations.

REMEDICATION REPORT
1 ERIK CIRCLE, VERDI, NEVADA

APPENDIX A
SOIL DISPOSAL DOCUMENTATION

Summary of Off-Site Soil Transportation			
Date	Manifest No.	Area	Volume (cu yds)
07/24/2017	WM-AV-072017-001	Area 1	18
07/25/2017	WM-AV-072017-002	Area 1	16
07/25/2017	WM-AV-072017-003	Area 1	16
07/25/2017	WM-AV-072017-004	Area 1	16
07/25/2017	WM-AV-072017-005	Area 1	16
07/25/2017	WM-AV-072017-006	Area 1/Area 3	16 (11 cu yd/5 cu yd)
07/25/2017	WM-AV-072017-007	Area 3	16
07/25/2017	WM-AV-072017-008	Area 3	16
07/25/2017	WM-AV-072017-009	Area 3	16
07/25/2017	WM-AV-072017-011	Area 3	16
07/26/2017	WM-AV-072017-012	Area 3	16
07/26/2017	WM-AV-072017-013	Area 3	16
07/26/2017	WM-AV-072017-014	Area 3	16
07/26/2017	WM-AV-072017-015	Area 3	16
07/26/2017	WM-AV-072017-016	Area 3	16
07/26/2017	WM-AV-072017-017	Area 2	16
07/26/2017	WM-AV-072017-018	Area 2	16
07/26/2017	WM-AV-072017-019	Area 2	16
07/26/2017	WM-AV-072017-020	Area 2	16
07/26/2017	WM-AV-072017-021	Area 2	16
07/27/2017	WM-AV-072017-022	Area 2	15
07/27/2017	WM-AV-072017-023	Area 2	16



NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST		1. Generator's US EPA ID No. NVD982463010	Manifest Doc No. 0079247	2. Page 1 of 1
3. Generator's Mailing Address: Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439		Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439		A. Manifest Number WM AV-072017-001
4. Generator's Phone 775-345-0345		B. State Generator's ID Nevada Generator ID		
5. Transporter 1 Company Name Sierra Rental and Transport (SRT) USDOT 41412		6. US EPA ID Number NA		C. State Transporter's ID NA
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone 775-358-7344
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434		10. US EPA ID Number NA		E. State Transporter's ID State Transporter ID
				F. Transporter's Phone Transporter's Phone
				G. State Facility ID State Facility ID
				H. State Facility Phone 800-963-4776

GENERATOR

11. Description of Waste Materials	12. Containers		13. Total Quantity	14. Unit Wt./Vol.	1. Misc. Comments
	No.	Type			
a. Non Regulated Material – Non Hazardous Soil (Area 1 and 3 - Nickle Impacted Soil) WM Profile # 117132NV	1	DT	18	Y	Comments
b. Waste Material WM Profile #					Comments
c. Waste Material WM Profile #					Comments
d. Waste Material WM Profile #					Comments
J. Additional Descriptions for Materials Listed Above	K. Disposal Location Direct Landfill				
	Cell			Level	
	Grid				

15. Special Handling Instructions and Additional Information

Purchase Order # 1140615 EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)

16. GENERATOR'S CERTIFICATE:
I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Printed Name Lynzie Diehl, EHS Manager, Arconic Verdi Operations
Signature Month 07, Day 24, Year 2017

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed Name Mike McKay Signature Month 07, Day 24, Year 2017

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed Name CBO Signature Month, Day, Year

FACILITY

19. Certificate of Final Treatment/Disposal
I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.
Printed Name CBO Signature Month 07, Day 24, Year 2017



2401 Canyon Road
 Sparks, NV, 89434
 Ph: 775-342-0401

Refuse, Inc. - Lockwood Landfill

Ticket# 2015668

Customer Name	TETRATECH TETRA TECH	Carrier	SIERRATRUCKTRAN SIERRA TRUCK & TRANS
Ticket Date	07/24/2017	Vehicle#	196 Volume 18.0
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	MIKE
Hauling Ticket#		Check#	
Route		Billing #	0001653
State Waste Code		Gen EPA ID	
Manifest	WAF		
Destination		Grid	
PO	1140615		
Profile	117132NV (AREA 3 NICKLE IMPACTED SOIL)		
Generator	150-ARCONIC VERDIFACILITY ARCONICVARDIFACILITY(1 ERIK CIRCLE)		

	Time	Scale	Operator	Inbound	Gross
In	07/24/2017 14:31:28	Scale 01	cb		Tare
Out	07/24/2017 14:31:28		cb		Net
					Tons

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spwaste Solid Oth-	100	18.00	Yards	25.00		\$450.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$30.64	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$93.52	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$23.22	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$30.19	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Total Tax
 Total Ticket \$822.57

Driver's Signature

402WM





NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST	1. Generator's US EPA ID No. NVD982463010	Manifest Doc No. NUMBER	2. Page 1 of 1										
3. Generator's Mailing Address: Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439		Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439											
4. Generator's Phone 775-345-0345		A. Manifest Number WM AV-072017-002											
5. Transporter 1 Company Name Sierra Rental and Transport (SRT) USDOT 41412		B. State Generator's ID State Generator's ID											
6. US EPA ID Number NA		C. State Transporter's ID NA											
7. Transporter 2 Company Name Transporter 2 Company Name		D. Transporter's Phone 775-358-7344											
8. US EPA ID Number Generator's ID Number		E. State Transporter's ID State Transporter ID											
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434		F. Transporter's Phone Transporter's Phone											
10. US EPA ID Number NA		G. State Facility ID State Facility ID											
		H. State Facility Phone 800-963-4776											
GENERATOR	11. Description of Waste Materials		12. Containers		13. Total Quantity		14. Unit Wt./Vol.		15. Misc. Comments				
	a. Non Regulated Material – Non Hazardous Soil (Area 1 and 3 - Nickle Impacted Soil) WM Profile # 117132NV		No. Type		Quantity		Y		Comments				
			1 1 DT		16								
	b. Waste Name WM Profile # 117132NV		No. Type		Quantity		Y		Comments				
c. Waste Name WM Profile # 117132NV		No. Type		Quantity		Y		Comments					
d. Waste Name WM Profile # 117132NV		No. Type		Quantity		Y		Comments					
J. Additional Descriptions for Materials Listed Above Additional Descriptions		K. Disposal Location Direct Landfill		Cell		Level							
15. Special Handling Instructions and Additional Information Special Handling Instructions													
Purchase Order # 1140615		EMERGENCY CONTACT / PHONE NO.:		CHEMTREC (800-424-9300)									
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.		Printed Name Lynzie Diehl, EHS Manager, Arconic Verdi Operations		Signature		Month 07		Day 25		Year 2017			
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed Name Mike McKay		Signature		Month 07		Day 25		Year 2017			
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed Name		Signature		Month		Day		Year			
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.		20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.		Printed Name CBO		Signature		Month 07		Day 25		Year 2017	

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY



Refuse, Inc. - Lockwood Landfill

2401 Canyon Road
Sparks, NV, 89434
Ph: 775-342-0401

Ticket# 2015845

Customer Name TETRATECH TETRA TECH
Ticket Date 07/25/2017
Payment Type Credit Account
Manual Ticket#
Hauling Ticket#
Route
State Waste Code
Manifest WAF
Destination
PO 1140615
Profile 117132NV (AREA 3 NICKLE IMPACTED SOIL)
Generator 150-ARCONIC VERDIFACILITY ARCONICVARDIFACILITY(1 ERIK CIRCLE)

Carrier SIERRATRUCKTRAN SIERRA TRUCK & TRANS
Vehicle# 196 Volume 18.0
Container
Driver MIKE/VERDI FACILITY
Check#
Billing # 0001653
Gen EPA ID
Grid

	Time	Scale	Operator	Inbound	Gross
In	07/25/2017 08:31:11	Scale 01	cb		Tare
Out	07/25/2017 08:31:11		cb		Net
					Tons

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spwaste Solid Dth-	100	16.00	Yards	25.00		\$400.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$28.26	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$86.27	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$21.42	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$27.85	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Total Tax
Total Ticket \$758.80

Driver's Signature
402WM





NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST		1. Generator's US EPA ID No. NVD982463010	Manifest Doc No. Number	2. Page 1 of 1			
3. Generator's Mailing Address: Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439		Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439		A. Manifest Number WM	AV-072017-003		
4. Generator's Phone 775-345-0345				B. State Generator's ID State Generator's ID			
5. Transporter 1 Company Name Sierra Rental and Transport (SRT) USDOT 41412		6. US EPA ID Number NA		C. State Transporter's ID NA			
7. Transporter 2 Company Name Transporter 2 Company Name		8. US EPA ID Number US EPA ID Number		D. Transporter's Phone 775-358-7344			
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434		10. US EPA ID Number NA		E. State Transporter's ID State Transporter's ID			
				F. Transporter's Phone Transporter 2 Phone			
				G. State Facility ID State Facility ID			
				H. State Facility Phone 800-963-4776			
GENERATOR	11. Description of Waste Materials		12. Containers		13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
	a. Non Regulated Material – Non Hazardous Soil (Area 1 and 3 - Nickle Impacted Soil) WM Profile # 117132NV		No.	Type	16	Y	Comments
	b. Waste Name WM Profile # <i>WM Profile Number</i>		No.	Type	Total Qty	Wt./Vol.	Comments
	c. Waste Name WM Profile # <i>WM Profile Number</i>		No.	Type	Total Qty	Wt./Vol.	Comments
	d. Waste Name WM Profile # <i>WM Profile Number</i>		No.	Type	Total Qty	Wt./Vol.	Comments
	J. Additional Descriptions for Materials Listed Above Additional Description		K. Disposal Location Direct Landfill				
		Cell			Level		
		Grid					
15. Special Handling Instructions and Additional Information <i>Special Handling Instructions</i>							
Purchase Order # 1140615		EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)					
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.							
Printed Name Lynzie Diehl EHS Manager, Arconic Verdi Operations		Signature			Month	Day	Year
					07	25	2017
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials		Signature		Month	Day	Year
	Printed Name KEVIN TEEPLES				07	25	2017
	18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Month	Day	Year
FACILITY	19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.						
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.						
	Printed Name CBO		Signature			Month	Day
					07	25	2017

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY



2401 Canyon Road
Sparks, NV, 89434
Ph: 775-342-0401

Refuse, Inc. - Lockwood Landfill

SRT 203

Ticket# 2015853

Customer Name	TETRATECH TETRA TECH	Carrier	SIERRATRUCKTRAN SIERRA TRUCK & TRANS
Ticket Date	07/25/2017	Vehicle#	203 Volume 18.0
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	KEVIN JOB# TESLA
Hauling Ticket#		Check#	
Route		Billing #	0001653
State Waste Code		Gen EPA ID	
Manifest	WAF		
Destination		Grid	
PO	1140615		
Profile	11713ENV (AREA 3 NICKLE IMPACTED SOIL)		
Generator	150-ARCONIC VERDIFACILITY ARCONICVARDIFACILITY(1 ERIK CIRCLE)		

Time	Scale	Operator	Inbound	Gross
In 07/25/2017 08:37:37	Scale 01	cb		Tare
Out 07/25/2017 08:37:37		cb		Net
				Tons

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spwaste Solid Dth-	100	18.00	Yards	25.00		\$400.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$28.26	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$86.27	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$21.42	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$27.85	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Handwritten signature

Total Tax
Total Ticket \$758.80

Driver's Signature
402WMM



S P O R T E R	KEVIN TERPLES		<i>Kevin Terples</i>		07	25	2017	
	18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed Name			Signature			Month	Day	Year
F A C I L I T Y	19. Certificate of Final Treatment/Disposal							
	I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.							
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.							
Printed Name			Signature			Month	Day	Year
CBO			CBO			07	25	2017

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY



NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST		1. Generator's US EPA ID No. NVD982463010		Manifest Doc No. Number		2. Page 1 of 1								
3. Generator's Mailing Address: Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439			Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439			A. Manifest Number WM								
4. Generator's Phone 775-345-0345						B. State Generator's ID State Generator's ID								
5. Transporter 1 Company Name Sierra Rental and Transport (SRT) USDOT 41412			6. US EPA ID Number NA			C. State Transporter's ID NA								
7. Transporter 2 Company Name Transporter 2 Company Name			8. US EPA ID Number US EPA ID Number			D. Transporter's Phone 775-358-7344								
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434			10. US EPA ID Number NA			E. State Transporter's ID State Transporter ID								
						F. Transporter's Phone Transporter's Phone								
						G. State Facility ID State Facility ID								
						H. State Facility Phone 800-963-4776								
GENERATOR	11. Description of Waste Materials				12. Containers		13. Total Quantity		14. Unit Wt./Vol.		15. Misc. Comments			
	a. Non Regulated Material – Non Hazardous Soil (Area 1 and 3 - Nickle Impacted Soil) WM Profile # 117132NV				No. Type		Total Qty		Wt./Vol.		Comments			
					1		DT		16		Y			
	b. Waste Name WM Profile #				No. Type		Total Qty		Wt./Vol.		Comments			
	c. Waste Name WM Profile #				No. Type		Total Qty		Wt./Vol.		Comments			
d. Waste Name WM Profile #				No. Type		Total Qty		Wt./Vol.		Comments				
J. Additional Descriptions for Materials Listed Above Additional Description				K. Disposal Location Direct Landfill										
				Cell				Level						
				Grid										
15. Special Handling Instructions and Additional Information Special handling instructions														
Purchase Order # 1140615				EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)										
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.														
Printed Name Lynzie Diehl, EHS Manager, Arconic Verdi Operations				Signature				Month 07		Day 25		Year 2017		
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials													
	Printed Name Ramon Lopez Cabrera				Signature				Month 07		Day 25		Year 2017	
	18. Transporter 2 Acknowledgement of Receipt of Materials													
Printed Name				Signature				Month		Day		Year		
FACILITY	19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.													
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.													
	Printed Name CBO				Signature				Month 07		Day 25		Year 2017	

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY



Refuse, Inc. - Lockwood Landfill

2401 Canyon Road
Sparks, NV, 89434
Ph: 775-342-0401

Ticket# 2015880

Customer Name	TETRATECH TETRA TECH	Carrier	GARYDERNERTRUCKING GARY DERNER TRUCK
Ticket Date	07/25/2017	Vehicle#	98 Volume 18.0
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	JD #
Hauling Ticket#		Check#	
Route		Billing #	0001653
State Waste Code		Gen EPA ID	
Manifest	WAF	Grid	
Destination			
PO	1140615		
Profile	117132NV (AREA 3 NICKLE IMPACTED SOIL)		
Generator	150-ARCONIC VERDIFACILITY ARCONICVERDIFACILITY(1 ERIK CIRCLE)		

	Time	Scale	Operator	Inbound	Gross
In	07/25/2017 09:17:03	Scale 01	cb		Tare
Out	07/25/2017 09:17:03		cb		Net
					Tons

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spwaste Solid Oth-	100	16.00	Yards	25.00		\$400.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$28.26	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$86.27	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$21.42	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$27.85	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Total Tax
Total Ticket \$759.80

Driver's Signature *Ramon Lopez*

N S P O R T E R	<i>RAMON LOPEZ Cabrera</i>		<i>Ramon Lopez Cabrera</i>		07	25	2017
	18. Transporter 2 Acknowledgement of Receipt of Materials						
	Printed Name		Signature		Month	Day	Year
F A C I L I T Y	19. Certificate of Final Treatment/Disposal						
	I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.						
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.						
	Printed Name		Signature		Month	Day	Year
	<i>CBO</i>		<i>CBO</i>		07	25	2017

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY Blue- GENERATOR #2 COPY Yellow- GENERATOR #1 COPY
Pink- FACILITY USE ONLY Gold- TRANSPORTER #1 COPY



NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST	1. Generator's US EPA ID No. NVD982463010	Manifest Doc No. Number	2. Page 1 of 1
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Generator's Mailing Address: Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439	Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439	A. Manifest Number WM	AV-072017-005
4. Generator's Phone 775-345-0345		B. State Generator's ID None Generator ID	

5. Transporter 1 Company Name Sierra Rental and Transport (SRT) USDOT 41412	6. US EPA ID Number NA	C. State Transporter's ID NA
7. Transporter 2 Company Name Transporter 2 Company Name		D. Transporter's Phone 775-358-7344

8. US EPA ID Number US EPA ID Number	E. State Transporter's ID State Transporter ID
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434	F. Transporter's Phone Transporter 2 Phone
10. US EPA ID Number NA	G. State Facility ID State Facility ID
	H. State Facility Phone 800-963-4776

GENERATOR

11. Description of Waste Materials	12. Containers		13. Total Quantity	14. Unit Wt./Vol.	1. Misc. Comments
	No.	Type			
a. Non Regulated Material – Non Hazardous Soil (Area 1 and 3 - Nickle Impacted Soil) WM Profile # 117132NV	1	DT	16	Y	Comments
b. Waste Name WM Profile #	No.	Type	Total Qty	Unit Wt./Vol.	Comments
c. Waste Name WM Profile #	No.	Type	Total Qty	Unit Wt./Vol.	Comments
d. Waste Name WM Profile #	No.	Type	Total Qty	Unit Wt./Vol.	Comments

J. Additional Descriptions for Materials Listed Above Additional Description:	K. Disposal Location Direct Landfill
	Cell
	Grid

15. Special Handling Instructions and Additional Information
Special Handling Instructions:

Purchase Order # 1140615 EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)

16. GENERATOR'S CERTIFICATE:
I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Printed Name Lynzie Diehl, EHS Manager, Arconic Verdi Operations	Signature	Month	Day	Year
		07	25	2017

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials	Printed Name	Signature	Month	Day	Year
			07	25	2017

18. Transporter 2 Acknowledgement of Receipt of Materials	Printed Name	Signature	Month	Day	Year

FACILITY

19. Certificate of Final Treatment/Disposal
I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.	Printed Name	Signature	Month	Day	Year
			07	25	2017



Refuse, Inc. - Lockwood Landfill

2401 Canyon Road
Sparks, NV, 89434
Ph: 775-342-0401

Ticket# 2015915

Customer Name TETRATECH TETRA TECH Carrier SIERRATRUCKTRAN SIERRA TRUCK & TRANS
Ticket Date 07/25/2017 Vehicle# 196 Volume 18.0
Payment Type Credit Account Container
Manual Ticket# Driver MIKE/VERDI FACILITY
Hauling Ticket# Check#
Route Billing # 0001653
State Waste Code Gen EPA ID
Manifest WAF
Destination Grid
PO 1140615
Profile 117132NV (AREA 3 NICKLE IMPACTED SOIL)
Generator 150-ARCONIC VERDIFACILITY ARCONICVARDIFACILITY(1 ERIK CIRCLE)

	Time	Scale	Operator	Inbound	Gross
In	07/25/2017 10:13:52	Scale 01	cb		Tare
Out	07/25/2017 10:13:52		cb		Net
					Tons

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spwaste Solid Oth-	100	15.00	Yards	25.00		\$400.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$28.26	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$86.27	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$21.42	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$27.85	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Total Tax
Total Ticket \$758.80

Driver's Signature
402WM

S P O R T E R	18. Transporter 2 Acknowledgement of Receipt of Materials			07	25	2017
	Printed Name	Signature		Month	Day	Year
F A C I L I T Y	19. Certificate of Final Treatment/Disposal					
	I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.					
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.					
	Printed Name	Signature		Month	Day	Year
	CB0	CB0		07	25	2017

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY



NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST

1. Generator's US EPA ID No.

NVD982463010

Manifest Doc No.

Number

2. Page 1 of

1

Generator's Mailing Address:
Arconic Fastening Systems & Rings
1 Eric Circle
Verdi, NV 89439

Generator's Site Address (if different than mailing):
Arconic Fastening Systems & Rings
1 Eric Circle
Verdi, NV 89439

A. Manifest Number

WM

AV-072017-006

B. State Generator's ID
State Generator's ID

4. Generator's Phone 775-345-0345

5. Transporter 1 Company Name
Sierra Rental and Transport (SRT)
USDOT 41412

6. US EPA ID Number

NA

C. State Transporter's ID NA

D. Transporter's Phone 775-358-7344

7. Transporter 2 Company Name
Transporter 2 Company Name

8. US EPA ID Number

US EPA ID Number

E. State Transporter's ID State Transporter ID

F. Transporter's Phone Transporter 2 Phone

9. Designated Facility Name and Site Address
Lockwood Regional Landfill (Refuse, Inc.)
2700 East Mustang Road
Sparks, NV 89434

10. US EPA ID Number

NA

G. State Facility ID State Facility ID

H. State Facility Phone 800-963-4776

GENERATOR

11. Description of Waste Materials

a. Non Regulated Material - Non Hazardous Soil (Area 1 and 3 - Nickle Impacted Soil)

WM Profile # 117132NV

12. Containers

No. Type

1 DT

13. Total Quantity

16

14. Unit Wt./Vol.

Y

I. Misc. Comments

Comments

b. Waste Name

WM Profile # WM Profile Number

No. Type

Total Qty. Wt./Vol.

Comments

c. Waste Name

WM Profile # WM Profile Number

No. Type

Total Qty. Wt./Vol.

Comments

d. Waste Name

WM Profile # WM Profile Number

No. Type

Total Qty. Wt./Vol.

Comments

J. Additional Descriptions for Materials Listed Above

Additional Description

K. Disposal Location

Direct Landfill

Cell

Level

Grid

15. Special Handling Instructions and Additional Information

Special Handling Instructions

Purchase Order # 1140615

EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)

16. GENERATOR'S CERTIFICATE:

I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Printed Name Lynzie Diehl,
EHS Manager, Arconic Verdi Operations

Signature

Month Day Year

07 25 2017

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed Name KEVIN TEEPLES

Signature

Month Day Year

07 25 2017

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed Name

Signature

Month Day Year

19. Certificate of Final Treatment/Disposal

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.

Printed Name

Signature

Month Day Year

07 25 2017

te- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY



Refuse, Inc. - Lockwood Landfill

2401 Canyon Road
Sparks, NV, 89434
Ph: 775-342-0401

Ticket# 2015939

Customer Name	TETRATECH TETRA TECH	Carrier	SIERRATRUCKTRAN SIERRA TRUCK & TRANS
Ticket Date	07/25/2017	Vehicle#	203 Volume 18.0
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	KEVIN JOB# TESLA
Hauling Ticket#		Check#	
Route		Billing #	0001653
State Waste Code		Gen EPA ID	
Manifest	waf		
Destination		Grid	
PO	1140615		
Profile	117132NV (AREA 3 NICKLE IMPACTED SOIL)		
Generator	150-ARCONIC VERDIFACILITY ARCONICVARDIFACILITY(1 ERIK CIRCLE)		

	Time	Scale	Operator	Inbound	Gross
In	07/25/2017 10:42:57	Scale 01	cb		Tare
Out	07/25/2017 10:42:57		cb		Net
					Tons

Comments

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Spwaste Solid Oth-	100	16.00	Yards	25.00		\$400.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$28.26	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$86.27	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$21.42	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$27.85	WASHOE
6 TRANSLAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Total Tax
Total Ticket \$758.80

Driver's Signature
402WM



TRANSPORTER	 18. Transporter 2 Acknowledgement of Receipt of Materials		07	25	2017
	Printed Name	Signature	Month	Day	Year
FACILITY	19. Certificate of Final Treatment/Disposal				
	I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.				
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.				
	Printed Name	Signature	Month	Day	Year
	CB		07	25	2017

te- TREATMENT, STORAGE, DISPOSAL FACILITY COPY
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



NON-HAZARDOUS MANIFEST

HAZARDOUS MANIFEST	1. Generator's US EPA ID No. NVD982463010	Manifest Doc No. Number	2. Page 1 of 1
--------------------	--	----------------------------	-------------------

Generator's Mailing Address: Arconic Fastening Systems & Rings Eric Circle Verdi, NV 89439	Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439	A. Manifest Number WM	AV-072017-007
4. Generator's Phone 775-345-0345		B. State Generator's ID State Generator's ID	

5. Transporter 1 Company Name Sierra Rental and Transport (SRT) USDOT 41412	6. US EPA ID Number NA	C. State Transporter's ID NA
---	---------------------------	---------------------------------

7. Transporter 2 Company Name Transporter 2 Company Name	8. US EPA ID Number US EPA ID Number	D. Transporter's Phone 775-358-7344
---	---	-------------------------------------

9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434	10. US EPA ID Number NA	E. State Transporter's ID State Transporter ID	F. Transporter's Phone Transporter's Phone
---	----------------------------	---	---

11. Description of Waste Materials		12. Containers No. Type	13. Total Quantity	14. Unit Wt./Vol.	15. Misc. Comments
------------------------------------	--	----------------------------	--------------------	-------------------	--------------------

a. Non Regulated Material – Non Hazardous Soil (Area 1 and 3 - Nickle Impacted Soil) WM Profile # 117132NV	1	DT	16	Y	Comments
---	---	----	----	---	----------

b. Waste Name WM Profile # WM Profile Number	No.	Type	Total Qty.	Wt./Vol.	Comments
---	-----	------	------------	----------	----------

c. Waste Name WM Profile # WM Profile Number	No.	Type	Total Qty.	Wt./Vol.	Comments
---	-----	------	------------	----------	----------

d. Waste Name WM Profile # WM Profile Number	No.	Type	Total Qty.	Wt./Vol.	Comments
---	-----	------	------------	----------	----------

J. Additional Descriptions for Materials Listed Above Additional Description	K. Disposal Location Direct Landfill				
	Cell			Level	
	Grid				

15. Special Handling Instructions and Additional Information
Special Handling Instructions

Purchase Order # 1140615 EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)

16. GENERATOR'S CERTIFICATE:
I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Printed Name Lynzie Diehl, EHS Manager, Arconic Verdi Operations Signature

Month	Day	Year
07	25	2017

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed Name RAMON LOPEZ C Signature

Month	Day	Year
07	25	2017

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed Name _____ Signature _____

Month	Day	Year

19. Certificate of Final Treatment/Disposal
I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.

Printed Name Signature

Month	Day	Year
07	25	2017



2401 Canyon Road
Sparks, NV, 89434
Ph: 775-342-0401

Refuse, Inc. - Lockwood Landfill

Ticket# 2015998

Customer Name TETRATECH TETRA TECH Carrier GARYDERNERTRUCKING GARY DERNER TRUCK
Ticket Date 07/25/2017 Vehicle# 98 Volume 18.0
Payment Type Credit Account Container
Manual Ticket# Driver JD #
Hauling Ticket# Check#
Route Billing # 0001653
State Waste Code Gen EPA ID
Manifest waf
Destination Grid
PO 1140615
Profile 117132NV (AREA 3 NICKLE IMPACTED SOIL)
Generator 150-ARCONIC VERDIFACILITY ARCONICVERDIFACILITY(1 ERIK CIRCLE)

Time	Scale	Operator	Inbound	Gross
In 07/25/2017 12:21:21	Scale 01	cb		Tare
Out 07/25/2017 12:21:21		cb		Net
				Tons

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spwaste Solid Oth-	100	18.00	Yards	25.00		\$450.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$30.64	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$93.52	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$23.22	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$30.19	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Total Tax
Total Ticket \$822.57

Driver's Signature

Ramon Lopez

402WM



S P O R T E R	18. Transporter 2 Acknowledgement of Receipt of Materials		07	25	2017
	Printed Name	Signature	Month	Day	Year
F A C I L I T Y	19. Certificate of Final Treatment/Disposal				
	I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.				
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.					
Printed Name	Signature	Month	Day	Year	
CB	CB	07	25	2017	

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY



NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST		1. Generator's US EPA ID No. NVD982463010	Manifest Doc No. Number	2. Page 1 of 1					
3. Generator's Mailing Address: Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439		Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439		A. Manifest Number WM AV-072017-008					
4. Generator's Phone 775-345-0345		B. State Generator's ID State Generator ID							
5. Transporter 1 Company Name Sierra Rental and Transport (SRT) USDOT 41412		6. US EPA ID Number NA		C. State Transporter's ID NA					
7. Transporter 2 Company Name Transporter 2 Company Name		8. US EPA ID Number US EPA ID Number		D. Transporter's Phone 775-358-7344					
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434		10. US EPA ID Number NA		E. State Transporter's ID State Transporter ID					
				F. Transporter's Phone Transporter 2 Phone					
				G. State Facility ID State Facility ID					
				H. State Facility Phone 800-963-4776					
GENERATOR	11. Description of Waste Materials		12. Containers	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments			
	a. Non Regulated Material – Non Hazardous Soil (Area 1 and 3 - Nickle Impacted Soil) WM Profile # 117132NV		No. Type	16	Y	Comments			
	b. Waste Name WM Profile # WM Profile Number		No. Type Total Qty	Qty Vol.	Comments				
	c. Waste Name WM Profile # WM Profile Number		No. Type Total Qty	Qty Vol.	Comments				
	d. Waste Name WM Profile # WM Profile Number		No. Type Total Qty	Qty Vol.	Comments				
	J. Additional Descriptions for Materials Listed Above Additional Description		K. Disposal Location Direct Landfill						
		Cell		Level					
		Grid							
15. Special Handling Instructions and Additional Information Special Handling Instructions									
Purchase Order # 1140615		EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)							
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.									
Printed Name Lynzie Diehl, EHS Manager, Arconic Verdi Operations		Signature			Month 07	Day 25	Year 2017		
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials		Printed Name		Signature		Month 07	Day 25	Year 2017
	18. Transporter 2 Acknowledgement of Receipt of Materials		Printed Name		Signature		Month	Day	Year
FACILITY	19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.								
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.								
Printed Name		Signature			Month 07	Day 25	Year 2017		

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY



Refuse, Inc. - Lockwood Landfill

2401 Canyon Road
Sparks, NV, 89434
Ph: 775-342-0401

Ticket# 2016017

Customer Name	TETRATECH TETRA TECH	Carrier	SIERRATRUCKTRAN SIERRA TRUCK & TRANS
Ticket Date	07/25/2017	Vehicle#	195 Volume 18.0
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	MIKE/VERDI FACILITY
Hauling Ticket#		Check#	
Route		Billing #	0001653
State Waste Code		Ben EPA ID	
Manifest	WAF	Grid	
Destination			
PO	1140615		
Profile	117132NV (AREA 3 NICKLE IMPACTED SOIL)		
Generator	150-ARCONIC VERDIFACILITY ARCONICVARDIFACILITY(1 ERIK CIRCLE)		

	Time	Scale	Operator	Inbound	Gross
In	07/25/2017 12:54:34	Scale 01	cb		Tare
Out	07/25/2017 12:54:34		cb		Net
					Tons

Comments

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Spwaste Solid Oth-	100	16.00	Yards	25.00		\$400.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$28.26	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$86.27	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$21.42	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$27.85	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Total Tax
Total Ticket \$758.80

Driver's Signature



TRANSPORTER	Printed Name	Signature	07	25	2017
	18. Transporter 2 Acknowledgement of Receipt of Materials				
FACILITY	19. Certificate of Final Treatment/Disposal				
	I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.				
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.				
	Printed Name	Signature	07	25	2017

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST	1. Generator's US EPA ID No. NVD982463010	Manifest Doc No. Number	2. Page 1 of 1
3. Generator's Mailing Address: Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439		Generator's Site Address (If different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439	
4. Generator's Phone 775-345-0345		A. Manifest Number WM AV-072017-009	
5. Transporter 1 Company Name Sierra Rental and Transport (SRT) USDOT 41412		B. State Generator's ID State Generator's ID	
6. US EPA ID Number NA		C. State Transporter's ID NA	
7. Transporter 2 Company Name Transporter 2 Company Name		D. Transporter's Phone 775-358-7344	
8. US EPA ID Number US EPA ID Number		E. State Transporter's ID State Transporter ID	
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434		F. Transporter's Phone Transporter 2 Phone	
10. US EPA ID Number NA		G. State Facility ID State Facility ID	
		H. State Facility Phone 800-963-4776	
GENERATOR	11. Description of Waste Materials		12. Containers
	a. Non Regulated Material – Non Hazardous Soil (Area 1 and 3 - Nickle Impacted Soil)		No. Type
	WM Profile # 117132NV		1 DT
	b. Waste Name		Total Qty. Unit Wt./Vol.
	WM Profile # WMA Profile Number		Y
TRANSPORTER	c. Waste Name		I. Misc. Comments
	WM Profile # WMA Profile Number		
	d. Waste Name		
	WM Profile # WMA Profile Number		
J. Additional Descriptions for Materials Listed Above		K. Disposal Location	
Additional Description		Direct Landfill	
15. Special Handling Instructions and Additional Information		Cell Level	
Special Handling Instructions		Grid	
Purchase Order # 1140615		EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)	
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.			
Printed Name Lynzie Diehl, EHS Manager, Arconic Verdi Operations		Signature	Month Day Year 07 25 2017
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature	Month Day Year 07 25 2017
Printed Name KEVIN TEEPLES		Signature	Month Day Year
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature	Month Day Year
Printed Name		Signature	Month Day Year
FACILITY	19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.		
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.		
Printed Name CBO		Signature	Month Day Year 07 25 2017

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY Blue- GENERATOR #2 COPY Yellow- GENERATOR #1 COPY
 Pink- FACILITY USE ONLY Gold- TRANSPORTER #1 COPY



NON-HAZARDOUS

Refuse, Inc. - Lockwood Landfill

2401 Canyon Road
Sparks, NV, 89434
Ph: 775-342-0401

Ticket# 2016042

Customer Name	TETRATECH TETRA TECH	Carrier	SIERRATRUCKTRAN SIERRA TRUCK & TRANS
Ticket Date	07/25/2017	Vehicle#	203 Volume 18.0
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	KEVIN JOB# TESLA
Hauling Ticket#		Check#	
Route		Billing #	0001653
State Waste Code		Gen EPA ID	
Manifest	WAF	Grid	
Destination			
PO	1140615		
Profile	117132NV (AREA 3 NICKLE IMPACTED SOIL)		
Generator	150-ARCONIC VERDIFACILITY ARCONICVERDIFACILITY(1 ERIK CIRCLE)		

	Time	Scale	Operator	Inbound	Gross
In	07/25/2017 13:34:55	Scale 01	cb		Tare
Out	07/25/2017 13:34:55		cb		Net
					Tons

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spwaste Solid Oth-	100	16.00	Yards	25.00		\$400.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$28.26	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$86.27	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$21.42	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$27.85	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Kevin

Total Tax
Total Ticket \$758.80

402WM

Driver's Signature

H S P O R T E R	KEVIN KEEPLES		07 25 2017		
	18. Transporter 2 Acknowledgement of Receipt of Materials				
	Printed Name	Signature	Month	Day	Year
F A C I L I T Y	19. Certificate of Final Treatment/Disposal				
	I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.				
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.				
	Printed Name	Signature	Month	Day	Year
	BO	BO	07	25	2017

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY



NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST		1. Generator's US EPA ID No. NVD982463010		Manifest Doc No. <i>number</i>		2. Page 1 of 1								
3. Generator's Mailing Address: Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439			Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439			A. Manifest Number WM								
4. Generator's Phone 775-345-0345						B. State Generator's ID <i>State Generator's ID</i>								
5. Transporter 1 Company Name Sierra Rental and Transport (SRT) USDOT 41412			6. US EPA ID Number NA			C. State Transporter's ID NA								
7. Transporter 2 Company Name <i>Transporter 2 Company Name</i>			8. US EPA ID Number <i>US EPA ID Number</i>			D. Transporter's Phone 775-358-7344								
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434			10. US EPA ID Number NA			E. State Transporter's ID <i>State Transporter ID</i>								
						F. Transporter's Phone <i>Transporter Phone</i>								
						G. State Facility ID <i>State Facility ID</i>								
						H. State Facility Phone 800-963-4776								
GENERATOR	11. Description of Waste Materials				12. Containers		13. Total Quantity		14. Unit Wt./Vol.		15. Misc. Comments			
	a. Non Regulated Material – Non Hazardous Soil (Area 1 and 3 - Nackle Impacted Soil) WM Profile # 117132NV				No. Type		Total Qty		Wt./Vol.		Comments			
					1 1 DT		16		Y					
	b. Waste Name WM Profile # <i>WM Profile Number</i>				No. Type		Total Qty		Wt./Vol.		Comments			
	c. Waste Name WM Profile # <i>WM Profile Number</i>				No. Type		Total Qty		Wt./Vol.		Comments			
d. Waste Name WM Profile # <i>WM Profile Number</i>				No. Type		Total Qty		Wt./Vol.		Comments				
J. Additional Descriptions for Materials Listed Above <i>Additional Description</i>				K. Disposal Location Direct Landfill										
				Cell				Level						
				Grid										
15. Special Handling Instructions and Additional Information <i>Special Handling Instructions</i>														
Purchase Order # 1140615				EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)										
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.														
Printed Name Lynzie Diehl, EHS Manager, Arconic Verdi Operations				Signature				Month 07		Day 25		Year 2017		
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials													
	Printed Name Ramon Lopez C				Signature				Month 07		Day 25		Year 2017	
	Printed Name				Signature				Month		Day		Year	
18. Transporter 2 Acknowledgement of Receipt of Materials														
Printed Name				Signature				Month		Day		Year		
FACILITY	19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.													
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.													
	Printed Name CB				Signature				Month 07		Day 25		Year 2017	

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Refuse, Inc. - Lockwood Landfill

2401 Canyon Road
Sparks, NV, 89434
Ph: 775-342-0401

Ticket# 2016094

Customer Name TETRATECH TETRA TECH
 Ticket Date 07/25/2017
 Payment Type Credit Account
 Manual Ticket#
 Hauling Ticket#
 Route
 State Waste Code
 Manifest WAF
 Destination
 PO 1140615
 Profile 117132NV (AREA 3 NICKLE IMPACTED SOIL)
 Generator 150-ARCONIC VERDIFACILITY ARCONICVERDIFACILITY(1 ERIK CIRCLE)

Carrier GARYDERNERTRUCKING GARY DERNER TRUCK
 Vehicle# 98 Volume 18.0
 Container
 Driver JD #
 Check#
 Billing # 0001653
 Gen EPA ID
 Brid

	Time	Scale	Operator	Inbound	Gross
In	07/25/2017 15:00:45	Scale 01	cb		Tare
Out	07/25/2017 15:00:45		cb		Net
					Tons

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spwaste Solid Oth-	100	16.00	Yards	25.00		\$400.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$28.26	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$86.27	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$21.42	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$27.85	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Total Tax
 Total Ticket \$758.80

Driver's Signature
402WM

Ramon Lopez C



N S P O R T E R	18. Transporter 2 Acknowledgement of Receipt of Materials				
	Printed Name	Signature	Month	Day	Year
F A C I L I T Y	19. Certificate of Final Treatment/Disposal				
	I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.				
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.				
	Printed Name	Signature	Month	Day	Year
	<i>CB</i>	<i>CB</i>	07	25	2017

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY
 Blue- GENERATOR #2 COPY
 Yellow- GENERATOR #1 COPY
 Pink- FACILITY USE ONLY
 Gold- TRANSPORTER #1 COPY



NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST

1. Generator's US EPA ID No.
NVD982463010

Manifest Doc No.
Number

2. Page 1 of
1

Generator's Mailing Address:
Arconic Fastening Systems & Rings
Eric Circle
Verdi, NV 89439

Generator's Site Address (if different than mailing):
Arconic Fastening Systems & Rings
1 Eric Circle
Verdi, NV 89439

A. Manifest Number
WM

AV-072017-011

B. State Generator's ID
State Generator's ID

4. Generator's Phone 775-345-0345

5. Transporter 1 Company Name
Sierra Rental and Transport (SRT)
USDOT 41412

6. US EPA ID Number
NA

C. State Transporter's ID NA

D. Transporter's Phone 775-358-7344

7. Transporter 2 Company Name
Transporter 2 Company Name

8. US EPA ID Number
US EPA ID Number

E. State Transporter's ID State Transporter ID

F. Transporter's Phone Transporter 2 Phone

9. Designated Facility Name and Site Address
Lockwood Regional Landfill (Refuse, Inc.)
2700 East Mustang Road
Sparks, NV 89434

10. US EPA ID Number
NA

G. State Facility ID State Facility ID

H. State Facility Phone 800-963-4776

11. Description of Waste Materials

12. Containers		13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
No.	Type			
1	DT	16	Y	Comments
No.	Type	Total Qty	Wt./Vol.	Comments
No.	Type	Total Qty	Wt./Vol.	Comments
No.	Type	Total Qty	Wt./Vol.	Comments

a. Non Regulated Material – Non Hazardous Soil (Area 1 and 3 - Nickle Impacted Soil)

WM Profile # 117132NV

b. Waste Name

WM Profile # Waste Profile Number

c. Waste Name

WM Profile # Waste Profile Number

d. Waste Name

WM Profile # Waste Profile Number

J. Additional Descriptions for Materials Listed Above

Additional Description:

K. Disposal Location

Direct Landfill

Cell	Level
Grid	

15. Special Handling Instructions and Additional Information

Special Handling Instructions:

Purchase Order # 1140615

EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)

16. GENERATOR'S CERTIFICATE:

I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

Printed Name Lynzle Diehl,
EHS Manager, Arconic Verdi Operations

Signature

Month	Day	Year
07	25	2017

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed Name

KEVIN TEEPLES

Signature

Kevin Teeple

Month	Day	Year
07	25	2017

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed Name

Signature

Month	Day	Year

19. Certificate of Final Treatment/Disposal

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.

Printed Name

CBO

Signature

CBO

Month	Day	Year
07	25	2017

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY

GENERATOR

TRANSPORTER

FACILITY



2401 Canyon Road
Sparks, NV, 89434
Ph: 775-342-0401

Refuse, Inc. - Lockwood Landfill

Ticket# 2016134

Customer Name	TETRATECH TETRA TECH	Carrier	SIERRATRUCKTRAN SIERRA TRUCK & TRANS
Ticket Date	07/25/2017	Vehicle#	203 Volume 18.0
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	KEVIN JOB# TESLA
Hauling Ticket#		Check#	
Route		Billing #	0001653
State Waste Code		Gen EPA ID	
Manifest	WAF	Grid	
Destination			
PO	1140615		
Profile	117132NV (AREA 3 NICKLE IMPACTED SOIL)		
Generator	150-ARCONIC VERDIFACILITY ARCONICVERDIFACILITY(1 ERIK CIRCLE)		

	Time	Scale	Operator	Inbound	Gross
In	07/25/2017 16:06:35	Scale 01	cb		Tare
Out	07/25/2017 16:06:35		cb		Net
					Tons

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spwaste Solid Oth-	100	16.00	Yards	25.00		\$400.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$28.26	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$86.27	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$21.42	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$27.85	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Kevin

Total Tax
Total Ticket \$758.80

Driver's Signature

402WM



N S P O R T E R	18. Transporter 2 Acknowledgement of Receipt of Materials		07	25	2017
	Printed Name	Signature	Month	Day	Year
F A C I L I T Y	19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.				
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.				
	Printed Name	Signature	Month	Day	Year
	CBO	(CBO)	07	25	2017

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

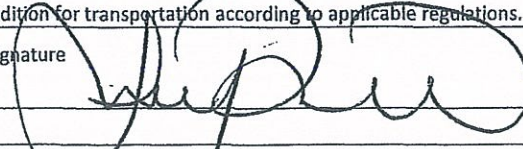
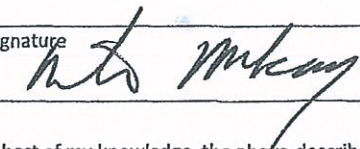
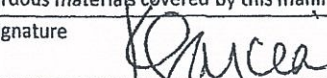
Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY

NON-HAZARDOUS MANIFEST

MANIFEST	1. Generator's US EPA ID No. NVD982463010	Manifest Doc No. Number	2. Page 1 of 1
Billing Address: Fastening Systems & Rings 89439		Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439	
Generator's Phone 775-345-0345		A. Manifest Number WM	
Transporter 1 Company Name Terra Rental and Transport (SRT) USDOT 41412		B. State Generator's ID State Generator's ID:	
7. Transporter 2 Company Name Transporter 2 Company Name		C. State Transporter's ID NA	
8. US EPA ID Number US EPA ID Number:		D. Transporter's Phone 775-358-7344	
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434		E. State Transporter's ID State Transporter ID:	
10. US EPA ID Number US EPA ID Number:		F. Transporter's Phone Transporter 2 Phone:	
11. Description of Waste Materials		G. State Facility ID State Facility ID:	
a. Non Regulated Material – Non Hazardous Soil (Area 1 and 3 - Nickle Impacted Soil) WM Profile # 117132NV		H. State Facility Phone 800-963-4776	
b. Waste Name WM Profile # WM Profile Number		12. Containers	
c. Waste Name WM Profile # WM Profile Number		13. Total Quantity	
d. Waste Name WM Profile # WM Profile Number		14. Unit Wt./Vol.	
J. Additional Descriptions for Materials Listed Above Additional Description		I. Misc. Comments	
15. Special Handling Instructions and Additional Information Special Handling Instructions		K. Disposal Location Direct Landfill	
Purchase Order # 1140615		EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)	
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.			
Printed Name Lynzie Diehl EHS Manager, Arconic Verdi Operations		Signature 	
17. Transporter 1 Acknowledgement of Receipt of Materials		Month 07 Day 26 Year 2017	
Printed Name		Signature	
18. Transporter 2 Acknowledgement of Receipt of Materials		Month 07 Day 26 Year 2017	
Printed Name MIKE MCKENY		Signature 	
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.		Month 07 Day 26 Year 2017	
20. Facility Owner/Operator: Certification of receipt of non-hazardous materials covered by this manifest.		Signature	
Printed Name Kathy Garcea		Signature 	

GENERATOR

TRANSPORTER

FACILITY

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Refuse, Inc. - Lockwood Landfill

2401 Canyon Road
 Sparks, NV, 89434
 Ph: 775-342-0401

Ticket# 2016432

Customer Name	TETRATECH TETRA TECH	Carrier	SIERRATRUCKTRAN SIERRA TRUCK & TRANS
Ticket Date	07/26/2017	Vehicle#	196 Volume 18.0
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	MIKE/VERDI FACILITY
Hauling Ticket#		Check#	
Route		Billing #	0001653
State Waste Code		Gen EPA ID	
Manifest	WAF		
Destination		Grid	
PO	1140615		
Profile	117132NV (AREA 3 NICKLE IMPACTED SOIL)		
Generator	150-ARCONIC VERDIFACILITY ARCONICVARDIFACILITY(1 ERIK CIRCLE)		

Time	Scale	Operator	Inbound	Gross	2 lb*
In 07/26/2017 00:24:02	Scale 2 -->	kg		Tare	1 lb*
Out 07/26/2017 00:24:02		kg		Net	1 lb
		* Manual Weight		Tons	

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spwaste Solid Oth-	100	16.00	Yards	25.00		\$400.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$28.26	
3 EVF-P-Standard Env	100		%	14.50		\$86.27	
4 RCR-P-Regulatory C	100		%	3.60		\$21.42	
5 FUEL-Fuel Surcharg	100		%	4.68		\$27.85	
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	

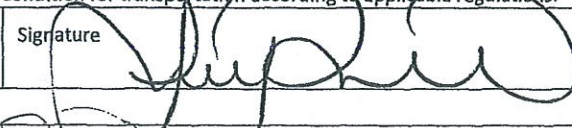
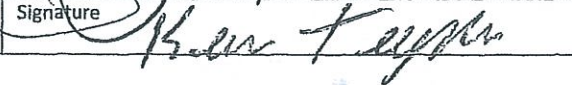
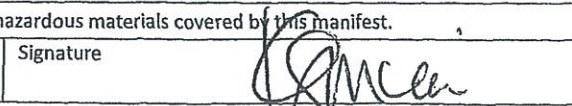
Total Tax
 Total Ticket \$758.00

Driver's Signature

402WM



NON-HAZARDOUS MANIFEST

MANIFEST	1. Generator's US EPA ID No. NVD982463010	Manifest Doc No. MANIFEST	2. Page 1 of 1
Address: g Systems & Rings 39 s Phone 775-345-0345		Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439	
Generator 1 Company Name ental and Transport (SRT) T 41412		A. Manifest Number WM AV-072017-013	
Generator 2 Company Name nsporter 2 Company Name		B. State Generator's ID State Generator's ID	
Generator 3 Company Name nsporter 3 Company Name		C. State Transporter's ID NA	
Generator 4 Company Name nsporter 4 Company Name		D. Transporter's Phone 775-358-7344	
Generator 5 Company Name nsporter 5 Company Name		E. State Transporter's ID State Transporter ID	
Generator 6 Company Name nsporter 6 Company Name		F. Transporter's Phone Transporter 2 Phone	
Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434		G. State Facility ID State Facility ID	
		H. State Facility Phone 800-963-4776	
11. Description of Waste Materials		12. Containers	
		No. Type	
a. Non Regulated Material – Non Hazardous Soil (Area 1 and 3 - Nickle Impacted Soil) WM Profile # 117132NV		13. Total Quantity 16	
b. Waste Name WM Profile # WM Profile Number		14. Unit Wt./Vol. Y	
c. Waste Name WM Profile # WM Profile Number		I. Misc. Comments Comments	
d. Waste Name WM Profile # WM Profile Number			
J. Additional Descriptions for Materials Listed Above Additional Description		K. Disposal Location Direct Landfill	
		Cell Level	
		Grid	
15. Special Handling Instructions and Additional Information Special Handling Instructions			
Purchase Order # 1140615		EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)	
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.			
Printed Name Lynzie Diehl, EHS Manager, Arconic Verdi Operations		Signature 	
		Month 07 Day 26 Year 2017	
17. Transporter 1 Acknowledgement of Receipt of Materials			
Printed Name KEVIN TEEPLES		Signature 	
		Month 07 Day 26 Year 2017	
18. Transporter 2 Acknowledgement of Receipt of Materials			
Printed Name		Signature	
		Month Day Year	
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.			
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.			
Printed Name Kathy Garcia		Signature 	
		Month 07 Day 26 Year 2017	

GENERATOR

TRANSPORTER

FACILITY



Refuse, Inc. - Lockwood Landfill

2401 Canyon Road
Sparks, NV, 89434
Ph: 775-342-0401

Ticket# 2016465

Customer Name	TETRATECH TETRA TECH	Carrier	SIERRATRUCKTRAN SIERRA TRUCK & TRANS
Ticket Date	07/26/2017	Vehicle#	203 Volume 16.0
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	KEVIN JOB# VERDI FACILITY
Hauling Ticket#		Check#	
Route		Billing #	0001653
State Waste Code		Gen EPA ID	
Manifest	WAF	Grid	
Destination			
PO	1140615		
Profile	117132NV (AREA 3 NICKLE IMPACTED SOIL)		
Generator	150-ARCONIC VERDIFACILITY ARCONICVARDIFACILITY(1 ERIK CIRCLE)		

Time	Scale	Operator	Inbound	Gross	2 lb*
In 07/26/2017 00:31:56	Scale 2 -->	kg		Tare	1 lb*
Out 07/26/2017 00:31:56		kg		Net	1 lb
		* Manual Weight		Tons	

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spwaste Solid Oth-	100	16.00	Yards	25.00		\$400.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$20.26	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$86.27	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$21.42	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.60		\$27.85	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

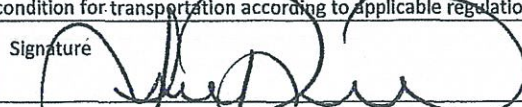
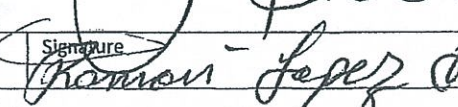
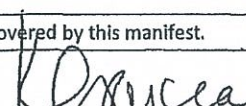
Total Tax
Total Ticket \$750.00

Driver's Signature

402WM



NON-HAZARDOUS MANIFEST

MANIFEST	1. Generator's US EPA ID No. NVD982463010	Manifest Doc No. EMW041	2. Page 1 of 1			
Mailing Address: Ening Systems & Rings 89439		Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439				
Generator's Phone: 775-345-0345		A. Manifest Number WM AV-072017-014				
Transporter 1 Company Name Terra Rental and Transport (SRT) SDOT 41412		6. US EPA ID Number NA				
7. Transporter 2 Company Name Transporter 2 Company Name		8. US EPA ID Number US EPA ID Number				
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434		10. US EPA ID Number NA				
11. Description of Waste Materials		12. Containers		13. Total Quantity	14. Unit Wt./Vol.	1. Misc. Comments
		No.	Type			
a. Non Regulated Material – Non Hazardous Soil (Area 1 and 3 - Nickle Impacted Soil) WM Profile # 117132NV		1	DT	16	Y	Comments
b. Waste Name WM Profile # WM Profile Number		No.	Type	Total Qty.	Wt./Vol.	Comments
c. Waste Name WM Profile # WM Profile Number		No.	Type	Total Qty.	Wt./Vol.	Comments
d. Waste Name WM Profile # WM Profile Number		No.	Type	Total Qty.	Wt./Vol.	Comments
J. Additional Descriptions for Materials Listed Above Additional Description				K. Disposal Location Direct Landfill		
				Cell		Level
				Grid		
15. Special Handling Instructions and Additional Information Special Handling Instructions						
Purchase Order # 1140615		EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)				
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.						
Printed Name Lynzie Diehl, EHS Manager, Arconic Verdi Operations				Signature 		Month 07
						Day 26
						Year 2017
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed Name Ramon Lopez				Signature 		Month 07
						Day 26
						Year 2017
18. Transporter 2 Acknowledgement of Receipt of Materials						
Printed Name				Signature		Month
						Day
						Year
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.						
20. Facility Owner or Operator Certification of receipt of non-hazardous materials covered by this manifest.						
Printed Name Ruby Garcia				Signature 		Month 07
						Day 26
						Year 2017

GENERATOR

TRANSPORTER

FACILITY

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



2401 Canyon Road
Sparks, NV, 89434
Ph: 775-342-0401

Ticket# 2016477

Customer Name	TETRATECH TETRA TECH	Carrier	GARYDERNERTRUCKING	GARY DERNER TRUCK
Ticket Date	07/26/2017	Vehicle#	98	Volume 16.0
Payment Type	Credit Account	Container		
Manual Ticket#		Driver	JD #	
Hauling Ticket#		Check#		
Route		Billing #	0001653	
State Waste Code		Gen EPA ID		
Manifest	WAF			
Destination		Grid		
PO	1140615			
Profile	117132NV (AREA 3 NICKLE IMPACTED SOIL)			
Generator	150-ARCONIC VERDIFACILITY	ARCONICVERDIFACILITY(1 ERIK CIRCLE)		

	Time	Scale	Operator	Inbound	Gross	2 lb*
In	07/26/2017 09:05:26	Scale 2 -->	kg		Tare	1 lb*
Out	07/26/2017 09:05:26		kg		Net	1 lb
			* Manual Weight		Tons	

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spwaste Solid Oth-	100	16.00	Yards	25.00		\$400.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$28.26	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$86.27	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$21.42	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$27.85	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Total Tax
Total Ticket \$758.80

Driver's Signature

402WM





NON-HAZARDOUS MANIFEST

HAZARDOUS MANIFEST	1. Generator's US EPA ID No. NVD982463010	Manifest Doc No. Number	2. Page 1 of 1				
Generator's Mailing Address: Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439		Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439					
4. Generator's Phone 775-345-0345		A. Manifest Number WWM AV-072017-015					
5. Transporter 1 Company Name Sierra Rental and Transport (SRT) USDOT 41412		B. State Generator's ID State Generator's ID					
6. US EPA ID Number NA		C. State Transporter's ID NA					
7. Transporter 2 Company Name Transporter 2 Company Name		D. Transporter's Phone 775-358-7344					
8. US EPA ID Number US EPA ID Number		E. State Transporter's ID State Transporter's ID					
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434		F. Transporter's Phone Transporter's Phone					
10. US EPA ID Number NA		G. State Facility ID State Facility ID					
		H. State Facility Phone 800-963-4776					
GENERATOR	11. Description of Waste Materials		12. Containers	13. Total Quantity	14. Unit Wt./Vol.	15. Misc. Comments	
	a. Non Regulated Material – Non Hazardous Soil (Area 1 and 3 - Nackle Impacted Soil) WM Profile # 117132NV		No. 1	Type DT	16	Y	Comments
	b. Waste Name WM Profile # WM Profile Number		No.	Type	Total Qty.	Wt./Vol.	Comments
	c. Waste Name WM Profile # WM Profile Number		No.	Type	Total Qty.	Wt./Vol.	Comments
	d. Waste Name WM Profile # WM Profile Number		No.	Type	Total Qty.	Wt./Vol.	Comments
J. Additional Descriptions for Materials Listed Above Additional Description		K. Disposal Location Direct Landfill					
		Cell		Level			
		Grid					
15. Special Handling Instructions and Additional Information Special Handling Instructions							
Purchase Order # 1140615 EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)							
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.							
Printed Name Lynzie Diehl, EHS Manager, Arconic Verdi Operations		Signature			Month 07	Day 26	Year 2017
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed Name MIKE MCKAY		Signature			Month 07	Day 26	Year 2017
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed Name		Signature			Month	Day	Year
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.							
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.							
Printed Name Kathy Garcia		Signature			Month 07	Day 26	Year 2017

GENERATOR
TRANSPORTER
FACILITY

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY



2401 Canyon Road
 Sparks, NV, 89434
 Ph: 775-342-0401

Ticket# 2016479

Customer Name	TETRATECH TETRA TECH	Carrier	SIERRATRUCKTRAN SIERRA TRUCK & TRANS
Ticket Date	07/26/2017	Vehicle#	196 Volume 16.0
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	MIKE/VERDI FACILITY
Hauling Ticket#		Check#	
Route		Billing #	0001653
State Waste Code		Gen EPA ID	
Manifest	WAF		
Destination		Grid	
PO	1140615		
Profile	117132NV (AREA 3 NICKLE IMPACTED SOIL)		
Generator	150-ARCONIC VERDIFACILITY ARCONICVARDIFACILITY(1 ERIK CIRCLE)		

	Time	Scale	Operator	Inbound	Gross	2 lb*
In	07/26/2017 10:08:31	Scale 2 -->	kg		Tare	1 lb*
Out	07/26/2017 10:08:31		kg		Net	1 lb
			* Manual Weight		Tons	

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spwaste Solid Oth-	100	16.00	Yards	25.00		\$400.00	WASHOE
2 WWM-F-Waste Water	100		%	4.75		\$28.26	WASHOE
3 EVF-F-Standard Env	100		%	14.50		\$86.27	WASHOE
4 RCR-F-Regulatory C	100		%	3.60		\$21.42	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$27.85	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Total Tax
 Total Ticket \$758.00

Driver's Signature



NON-HAZARDOUS MANIFEST

US MANIFEST	1. Generator's US EPA ID No. NVD982463010	Manifest Doc No. Number	2. Page 1 of 1
Mailing Address: Fastening Systems & Rings Verdi, NV 89439	Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439		A. Manifest Number WM AV-072017-016
Generator's Phone 775-345-0345	6. US EPA ID Number NA	B. State Generator's ID State Generator's ID	
Transporter 1 Company Name Serra Rental and Transport (SRT) USDOT 41412	8. US EPA ID Number US EPA ID Number	C. State Transporter's ID NA	
7. Transporter 2 Company Name Transporter 2 Company Name	10. US EPA ID Number NA	D. Transporter's Phone 775-358-7344	
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434		E. State Transporter's ID State Transporter ID	
		F. Transporter's Phone Transporter 2 Phone	
		G. State Facility ID State Facility ID	
		H. State Facility Phone 800-963-4776	
11. Description of Waste Materials	12. Containers		13. Total Quantity
	No.	Type	14. Unit Wt./Vol.
a. Non Regulated Material – Non Hazardous Soil (Area 1 and 3 - Nickle Impacted Soil) WM Profile # 117132NV	1	DT	16 Y
b. Waste Name WM Profile # WM Profile Number	No.	Type	Total Qty Wt./Vol.
c. Waste Name WM Profile # WM Profile Number	No.	Type	Total Qty Wt./Vol.
d. Waste Name WM Profile # WM Profile Number	No.	Type	Total Qty Wt./Vol.
J. Additional Descriptions for Materials Listed Above Additional Description	K. Disposal Location Direct Landfill		
	Cell		Level
	Grid		
15. Special Handling Instructions and Additional Information Special Handling Instructions			
Purchase Order # 1140615		EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)	
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.			
Printed Name Lynzie Diehl, EHS Manager, Arconic Verdi Operations		Signature	Month Day Year 07 26 2017
17. Transporter 1 Acknowledgement of Receipt of Materials			
Printed Name KEVIN TEEPLES		Signature	Month Day Year 07 26 2017
18. Transporter 2 Acknowledgement of Receipt of Materials			
Printed Name		Signature	Month Day Year
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.			
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.			
Printed Name Kathy Garcea		Signature	Month Day Year 07 26 2017

GENERATOR

TRANSPORTER

FACILITY

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY



Refuse, Inc. - Lockwood Landfill

2401 Canyon Road
Sparks, NV, 89434
Ph: 775-342-0401

Ticket# 2016471

Customer Name	TETRATECH TETRA TECH	Carrier	SIERRATRUCKTRAM SIERRA TRUCK & TRANS
Ticket Date	07/26/2017	Vehicle#	203 Volume 16.0
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	KEVIN JOB# VERDI FACILITY
Hauling Ticket#		Check#	
Route		Billing #	0001653
State Waste Code		Gen EPA ID	
Manifest	WAF	Grid	
Destination			
PO	1140615		
Profile	117132NV (AREA 3 NICKLE IMPACTED SOIL)		
Generator	150-ARCONIC VERDIFACILITY ARCONICVARDIFACILITY(1 ERIK CIRCLE)		

	Time	Scale	Operator	Inbound	Gross	2 lb*
In	07/26/2017 10:32:31	Scale 2 -->	kg		Tare	1 lb*
Out	07/26/2017 10:32:31		kg		Net	1 lb
			* Manual Weight		Tons	

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spwaste Solid Oth-	100	16.00	Yards	25.00		\$400.00	WASHOE
2 WWM-F-Waste Water	100		%	4.75		\$28.26	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$86.27	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$21.42	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.60		\$27.85	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Total Tax
Total Ticket \$750.00

Driver's Signature

402WM



NON-HAZARDOUS MANIFEST

MANIFEST	1. Generator's US EPA ID No. NVD982463010	Manifest Doc No. Number	2. Page 1 of 1				
Billing Address: Sinning Systems & Rings 89439		Generator's Site Address (if different than billing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439					
Generator's Phone 775-345-0345		A. Manifest Number WM AV-072017-017					
Transporter 1 Company Name Serra Rental and Transport (SRT) USDOT 41412		B. State Generator's ID State Generator's ID					
6. US EPA ID Number NA		C. State Transporter's ID NA					
7. Transporter 2 Company Name Transporter 2 Company Name		D. Transporter's Phone 775-358-7344					
8. US EPA ID Number US EPA ID Number		E. State Transporter's ID State Transporter ID					
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434		F. Transporter's Phone Transporter 2 Phone					
10. US EPA ID Number NA		G. State Facility ID					
		H. State Facility Phone 800-963-4776					
11. Description of Waste Materials		12. Containers		13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments	
		No.	Type				
a. Area 2 - Nickle TPH Impacted Soil and debris WM Profile # 117114NV		1	DT	16	Y	Comments	
b. Waste Name WM Profile # WM Profile Number		No.	Type	Total Qty	Wt./Vol.	Comments	
c. Waste Name WM Profile # WM Profile Number		No.	Type	Total Qty	Wt./Vol.	Comments	
d. Waste Name WM Profile # WM Profile Number		No.	Type	Total Qty	Wt./Vol.	Comments	
J. Additional Descriptions for Materials Listed Above Additional Description		K. Disposal Location Bioremediation, Fastlane- High PCS					
		Cell		Level			
		Grid					
15. Special Handling Instructions and Additional Information Special Handling Instructions							
Purchase Order # 1140615		EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)					
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.							
Printed Name Lynzie Dienl		Signature 			Month 07	Day 26	Year 2017
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed Name RAMON Lopez C			Signature Ramon Lopez C		
		Month 07			Day 26		Year 2017
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed Name			Signature		
		Month			Day		Year
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.							
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.							
Printed Name Kathy Garcia		Signature 			Month 07	Day 20	Year 2017

GENERATOR

TRANSPORTER

FACILITY

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY

Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



2401 Canyon Road
Sparks, NV, 89434
Ph: 775-342-0401

Ticket# 2016466

Customer Name	TETRATECH TETRA TECH	Carrier	GARYDERNERTRUCKING GARY DERNER TRUCK
Ticket Date	07/26/2017	Vehicle#	98 Volume 16.0
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	JD #
Hauling Ticket#		Check#	
Route		Billing #	0001653
State Waste Code		Gen EPA ID	
Manifest	WAF	Grid	
Destination			
PO	1140615		
Profile	117114NV (NICKEL TPH IMPACTED SOIL AND DEBRIS)		
Generator	150-ARCONIC VERDIFACILITY ARCONICVERDIFACILITY(1 ERIK CIRCLE)		

	Time	Scale	Operator	Inbound	Gross	2 lb*
In	07/26/2017 11:43:32	Scale 2 -->	kg		Tare	1 lb*
Out	07/26/2017 11:43:32		kg		Net	1 lb
			* Manual Weight		Tons	

Comments

Product	LDX	Qty	UOM	Rate	Tax	Amount	Origin
1 Spw Biorem RGC-Cub	100	16.00	Yards	65.00		\$1040.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$58.66	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$179.08	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$44.46	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$57.80	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Total Tax
Total Ticket \$1575.00

Driver's Signature





NON-HAZARDOUS MANIFEST

HAZARDOUS MANIFEST	1. Generator's US EPA ID No. NVD982463010	Manifest Doc No. Manifest	2. Page 1 of 1
Generator's Mailing Address: Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439		Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439	
4. Generator's Phone 775-345-0345		A. Manifest Number WM AV-072017-018	
5. Transporter 1 Company Name Sierra Rental and Transport (SRT) USDOT 41412		6. US EPA ID Number NA	
7. Transporter 2 Company Name Transporter 2 Company Name		8. US EPA ID Number US EPA ID Number	
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434		10. US EPA ID Number NA	
11. Description of Waste Materials		12. Containers	
a. Area 2 - Nickle TPH Impacted Soil and debris WM Profile # 117114NV		13. Total Quantity 16	
b. Waste Name WM Profile #		14. Unit Wt./Vol. Y	
c. Waste Name WM Profile #		I. Misc. Comments Comments	
d. Waste Name WM Profile #		Comments	
J. Additional Descriptions for Materials Listed Above Additional Description		K. Disposal Location Bioremediation, Fastlane- High PCS	
15. Special Handling Instructions and Additional Information Special handling instructions		Cell Level	
Purchase Order # 1140615		EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)	
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.			
Printed Name Lynzie Dienl		Signature 	
17. Transporter 1 Acknowledgement of Receipt of Materials		Month Day Year 07 2017	
Printed Name Mike McKay		Signature 	
18. Transporter 2 Acknowledgement of Receipt of Materials		Month Day Year 07 2017	
Printed Name		Signature	
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.			
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.			
Printed Name Kathy Garcia		Signature 	
Month Day Year 07 2017		Day Year 20 2017	

GENERATOR

TRANSPORTER

FACILITY

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY

2401 Canyon Road
 Sparks, NV, 89434
 Ph: 775-342-0401

Ticket# 2016467

Customer Name	TETRATECH TETRA TECH	Carrier	SIERRATRUCKTRAN SIERRA TRUCK & TRANS
Ticket Date	07/26/2017	Vehicle#	196 Volume 16.0
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	MIKE/VERDI FACILITY
Hauling Ticket#		Check#	
Route		Billing #	0001653
State Waste Code		Gen EPA ID	
Manifest	WAF	Grid	
Destination			
PO	1140615		
Profile	117114NV (NICKEL TPH IMPACTED SOIL AND DEBRIS)		
Generator	150-ARCONIC VERDIFACILITY ARCONICVARDIFACILITY(1 ERIK CIRCLE)		

	Time	Scale	Operator	Inbound	Gross	2 lb*
In	07/26/2017 12:48:08	Scale 2 -->	Kg		Tare	1 lb*
Out	07/26/2017 12:48:08		Kg		Net	1 lb
			* Manual Weight		Tons	

Comments

WAF 150-ARCONIC VERDIFACILITY ARCONICVARDIFACILITY(1 ERIK CIRCLE)

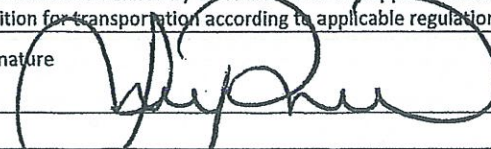
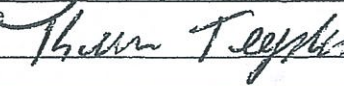
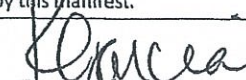
Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spw Biorem RGC-Cub	100	16.00	Yards	65.00		\$1040.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$58.66	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$179.08	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$44.46	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$57.80	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Total Tax
 Total Ticket \$1575.00

Driver's Signature



NON-HAZARDOUS MANIFEST

1. Generator's US EPA ID No. NVD982463010	Manifest Doc No. Number	2. Page 1 of 1			
Generator's Mailing Address: Fastening Systems & Rings Circle di, NV 89439		Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439		A. Manifest Number WM	AV-072017- <u>019</u>
Generator's Phone 775-345-0345		B. State Generator's ID State Generator's ID			
5. Transporter 1 Company Name Sierra Rental and Transport (SRT) USDOT 41412		6. US EPA ID Number NA		C. State Transporter's ID NA	D. Transporter's Phone 775-358-7344
7. Transporter 2 Company Name Transporter 2 Company Name		8. US EPA ID Number US EPA ID Number		E. State Transporter's ID State Transporter ID	F. Transporter's Phone Transporter 2 Phone
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434		10. US EPA ID Number NA		G. State Facility ID	H. State Facility Phone 800-963-4776
11. Description of Waste Materials		12. Containers		13. Total Quantity	14. Unit Wt./Vol.
a. Area 2 - Nickle TPH Impacted Soil and debris WM Profile # 117114NV		No. 1	Type DT	16	Y
b. Waste Name WM Profile #		No.	Type	Total Qty.	Unit Vol.
c. Waste Name WM Profile #		No.	Type	Total Qty.	Unit Vol.
d. Waste Name WM Profile #		No.	Type	Total Qty.	Unit Vol.
J. Additional Descriptions for Materials Listed Above Additional Description		K. Disposal Location Bioremediation, Fastlane- High PCS			
15. Special Handling Instructions and Additional Information Special Handling Instructions		Cell		Level	
Grid		16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CER Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.			
Purchase Order # 1140615		EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)			
Printed Name Lynzie Dieni		Signature 		Month 07	Day 26
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed Name KEVIN TEEPLES		Signature 	
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed Name		Signature	
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.		20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.		Month 07	Day 26
Printed Name Kathy Garcia		Signature 		Year 2017	

GENERATOR

TRANSPORTER

FACILITY

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY
 Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY
 Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Refuse, Inc. - Lockwood Landfill

2401 Canyon Road
Sparks, NV, 89434
Ph: 775-342-0401

Ticket# 2016422

Customer Name TETRATECH TETRA TECH
Ticket Date 07/26/2017
Payment Type Credit Account
Manual Ticket#
Hauling Ticket#
Route
State Waste Code
Manifest WAF
Destination
PO 1140615
Profile 117114NV (NICKEL TPH IMPACTED SOIL AND DEBRIS)
Generator 150-ARCONIC VERDIFACILITY ARCONICVARDIFACILITY(1 ERIK CIRCLE)

Carrier SIERRATRUCKTRAN SIERRA TRUCK & TRANS
Vehicle# 203 Volume 18.0
Container
Driver KEVIN JOB# VERDI FACILITY
Check#
Billing # 0001653
Gen EPA ID
Grid

	Time	Scale	Operator	Inbound	Gross
In	07/26/2017 13:38:52	Scale 01	kg		Tare
Out	07/26/2017 13:38:52		kg		Net
Comments					Tons

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spw Biorem RGC-Cub	100	16.00	Yards	65.00		\$1040.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$58.66	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$179.08	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$44.46	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$57.80	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Kevin

Total Tax
Total Ticket \$1575.00

Driver's Signature
402WM

SPORTER	18. Transporter 2 Acknowledgement of Receipt of Materials			
	Printed Name <i>Kevin Tette</i>	Signature <i>Kevin Tette</i>	Month	Day
FACILITY	19. Certificate of Final Treatment/Disposal			
	I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.			
T	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.			
	Printed Name <i>Kathy Garcia</i>	Signature <i>Kathy Garcia</i>	Month 07	Day 26

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY

NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST	1. Generator's US EPA ID No. NVD982463010	Manifest Doc No. Number	2. Page 1 of 1							
Generator's Mailing Address: Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439		Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439		A. Manifest Number WM AV-072017-020						
4. Generator's Phone 775-345-0345		B. State Generator's ID State Generator's ID								
5. Transporter 1 Company Name Sierra Rental and Transport (SRT) USDOT 41412		6. US EPA ID Number NA		C. State Transporter's ID NA						
7. Transporter 2 Company Name Transporter 2 Company Name		8. US EPA ID Number US EPA ID Number		D. Transporter's Phone 775-358-7344						
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434		10. US EPA ID Number NA		E. State Transporter's ID State Transporter ID						
				F. Transporter's Phone Transporter 2 Phone						
				G. State Facility ID						
				H. State Facility Phone 800-963-4776						
GENERATOR	11. Description of Waste Materials		12. Containers		13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments			
	a. Area 2 - Nickle TPH Impacted Soil and debris WM Profile # 117114NV		No.	Type	16	Y	Comments			
	b. Waste Name WM Profile #		No.	Type	Total Qty	Wt./Vol.	Comments			
	c. Waste Name WM Profile #		No.	Type	Total Qty	Wt./Vol.	Comments			
	d. Waste Name WM Profile #		No.	Type	Total Qty	Wt./Vol.	Comments			
J. Additional Descriptions for Materials Listed Above Additional Description		K. Disposal Location Bioremediation, Fastlane- High PCS								
		Cell				Level				
		Grid								
15. Special Handling Instructions and Additional Information Special Handling Instructions										
Purchase Order # 1140615		EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)								
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.										
Printed Name Lynzee Diehl		Signature 			Month 07	Day 26	Year 2017			
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials		Printed Name Ramon Lopez C			Signature 		Month 07	Day 26	Year 2017
	18. Transporter 2 Acknowledgement of Receipt of Materials		Printed Name			Signature		Month	Day	Year
FACILITY	19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.									
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.									
Printed Name Kathy Garcea		Signature 			Month 07	Day 26	Year 2017			

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Refuse, Inc. - Lockwood Landfill

2401 Canyon Road
Sparks, NV, 89434
Ph: 775-342-0401

Ticket# 2016446

Customer Name	TETRATECH TETRA TECH	Carrier	GARYDERNERTRUCKING	GARY DERNER TRUCK
Ticket Date	07/26/2017	Vehicle#	98	Volume 18.0
Payment Type	Credit Account	Container		
Manual Ticket#		Driver	JD #	
Hauling Ticket#		Check#		
Route		Billing #	0001653	
State Waste Code		Gen EPA ID		
Manifest	WAF	Grid		
Destination				
PO	1140615			
Profile	117114NV (NICKEL TPH IMPACTED SOIL AND DEBRIS)			
Generator	150-ARCONIC VERDIFACILITY ARCONICVARDIFACILITY(1 ERIK CIRCLE)			

	Time	Scale	Operator	Inbound	Gross
In	07/26/2017 14:18:42	Scale 01	kg		Tare
Out	07/26/2017 14:18:42		kg		Net
					Tons

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spw Biorem RGC-Cub	100	16.00	Yards	65.00		\$1040.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$58.66	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$179.08	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$44.46	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$57.80	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Total Tax
Total Ticket \$1575.00

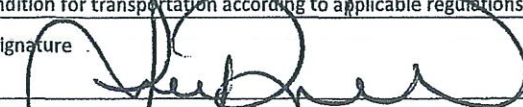

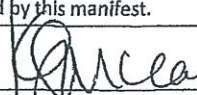
Driver's Signature

Ramon Lopez

402WM



NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST	1. Generator's US EPA ID No. <p style="text-align: center;">NVD982463010</p>	Manifest Doc No. <p style="text-align: center;">Number</p>	2. Page 1 of <p style="text-align: center;">1</p>																											
Generator's Mailing Address: Fastening Systems & Rings Circle NV 89439	Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439		A. Manifest Number <p style="text-align: center;">WM</p> AV-072017- <u>021</u>																											
Generator's Phone <p style="text-align: center;">775-345-0345</p>	B. State Generator's ID State Generator's ID		C. State Transporter's ID <p style="text-align: center;">NA</p>																											
Transporter 1 Company Name Sierra Rental and Transport (SRT) USDOT 41412	6. US EPA ID Number <p style="text-align: center;">NA</p>		D. Transporter's Phone <p style="text-align: center;">775-358-7344</p>																											
Transporter 2 Company Name Transporter 2 Company Name	8. US EPA ID Number US EPA ID Number		E. State Transporter's ID State Transporter's ID																											
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434	10. US EPA ID Number <p style="text-align: center;">NA</p>		F. Transporter's Phone Transporter 2 Phone																											
11. Description of Waste Materials			G. State Facility ID																											
a. Area 2 - Nickle TPH Impacted Soil and debris WM Profile # 117114NV			H. State Facility Phone <p style="text-align: center;">800-963-4776</p>																											
b. Waste Name WM Profile #			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">12. Containers</th> <th rowspan="2">13. Total Quantity</th> <th rowspan="2">14. Unit Wt./Vol.</th> <th rowspan="2">1. Misc. Comments</th> </tr> <tr> <th>No.</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">DT</td> <td style="text-align: center;">16</td> <td style="text-align: center;">Y</td> <td style="text-align: center;">Comments</td> </tr> <tr> <td style="text-align: center;">No.</td> <td style="text-align: center;">Type</td> <td style="text-align: center;">Total Qty.</td> <td style="text-align: center;">Unit Vol.</td> <td style="text-align: center;">Comments</td> </tr> <tr> <td style="text-align: center;">No.</td> <td style="text-align: center;">Type</td> <td style="text-align: center;">Total Qty.</td> <td style="text-align: center;">Unit Vol.</td> <td style="text-align: center;">Comments</td> </tr> <tr> <td style="text-align: center;">No.</td> <td style="text-align: center;">Type</td> <td style="text-align: center;">Total Qty.</td> <td style="text-align: center;">Unit Vol.</td> <td style="text-align: center;">Comments</td> </tr> </tbody> </table>	12. Containers		13. Total Quantity	14. Unit Wt./Vol.	1. Misc. Comments	No.	Type	1	DT	16	Y	Comments	No.	Type	Total Qty.	Unit Vol.	Comments	No.	Type	Total Qty.	Unit Vol.	Comments	No.	Type	Total Qty.	Unit Vol.	Comments
12. Containers		13. Total Quantity	14. Unit Wt./Vol.	1. Misc. Comments																										
No.	Type																													
1	DT	16	Y	Comments																										
No.	Type	Total Qty.	Unit Vol.	Comments																										
No.	Type	Total Qty.	Unit Vol.	Comments																										
No.	Type	Total Qty.	Unit Vol.	Comments																										
c. Waste Name WM Profile #			J. Additional Descriptions for Materials Listed Above Additional Description																											
d. Waste Name WM Profile #			K. Disposal Location Bioremediation, Fastlane- High PCS Cell _____ Level _____ Grid _____																											
15. Special Handling Instructions and Additional Information Special Handling Instructions																														
Purchase Order # 1140615		EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)																												
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.																														
Printed Name Lynne Diehl	Signature 	Month 07	Day 26																											
17. Transporter 1 Acknowledgement of Receipt of Materials Printed Name Mike McFarley		Signature 	Year 2017																											
18. Transporter 2 Acknowledgement of Receipt of Materials Printed Name		Signature	Year																											
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.																														
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.																														
Printed Name Rocky Garcia	Signature 	Month 07	Day 20																											

GENERATOR

TRANSPORTER

FACILITY

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY
 Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY
 Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



2401 Canyon Road
 Sparks, NV, 89434
 Ph: 775-342-0401

Refuse, Inc. - Lockwood Landfill

Ticket# 2016481

Customer Name TETRATECH TETRA TECH

Ticket Date 07/26/2017

Payment Type Credit Account

Manual Ticket#

Hauling Ticket#

Route

State Waste Code

Manifest WAF

Destination

PO 1140615

Profile 117114NV (NICKEL TPH IMPACTED SOIL AND DEBRIS)

Generator 150-ARCONIC VERDIFACILITY ARCONICVERDIFACILITY(1 ERIK CIRCLE)

Carrier SIERRATRUCKTRAN SIERRA TRUCK & TRANS

Vehicle# 196

Volume 16.0

Container

Driver MIKE/VERDI FACILITY

Check#

Billing # 0001653

Gen EPA ID

Grid

	Time	Scale	Operator	Inbound	Gross
In	07/26/2017 15:22:08	Scale 01	kg		Tare
Out	07/26/2017 15:22:08		kg		Net
Comments					Tons

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spw Biorem RGC-Cub	100	16.00	Yards	65.00		\$1040.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$58.66	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$179.08	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$44.46	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$57.80	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Mike Verdi

Total Tax
 Total Ticket \$1575.00

Driver's Signature

402WM



S P O R T E R	18. Transporter 2 Acknowledgement of Receipt of Materials			
	Printed Name	Signature	Month	Day
F A C I L I T Y	19. Certificate of Final Treatment/Disposal			
	I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.			
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.				
Printed Name	Signature	Month	Day	Year
<i>Kathy Garcia</i>	<i>Garcia</i>	07	26	2017

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY



NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST		1. Generator's US EPA ID No. NVD982463010		Manifest Doc No.		2. Page 1 of 1			
3. Generator's Mailing Address: Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439			Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439			A. Manifest Number WM			
4. Generator's Phone 775-345-0345						B. State Generator's ID AV-072017-022			
5. Transporter 1 Company Name Sierra Rental and Transport (SRT) USDOT 41412			6. US EPA ID Number NA			C. State Transporter's ID NA			
7. Transporter 2 Company Name			8. US EPA ID Number			D. Transporter's Phone 775-358-7344			
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434			10. US EPA ID Number NA			E. State Transporter's ID			
						F. Transporter's Phone			
						G. State Facility ID			
						H. State Facility Phone 800-963-4776			
GENERATOR	11. Description of Waste Materials			12. Containers		13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments	
	a. Area 2 - Nickle TPH Impacted Soil and debris			No.	Type	15	Y		
	WM Profile # 117114NV			1	DT				
	b. Area 3 - Nickel								
	WM Profile #								
	c. Area 4 - Nickel								
WM Profile #									
d. Area 5 - Nickel									
WM Profile #									
J. Additional Descriptions for Materials Listed Above			K. Disposal Location Bioremediation, Fastlane-High PCS						
			Cell		Level				
			Grid						
15. Special Handling Instructions and Additional Information									
Purchase Order # 1140615				EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)					
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.									
Printed Name Lynzie Diehl EHS Manager, Arconic Verdi Operations			Signature			Month 07	Day 26	Year 2017	
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials								
	Printed Name Ramon Lopez Cabrero			Signature			Month 07	Day 26	Year 2017
	18. Transporter 2 Acknowledgement of Receipt of Materials								
Printed Name			Signature			Month	Day	Year	
FACILITY	19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.								
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.								
	Printed Name			Signature			Month 07	Day	Year 2017

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY



2401 Canyon Road
Sparks, NV, 89434
Ph: 775-342-0401

Ticket# 2016501

Customer Name	TETRATECH TETRA TECH	Carrier	GARYDERNERTRUCKING	GARY DERNER TRUCK
Ticket Date	07/26/2017	Vehicle#	98	Volume 16.0
Payment Type	Credit Account	Container		
Manual Ticket#		Driver	JD #	
Hauling Ticket#		Check#		
Route		Billing #	0001653	
State Waste Code		Gen EPA ID		
Manifest	WAF			
Destination		Grid		
PO	1140615			
Profile	117114NV (NICKEL TPH IMPACTED SOIL AND DEBRIS)			
Generator	150-ARCONIC VERDIFACILITY ARCONICVARDIFACILITY(1 ERIK CIRCLE)			

	Time	Scale	Operator	Inbound	Gross
In	07/26/2017 16:09:31	Scale 01	kg		Tare
Out	07/26/2017 16:09:31		kg		Net
					Tons

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Spw Biorem RGC-Cub	100	15.00	Yards	65.00		\$975.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$55.58	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$169.65	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$42.12	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$54.76	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Total Tax
Total Ticket \$1492.11

Driver's Signature
402WM

Ramon Lopez C.



NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST	1. Generator's US EPA ID No. NVD982463010	Manifest Doc No. NUMERICAL	2. Page 1 of 1
Mailing Address: Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439	Generator's Site Address (if different than mailing): Arconic Fastening Systems & Rings 1 Eric Circle Verdi, NV 89439		A. Manifest Number WM AV-072017-023
Generator's Phone 775-345-0345	6. US EPA ID Number NA		B. State Generator's ID <i>State Generator's ID</i>
Transporter 1 Company Name Terra Rental and Transport (SRT)	7. Transporter 2 Company Name <i>Transporter 2 Company Name</i>		C. State Transporter's ID NA
Transporter 1 Phone 775-358-7344	8. US EPA ID Number <i>US EPA ID Number</i>		D. Transporter's Phone 775-358-7344
Transporter 2 Phone 775-358-7344	9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434		E. State Transporter's ID <i>State Transporter ID</i>
9. Designated Facility Name and Site Address Lockwood Regional Landfill (Refuse, Inc.) 2700 East Mustang Road Sparks, NV 89434	10. US EPA ID Number NA		F. Transporter's Phone <i>Transporter's Phone</i>
11. Description of Waste Materials		12. Containers	13. Total Quantity
a. Area 2 - Nickle TPH Impacted Soil and debris		No. Type	14. Unit Wt./Vol.
WM Profile # 117114NV		1 DT	16 Y
b. Waste Name		No. Type	15. Misc. Comments
WM Profile # <i>WM Profile Number</i>			<i>Comments</i>
c. Waste Name		No. Type	<i>Comments</i>
WM Profile # <i>WM Profile Number</i>			
d. Waste Name		No. Type	<i>Comments</i>
WM Profile # <i>WM Profile Number</i>			
J. Additional Descriptions for Materials Listed Above		K. Disposal Location	
<i>Additional Description</i>		Bioremediation, Fastlane- High PCS	
		Cell	Level
		Grid	
15. Special Handling Instructions and Additional Information <i>Special Handling Instructions</i>			
Purchase Order # 1140615		EMERGENCY CONTACT / PHONE NO.: CHEMTREC (800-424-9300)	
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.			
Printed Name Cynthia Dienl		Signature <i>[Signature]</i>	Month Day Year 07 2017
17. Transporter 1 Acknowledgement of Receipt of Materials			
Printed Name MIKE MEKAY		Signature <i>[Signature]</i>	Month Day Year 07 2017
18. Transporter 2 Acknowledgement of Receipt of Materials			
Printed Name		Signature	Month Day Year
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.			
20. Facility Owner or Operator Certification of receipt of non-hazardous materials covered by this manifest.			
Printed Name Kathy Garcea		Signature <i>[Signature]</i>	Month Day Year 07 26 2017

GENERATOR

TRANSPORTER

FACILITY



2401 Canyon Road
Sparks, NV, 89434
Ph: 775-342-0401

Ticket# 2016637

Customer Name TETRATECH TETRA TECH Carrier SIERRATRUCKTRAN SIERRA TRUCK & TRANS
 Ticket Date 07/27/2017 Vehicle# 196 Volume 16.0
 Payment Type Credit Account Container
 Manual Ticket# Driver MIKE/VERDI FACILITY
 Hauling Ticket# Check#
 Route Billing # 0001653
 State Waste Code Gen EPA ID
 Manifest WAF Grid
 Destination
 PO 1140615
 Profile 117114NV (NICKEL TPH IMPACTED SOIL AND DEBRIS)
 Generator 150-ARCONIC VERDIFACILITY ARCONICVARDIFACILITY(1 ERIK CIRCLE)

Time	Scale	Operator	Inbound	Gross
In 07/27/2017 09:23:24	Scale 01	kg		Tare
Out 07/27/2017 09:23:24		kg		Net
				Tons

Comments

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Spw Biorem RSC-Cub	100	16.00	Yards	65.00		\$1040.00	WASHOE
2 WWM-P-Waste Water	100		%	4.75		\$58.66	WASHOE
3 EVF-P-Standard Env	100		%	14.50		\$179.08	WASHOE
4 RCR-P-Regulatory C	100		%	3.60		\$44.46	WASHOE
5 FUEL-Fuel Surcharg	100		%	4.68		\$57.80	WASHOE
6 TRANSLOAD-Transpor	100	1	Load	195.00		\$195.00	WASHOE

Total Tax
Total Ticket \$1575.00

Driver's Signature

402WM



H S P O R T E R	18. Transporter 2 Acknowledgement of Receipt of Materials		07	2017
	Printed Name	Signature	Month	Day
F A C I L I T Y	19. Certificate of Final Treatment/Disposal			
	I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.			
	20. Facility Owner or Operator Certification of receipt of non-hazardous materials covered by this manifest.			
	Printed Name	Signature	Month	Day
	Kathy Garcea	K Garcea	07	26

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY

**APPENDIX B
PHOTOLOG**



Photo 1: Markout of excavation areas; Area 2 shown.



Photo 2: Starting excavation of Area 1.



Photo 3: Loading soils into trucks for transport to the landfill.



Photo 4: Area 1 excavation progressing.



Photo 5: Checking depth of the excavation.



Photo 6: Area 1 prior to backfilling.



Photo 7: Area 1 following backfill, compaction, and grading, looking east-southeast.



Photo 8: Area 2 prior to backfilling.



Photo 9: Area 2 following backfill, compaction, and grading, looking east.



Photo 10: Excavation in progress on Area 3.



Photo 11: Boulders removed from the excavation and set aside; these boulders were returned to the excavation, as possible.



Photo 12: Confirmation of excavation depth in Area 3.



Photo 13: Area 3 excavation ready for backfill.



Photo 14: Area 3 following backfill, compaction, and grading, looking south-southwest.

**APPENDIX C
DIG PERMIT**

DIGGING OR DRILLING PERMIT REQUISITION

PERMIT NUMBER: (Requester supplies permit number and attaches permit.)		EQUIP / BLDG:	ROUTING	
			Mech Design:	
PROJECT TITLE:			Telephone Company Rep:	
REQUEST DATE:	REQUIRED DATE:	REQUESTED BY:	* Environmental Control	Lynzie Diehl
			Dig Permit Planner	Lynzie Diehl
IS SOIL DISTURBANCE REQUIRED? <u>YES</u> <u>NO</u>		ACCOUNT NO: (Authorized Projects charge directly to RFA.)	Electrical Utilities	
			Area Electrical	
			Requester	
			* Req'd for Any Soil Disturbance	

EXCAVATION DESCRIPTION (INCLUDE LOCATION - SEE BACK)

REFERENCE DRAWINGS (POTENTIAL INTERFERENCES)

EMBEDDED CONDUIT:	UTILITY PIPING:
PROCESS PIPING:	EQUIPMENT GENERAL ARRANGEMENT:

THIS SECTION TO BE COMPLETED BY ARCONIC ENVIRONMENTAL CONTROL

Contaminants of Concern: _____

Project within Unit Covered by SMP? (Y/N) _____

Sampling Requirements: _____

Onsite Soil Management Requirements _____

Worker Exposure Control Plan Requirements: _____

Disposal Plan. _____



And Seek Help if Any of the Following Occur During the Project and Not Addressed in the Project Planning and Procedures

- Solvent or Unusual Odors
- Free Petroleum Product in the Soil or Water
- Visible or Unusual Soil Staining
- Tanks, Vaults or other like Structures

**** CONSTRUCTION AND USE OF DRINKING WATER WELLS WITHIN THE PLANT'S BOUNDARY IS PROHIBITED. ****

APPENDIX D
SOIL MANAGEMENT PLAN

Prepared for Submission to:
Washoe County Health District

Prepared on Behalf of:



Prepared By:
Ramboll Environ US Corporation
Arlington, Virginia

Date
August 2017

Project Number
01-40267B

SOIL MANAGEMENT PLAN

1 ERIK CIRCLE, VERDI, NEVADA

SOIL MANAGEMENT PLAN
1 ERIK CIRCLE, VERDI, NEVADA

Revision **00**
Date **August 2017**
Made by **Rohan Chaudhary**
Checked by **Sarah Stoneking**
Approved by **Adam Johnston**
Description **Soil Management Plan**
 Former Schlosser Forge Company – Viking Metallurgical
 1 Erik Circle, Verdi, NV

Ref 01-40267B

Ramboll Environ
4350 North Fairfax Drive
Suite 300
Arlington, VA 22203
USA

T +1 703 516 2300
F +1 703 516 2345
www.ramboll-environ.com

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1.2	Site Conditions Summary	1
2.	REQUIRED ACTIONS	3
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FIGURES

Figure 1: Extent of Soil Management Area

ATTACHMENTS

Attachment 1: Dig Permit

1. INTRODUCTION

This Soil Management Plan (SMP) provides protocols that site personnel and contractors must follow in the event that soils within the designated Soil Management Area (SMA) at the Schlosser Forge Company located at 1 Erik Circle in Verdi, Nevada are to be disturbed during maintenance, construction, or other activities that will penetrate the ground surface. The SMA is depicted on Figure 1.

Section 2 of this document provides a list of required procedures that should be followed any time that the ground surface within the designated Soil Management Area is to be penetrated.

1.1 Purpose of SMP

The purpose of the SMP is to describe, generally, the procedures that will be employed when soil within the SMA is disturbed. The SMP has been developed to facilitate safe work practices for subsurface activities within the SMA, by outlining procedures that will be used for testing, handling, and disposal of impacted soil that may be encountered during future construction, repair, or other activities. Implementing the procedures in this SMP will help ensure that impacted soil (if encountered) is handled in a manner that is protective of human health and the environment, does not exacerbate the environmental condition of the site and surrounding properties, and in accordance with State and local regulations.

1.2 Site Conditions Summary

Nickel has been identified in site soil at concentrations exceeding the United States Environmental Protection Agency (USEPA) Industrial Regional Screening Level (RSL) at depths up to 10 feet below ground surface (bgs) within the SMA. More specifically, three areas of nickel-affected soil were identified. Nickel concentrations in soil appear to decrease significantly with depth prior to reaching the groundwater table. In July 2017, nickel-affected soils within the upper two feet of the SMA were excavated and disposed off-site, and subsequently replaced with clean fill material. These actions eliminated potential exposure pathways for routine on-site workers at the site. However, nickel-affected soils remain in place at depths greater than 2 feet bgs within the SMA. Based on the above, potentially complete exposure pathways exist for the following scenario:

- *Future Construction Workers.* Although no construction activities are currently planned, future construction workers could come into contact with soils containing nickel in excess of the Industrial RSL or inhale dust particles containing nickel in excess of the Industrial RSL.

Nickel is a naturally occurring metal in the Earth's crust; the Agency for Toxic Substances and Disease Registry (ATSDR) cites typical concentrations of nickel in soil as 4 to 80 mg/kg.¹ Nickel in the environment binds strongly to particles containing iron or manganese; the solubility of nickel increases under more acidic conditions. Based on information provided by ATSDR, studies do not indicate that nickel concentrates in fish or in small animals. According to the ATSDR, food is the major source of human exposure to nickel. Exposure may also occur via breathing air, drinking water, or smoking tobacco containing nickel, or via

¹ Agency for Toxic Substances and Disease Registry (ATSDR) Toxicological Profile for Nickel, August 2005.

direct contact with soil or water impacted by nickel. Contact dermatitis is identified by ATSDR as the most common harmful effect of nickel in humans.

2. REQUIRED ACTIONS

The actions described below are intended to address the following elements:

- Protection of current site workers from direct contact with or inhalation of soils containing nickel in excess of the Industrial RSL;
- Protection of future site workers or construction workers based on direct contact with or inhalation of soils containing nickel in excess of the Industrial RSL.
- Conformance with regulations and guidance established by the NDEP and Washoe County Health District.

2.1 Personnel Notifications and Responsibilities

All site workers will be informed of the dig permit process and will be responsible for adhering to the dig permit process. Responsibility for implementation of this SMP lies with the facility manager and facility Environmental Health and Safety (EHS) Manager. These personnel are currently designated as follows:

Facility Manager: Mark Quattrin

Facility EHS Manager: Lynzie Diehl

The facility manager and/or facility EHS manager will be responsible for issuing dig permits for any future activities at the site that may disturb the ground surface and for determining whether the proposed activities fall within the SMA. If such activities are determined to occur within, or overlap the designated SMA, it will be responsibility of these personnel to inform the workers of the presence of nickel-affected soils; ensure that disturbed soils are appropriately characterized and managed off-site; and to ensure that workers include procedures during work that are protective, including the appropriate use of personal protective equipment and dust control.

2.2 Digging Authorization

Any on-site activity requiring penetration of the ground surface, including subsurface utility work, future construction, or other activities that may disturb the ground surface, will require the implementation of a dig permit process and authorization from the facility EHS manager. A copy of the dig permit for the facility is included as Attachment A.

When a dig permit is provided to the facility EHS Manager, the permit will be reviewed to determine whether the proposed activities may disturb soils within the SMA. If it is determined that such activities will disturb the SMA, the activities outlined in Section 2.3, below will be conducted, in addition to the implementation of Schlosser Forge Company's standard health and safety procedures.

2.3 Requirements for Work Within the SMA

2.3.1 Facility EHS Approval

Work within the SMA will require facility approval, including an authorized dig permit, which shall be maintained both by the facility EHS manager and the contractor or personnel performing the work.

2.3.2 Health and Safety Notifications and Procedures

Arconic has a strong commitment to health and safety and all site workers and subcontractors must adhere to Company health and safety policies and procedures. All site workers will be notified of the dig permit process and the dig permit process will be incorporated into site health and safety training. When a dig permit requisition form includes work that may disturb soils within the SMA, the permit will include specific mention of nickel as a contaminant of concern. Worker exposure control plan requirements will include the minimum use of USEPA Level D personal protective equipment to limit direct contact with nickel-affected soils and will also include provisions for control of visible dust via the application of a water spray or other effective method. If soils removed from the SMA require stockpiling, the soils will be stockpiled on plastic sheeting, bermed and covered with plastic sheeting at the end of each work day and during periods of precipitation to limit windblown particles or storm water runoff.

2.3.3 Sampling Requirements

If soils within the SMA will be disturbed, the soils will be tested for the presence of nickel to evaluate whether the soils can be stockpiled and re-used on-site or whether the soils will require off-site disposal. Soils exhibiting nickel in excess of 2,200 milligrams per kilogram (mg/kg) will require off-site management.

2.3.4 Soil Characterization and Management

If the proposed activities will include removal or excavation of soils within the SMA, the soils will be characterized for the presence of nickel, as well as other standard waste characterization parameters, to evaluate appropriate disposal options. Based on the characterization results, soils should be subsequently disposed off-site at an appropriately authorized waste management facility. Documentation of the soil characterization and off-site disposal will be maintained on-site.

3. DOCUMENTATION

3.1 Dig Permits

The EHS Manager will maintain copies of all dig permits for the plant. Permits will be maintained for a minimum duration of three years.

3.2 Soil Characterization Data

For those dig permits for which it is confirmed that the proposed activities will disturb soils within the SMA, soil characterization data shall be maintained on-file with the associated dig permit.

3.3 Soil Disposal Documentation

If testing indicates that nickel-affected (or otherwise impacted) soils will require off-site disposal, the facility will maintain records of the disposition of such soils, including waste profile forms, landfill approvals, and landfill tickets confirming receipt of soils.

01-40267B\PRIN_WP\44339v1

FIGURES

SOIL MANAGEMENT AREA
FORMER SCHLOSSER FORGE COMPANY
1 ERIK CIRCLE
VERDI, NEVADA



SOURCE:
Aerial Imagery: Google Earth, July, 2017.
Note:
Penetration of the ground surface within the Soil Management Area depicted herein requires prior written approval to Arcadis Health and Safety lead and is subject to specific work considerations.

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SCALE IN FEET

ATTACHMENTS

SOIL MANAGEMENT PLAN
1 ERIK CIRCLE, VERDI, NEVADA

ATTACHMENT 1
DIG PERMIT

DIGGING OR DRILLING PERMIT REQUISITION

PERMIT NUMBER: (Requester supplies permit number and attaches permit.)		EQUIP / BLDG:	ROUTING	
			Mech Design:	
PROJECT TITLE:			Telephone Company Rep:	
REQUEST DATE:	REQUIRED DATE:	REQUESTED BY:	* Environmental Control	Lynzie Diehl
			Dig Permit Planner	Lynzie Diehl
IS SOIL DISTURBANCE REQUIRED? YES NO		ACCOUNT NO: (Authorized Projects charge directly to RFA.)	Electrical Utilities	
			Area Electrical	
			Requester	
			* Req'd for Any Soil Disturbance	

EXCAVATION DESCRIPTION (INCLUDE LOCATION - SEE BACK)

REFERENCE DRAWINGS (POTENTIAL INTERFERENCES)

EMBEDDED CONDUIT:	UTILITY PIPING:
PROCESS PIPING:	EQUIPMENT GENERAL ARRANGEMENT:

THIS SECTION TO BE COMPLETED BY ARCONIC ENVIRONMENTAL CONTROL

Contaminants of Concern: _____

Project within Unit Covered by SMP? (Y/N) _____

Sampling Requirements:: _____

Onsite Soil Management Requirements _____

Worker Exposure Control Plan Requirements: _____

Disposal Plan. _____

And Seek Help if Any of the Following Occur During the Project and Not Addressed in the Project Planning and Procedures

- Solvent or Unusual Odors
- Free Petroleum Product in the Soil or Water
- Visible or Unusual Soil Staining
- Tanks, Vaults or other like Structures

**** CONSTRUCTION AND USE OF DRINKING WATER WELLS WITHIN THE PLANT'S BOUNDARY IS PROHIBITED. ****