October 5, 2011

Mr. John Pekala
ENVIRON International Corporation
560 West Lake Mead Parkway
Henderson, Nevada 89015

**Regarding:** ***Limited Asbestos Survey – RZ-D-16A***
**Nevada Environmental Response Trust**
**560 West Lake Mead Parkway**
**Henderson, Nevada 89015**
**Project No. CON111106**

Dear Mr. Pekala,

Logistical Solutions, LLC (LoSo) is pleased to provide ENVIRON International Corporation the results of the *Limited Asbestos Survey* conducted for the Nevada Environmental Response Trust site located at 560 West Lake Mead Parkway in Henderson, Nevada. The purpose of the limited asbestos survey (LAS) was to identify, within reason, the presence and location of potential asbestos-containing materials (ACMs) within or adjacent to Remediation Zone RZ-D-16A (project area).

The scope-of-work performed as part of this LAS included a visual survey of the project area, bulk-material sample collection of suspect ACMs, laboratory analysis, and preparation of this report.

## ASBESTOS REGULATIONS

### EPA – National Emission Standard for Hazardous Air Pollutants (NESHAP)-Asbestos

The *United States Environmental Protection Agency* (EPA) regulates the emission of asbestos in Title 40 of the *Code of Federal Regulations* (CFR), Chapter I, Subchapter C, Part 61, Subpart M, *National Emissions Standards for Hazardous Air Pollutants* (NESHAP). The NESHAP provides regulatory standards for the control of asbestos emissions during the removal and/or abatement of regulated asbestos containing material (RACM).

RACM is defined by NESHAP as meeting any of the following definitions: 1) a friable asbestos material; 2) a Category I non-friable ACBM that has become friable; 3) a Category I non-friable asbestos containing building materials (ACBM) that will be or has been subject to sanding, grinding, cutting, or abrading, or 4) a Category II non-friable ACBM that has a high probability of becoming or has become crumbled, pulverized or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

The NESHAP provides the following definitions for friable, non-friable, Category I non-friable, and Category II non-friable asbestos material:

- **Friable asbestos material** means any material containing more than one percent asbestos…. that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.

- **Non-friable asbestos material** means any material containing more than one percent asbestos…. that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
- **Category I non-friable asbestos-containing material** (ACM) means asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than one percent asbestos.
- **Category II non-friable** ACM means any material, excluding Category I non-friable ACM, containing more than one percent asbestos…that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

According to the NESHAP, RACM must be removed prior to a demolition or renovation of a building. The NESHAP also requires State and local notifications, proper handling, and proper disposal of RACM that may be removed or disturbed during any demolition, repair, or maintenance activities involving the RACM.

**OSHA - General Construction Standard**

The *Occupational Safety and Health Administration* (OSHA) regulates exposure to airborne asbestos for construction workers in Title 29 CFR, Part 1926.1101, *General Construction Standard (GCS)*. The GCS regulates exposure in all work as defined in 29 CFR 1910.12(b), including, but not limited to the following:

- Demolition or salvage of structures where asbestos is present;
- Removal or encapsulation of materials containing asbestos;
- Construction, alteration, repair, maintenance, or renovation of structures, substrates, or portions thereof, that contain asbestos;
- Installation of products containing asbestos;
- Asbestos spill/emergency cleanup;
- Transportation, disposal, storage, containment of and housekeeping activities involving asbestos or products containing asbestos, on the site or location at which construction activities are performed;
- Coverage under this standard shall be based on the nature of the work operation involving asbestos exposure; and
- This section does not apply to asbestos-containing asphalt roof coatings, cements, and mastics.

The GCS, which requires proper training of workers prior to the commencement of work, classifies asbestos-related work under this section into four classes:

- **Class I** – activities involving the removal of thermal system insulation (TSI) and surfacing asbestos-containing material (ACM) and potential asbestos-containing material (PACM);
- **Class II** – activities involving the removal of ACM which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics;
- **Class III** – repair and maintenance operations, where “ACM” including TSI ACM, surfacing ACM, and PACM may be disturbed; and
- **Class IV** – maintenance and custodial activities during which employees contact, but do not disturb, ACM or PACM and activities to clean up dust, waste, and debris resulting from Class I, Class II, and Class III activities.

# LIMITED ASBESTOS SURVEY

## Material Survey

On September 29, 2011, a Nevada-licensed asbestos building inspector visually surveyed an area where recent excavation activities were being conducted. A section of transite pipe was removed from the excavation and was placed within plastic sheeting. As a result, one bulk sample was collected for analyses just to confirm its asbestos content. The general location of the transite pipe is presented on the attached site plan. Several photographs of this location and the material are provided in the attached photograph log.

The suspect ACM sample was placed in a plastic Zip-Loc™ bag. The bag was sealed, labeled, and transported to Forensic Analytical Laboratories, Inc., a National Voluntary Laboratory Accreditation Program (NVLAP) laboratory. The bulk sample was analyzed for asbestos using the method specified in Appendix E, Subpart E, 40 Code of Federal Regulations, Part 763, Section 1, Polarized Light Microscopy (PLM).

## Results, Discussion, and Recommendations

Bulk sample RZ-D-16A reported an ACM concentration of 20 percent. A copy of the analytical report and chain-of-custody documentation indicating the sample location and material description are attached.

One homogeneous area of approximately three feet of a transite pipe was identified as ACM. According to OSHA 29 CFR 1926.1101(b), transite pipe removal is considered Class II asbestos work defined as the removal of ACM which is not TSI or surfacing material.

The transite pipe material was not a friable material in its intended use; however, excavation or disturbance of the pipe may render the material friable. As a result, a Nevada-licensed asbestos abatement contractor must be used to remove and dispose of the ACM prior to disturbance of the materials. Asbestos work activities are categorized according to OSHA 29 CFR 1926.1101(b). Class I asbestos work is defined as activities involving the removal of TSI ACM, surfacing ACM, and PACM. Class II asbestos work means activities involving the removal of ACM which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics. Class III asbestos work involves repair and maintenance operations, where ACM, including TSI and surfacing ACM and PACM, is likely to be disturbed, and Class IV asbestos work means maintenance and custodial activities during which employees contact but do not disturb ACM or PACM and activities to clean up dust, waste, and debris resulting from Class I, Class II, and Class III activities.

Federal law requires that asbestos control professionals must be trained on how to properly inspect for the presence of asbestos and to repair and remove it. Training for asbestos abatement professionals is required under AHERA, which is the authority under which EPA issued the EPA Asbestos Model Accreditation Plan (MAP) (40 CFR Part 763, Appendix C to Subpart E). Individuals seeking accreditation as asbestos abatement workers shall complete at least a 4–day training course as outlined in 40 CFR Part 763, Appendix C to Subpart E. The 4–day worker training course shall include lectures, demonstrations, and at least 14 hours of hands-on training.

After ACM removal is considered complete, a post-abatement visual assessment conducted by a Nevada-licensed asbestos project monitor is required to establish that removal has been achieved.

## Limitations

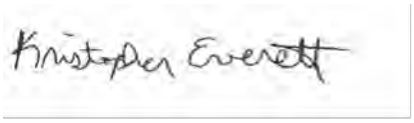
This report has been prepared for the exclusive use of ENVIRON International Corporation. The findings presented herein are based upon observations of our field personnel, points of investigation, and results of laboratory tests performed by Forensic Analytical Laboratories, Inc. All accessible areas of the excavation zone as part of this survey were attempted to be visually surveyed for the presence of potential asbestos-containing materials. However, it is possible that not all potential ACMs located within the excavation zone were identified in this survey.

Our services were performed in accordance with the generally accepted standard of practice at the time this report was written. No warranty, expressed or implied, is intended.

LoSo appreciates being of service to ENVIRON International Corporation on this project. If you have any questions or require additional information, please contact us at (702) 596-2021.

Sincerely,

**Logistical Solutions, LLC**



Kristopher Everett, CEM
Project Manager
NV Asbestos Consultant No. IM-1569

Ty L. Salazar, CEM, OHST
Operations Manager
NV Asbestos Consultant No. IM-1413

Attachments: Site Plan
Photograph Log
Analytical Report and Chain-of-Custody Documentation

LEGEND

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General location of the transite pipe

Scale: 1 inch ~ 108 feet

**SITE PLAN**

Nevada Environmental Response Trust

Within or Adjacent RZ-D-16A

Project Number
CON111106

1. General area of the soil excavation activities being conducted at the location where the transite pipe was located.

2. View of transite pipe and soil removed from the excavation. The transite pipe was wrapped in polyethylene sheeting.

3. View of other pipe material located underneath where the transite pipe was found.

| SITE PHOTOGRAPHS | |
|---|---|
| Nevada Environmental Response Trust | |
| Within or Adjacent RZ-D-16A | |
| Project Number CON111106 | LS LOGISTICAL SOLUTIONS |

Forensic Analytical Laboratories

**Final Report**

# Bulk Asbestos Analysis

(EPA Method 600/R-93-116, Visual Area Estimation)

Logistical Solutions, LLC
Ty Salazar
4780 W. Ann Road
Suite 5-237
N. Las Vegas, NV 89031

**Client ID:** L1349
**Report Number:** B154751
**Date Received:** 09/29/11
**Date Analyzed:** 10/03/11
**Date Printed:** 10/03/11
**First Reported:** 10/03/11

**Job ID/Site:** Con111106; Tronox; RZ-D-16A

**Date(s) Collected:** 09/29/2011

**FALI Job ID:** L1349
**Total Samples Submitted:** 1
**Total Samples Analyzed:** 1

| Sample ID | Lab Number | Asbestos Type | Percent in Layer | Asbestos Type | Percent in Layer | Asbestos Type | Percent in Layer |
|---|---|---|---|---|---|---|---|
| **RZ-D-16A** | 01036261 | | | | | | |
| Layer: Grey Semi-Fibrous Cementitious | | Chrysotile | **15 %** | Crocidolite | **5 %** | | |
| Total Composite Values of Fibrous Components: | | **Asbestos (20%)** | | | | | |
| Cellulose (Trace) | | | | | | | |

Tracy Mitchell, Laboratory Supervisor, Las Vegas Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.





6765 S. Eastern Avenue, Suite 3, Las Vegas, NV 89119 / Telephone: (702) 387-0040 / Fax: (702) 784-0030

Forensic Analytical Laboratories, Inc.

# Analysis Request Form (COC)

| | |
|---|---|
| Client Name & Address: Logistical Solutions, LLC | PO / Job#: CON111106 Date: 09/29/11 |
| | Turn Around Time: Same Day / 1Day / 2Day / ☑ 3Day / 4Day / 5Day |
| | ☐ PCM: ☐ NIOSH 7400A / ☐ NIOSH 7400B ☐ Rotometer |
| | ☑ PLM: ☐ Standard / ☐ Point Count 400 - 1000 / ☐ CARB 435 |
| Contact: Kris Everett | ☐ TEM Air: ☐ AHERA / ☐ Yamate2 / ☐ NIOSH 7402 |
| Phone: 702-340-2574 Fax: | ☐ TEM Bulk: ☐ Quantitative / ☐ Qualitative / ☐ Chatfield |
| | ☐ TEM Water: ☐ Potable / ☐ Non-Potable / ☐ Weight % |
| | ☐ TEM Microvac: ☐ Qual(+/-) / ☐ D5755(str/area) / ☐ D5756(str/mass) |
| E-mail: keverett@losonow.com | ☐ IAQ Particle Identification (PLM LAB) ☐ PLM Opaques/Soot |
| | ☐ Particle Identification (TEM LAB) ☐ Special Project |
| Site: TRONOX | ☐ Metals Analysis: Method: |
| Site Location: R2-D-16A | Matrix: |
| | Analytes: |
| Comments: | Report Via: ☐ Fax ☐ E-Mail ☐ Verbal |

| Sample ID | Date / Time | Sample Location / Description | FOR AIR SAMPLES ONLY | | | | Sample Area / Air Volume |
|---|---|---|---|---|---|---|---|
| | | | Type | Time On/Off | Avg. LPM | Total Time | |
| R2-D-16A | 9/29/11 1315 | R2-D-16A / Transite pipe | A P C | | | | |
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Sampled By: Kristopher Everett Date: 9/29/11 Time: 1405

Shipped Via: ☐ Fed Ex ☐ DHL ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

| | | |
|---|---|---|
| Relinquished By: Kristopher Everett | Relinquished By: | Relinquished By: |
| Date / Time: 9/29/11 1405 | Date / Time: | Date / Time: |
| Received By: | Received By: | Received By: |
| Date / Time: 9/29/11 1405 | Date / Time: | Date / Time: |
| Condition Acceptable? ☐ Yes ☐ No | Condition Acceptable? ☐ Yes ☐ No | Condition Acceptable? ☐ Yes ☐ No |

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