ASBESTOS AND LEAD ASSESSMENT

Former Eagle Gas
1395 US Hwy 395 North
Gardnerville, Nevada 89410
Nevada Brownfields Program
Task MA-02-14

Prepared for:
Nevada Division of Environmental Protection
Nevada Brownfields Program
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701

April 4, 2014
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1. INTRODUCTION

McGinley & Associates, Inc. (MGA) submits this report which presents the findings of our asbestos and lead based paint assessment of the “Former Eagle Gas” facility located in Gardnerville, Nevada. The assessment was conducted for the Town of Gardnerville in conjunction with the Nevada Division of Environmental Protection (NDEP) Brownfields program. The location of the subject site is indicated in Figure 1.

2. SCOPE OF SERVICES

The following scope of services were conducted as part of our asbestos and lead based paint assessment:

- Collection of five bulk samples of suspect asbestos containing material (ACM) building materials;
- Analytical testing of the suspect ACM;
- Conducting a lead based paint assessment using a XRF analyzer; and
- Preparation of this report of findings.

Each of these services are discussed in the following sections.

3. ASBESTOS CONTAINING MATERIAL INSPECTION

On January 9, 2014, an EPA accredited, and State of Nevada licensed asbestos inspector conducted an asbestos inspection and assessment at the referenced location for the purpose of determining if asbestos was present in suspect building materials.

Five (5) representative bulk samples were collected from materials identified to have the potential to contain asbestos. Suspect materials that were sampled during this inspection included; floor tile with mastic, ceramic tile grout, ceramic tile mortar/thin set and roofing materials.

This inspection was conducted in accordance with accepted EPA and OSHA regulations. All samples were submitted under approved chain-of-custody protocol, and analyzed at Asbestos TEM Laboratories, Inc. in Sparks, Nevada. The suspect ACM samples were analyzed for asbestos fibers utilizing Polarized Light Microscopy (PLM). The laboratory analytical report is attached in Appendix A, and the chain of custody record is provided in Appendix B.

4. ASBESTOS ANALYTICAL RESULTS

In accordance with OSHA 29 CFR 1926.1101 and NESHAPS 40 CFR 61.141 the definition of an asbestos containing material is “any material which contains more than one percent asbestos by weight”.

Analytical results indicated that one of the five bulk samples that were collected during this inspection was positive for containing asbestos in excess of one percent. Sample #RM-5 (roof penetration mastic) contained 5-10% Chrysotile asbestos. All other materials sampled during this investigation were “None Detected” for containing asbestos. Analytical results and the laboratory chain-of-custody are provided in Appendix A and B respectively.
These sample results are limited to the materials that were identified and sampled during this inspection. If additional materials are discovered that have not been sampled and will be disturbed during the restoration project, then these materials would require additional sampling and analysis.

5. LEAD-BASED PAINT ASSESSMENT

On January 9, 2014, a lead-based paint inspector conducted a lead-based paint assessment of suspect painted surface coatings at the above referenced location. The lead-based paint assessment was accomplished by utilizing an Innov-X Alpha Series X-Ray Fluorescence (XRF) analyzer. XRF analyzers determine the chemistry of a sample by measuring the spectrum of the characteristic x-ray emitted by the different elements in the sample when it is illuminated by x-rays. When a sample is measured using XRF, each element present in the sample emits its own unique fluorescent x-ray energy spectrum. By simultaneously measuring the fluorescent x-rays emitted by the different elements in the sample, the XRF analyzer can rapidly determine the elements present in the sample and their relative concentrations.
The XRF analyzer was utilized on all colors of paint on the interior and exterior of the gas station building and associated gas pump canopy. Multiple readings were taken of each color of paint identified at the following locations:

**Inside Gas Station Building**
- Door Trim - Blue Paint
- Office/Sink Room - Olive Green Paint
- Walls and Ceilings - White Paint
- Cement Floor - Red Paint

**Exterior of Gas Station Building**
- Rear CMU Block Wall - Grey Paint
- Exterior Walls, Sofitts and Roof Facia - Blue/White Paint
- Structural Beams on Roof - Red Paint

**Gas Pump Canopy**
- Canopy Facia - White, Blue, Cream and Beige Paint
- Canopy Structural Poles - Blue Paint
- Gas Pump Bollards - Yellow Paint
- Structural Beams on Roof - Red Paint

6. **LEAD-BASED PAINT XRF ANALYZER RESULTS**

The EPA definition of lead-based paint is when painted surface coatings contain 1.0 mg/cm² or greater, when using an XRF analyzer.

Readings from the XRF analyzer indicated that painted surface coatings located on the gas pump bollards, and on the canopy structural poles contained 1.0 mg/cm² of lead or greater. All other painted surface coatings located on the canopy and gas station building contained less than 1.0 mg/cm² of lead. Field notes providing XRF data from the assessment are provided in Appendix C.

7. **CONCLUSIONS/RECOMMENDATIONS**

As a result of information obtained from conducting this ACM inspection and LBP assessment, MGA recommends that procedures are acknowledged in order to maintain State of Nevada OSHA, federal OSHA and EPA regulatory compliance, and reduce liability and health concerns. The sections below describe those procedures for both asbestos containing material and lead-based paint.

7.1 **Asbestos Containing Material Inspection**

As a result of conducting this asbestos inspection, penetration mastics located on the roof of the gas station building were identified to contain greater than one percent asbestos. At the time of this inspection, the penetration mastics appeared to be in good condition, and, as long as the materials are not disturbed, do not appear to pose a health risk.

Roof penetration mastics are considered to be a non-friable material for the EPA and Nevada OSHA, and a non-classified material for federal OSHA. As a result, a Nevada certified asbestos abatement contractor is not required in order to remove or disturb these materials.
However, in order to maintain regulatory compliance and reduce liability and health concerns, MGA recommends that persons with asbestos training be utilized to perform any activities that would disturb the roofing penetration mastic materials.

7.2 Lead-Based Paint Assessment

As a result of information obtained from conducting this lead-based paint assessment, readings from the XRF analyzer indicated that that painted surface coatings located on the gas pump bollards and the canopy structural poles contained 1.0 mg/cm² of lead or greater. At the time of this assessment, the painted surfaces were in good condition and currently do not appear to pose a threat to human health. However, any future work activities that would disturb the painted surfaces should be conducted in accordance with OSHA Standard 1926.26 by individuals with proper training and personal protective equipment.

8. LIMITATIONS

MGA is not responsible for any claims or damages associated with the interpretation of information provided during this inspection. This report should not be regarded as a guarantee that no further lead-based paint or asbestos containing materials exists beyond that which was suspected, visually inspected and/or sampled during this inspection. In addition, asbestos and lead may not be distributed evenly throughout a particular material and MGA cannot guarantee that all materials sampled are exactly as represented throughout the entire building. In the event that renovation or demolition activities uncover materials that were previously hidden or inaccessible during the time of this inspection, additional sample collection and analysis may be required. In the event that materials that were previously hidden or inaccessible during the time of this inspection are disturbed and an exposure occurs, MGA shall be held harmless and will not be responsible for any claims made, financial or otherwise.

MGA makes no warranties or guarantees as to the accuracy or completeness of information obtained from, provided by, or compiled by others. It is possible that information exists beyond the scope of this investigation. This report is not a legal opinion. The services performed by MGA have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession currently licensed by the State of Nevada to perform this work, and practicing under similar conditions. No other warranty, expressed or implied, is made
9. **CLOSING**

MGA appreciates the opportunity to work with NDEP on this project. Should you have any questions regarding this report please contact the undersigned at (702) 260-4961.

Respectfully submitted,
McGinley and Associates, Inc.

Gene E. Johnson  
Certified Nevada Asbestos Consultant  
License No. IJPM0604

Reviewed by:
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.

Brett Bottenberg, C.E.M. #1690, Exp. 10/07/2015  
Senior Project Manager
APPENDIX A
Laboratory Analytical Results
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<th>SAMPLE ID</th>
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<th>ASBESTOS TYPE</th>
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<tr>
<td>FT-1</td>
<td>867-02108-001A</td>
<td>None Detected</td>
<td>Station - entryway, floor tile/black mastic</td>
<td>3)</td>
<td>4) Jan-15-14</td>
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<td>FT-1</td>
<td>867-02108-001B</td>
<td>None Detected</td>
<td>Station - entryway, floor tile/black mastic</td>
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<td>CTG-2</td>
<td>867-02108-002A</td>
<td>None Detected</td>
<td>Bathroom, grout/mortar</td>
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<tr>
<td>CTG-2</td>
<td>867-02108-002B</td>
<td>None Detected</td>
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<td>CTG-3</td>
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<td>Bathroom, ceramic tile/thin set</td>
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<tr>
<td>CTG-3</td>
<td>867-02108-003B</td>
<td>None Detected</td>
<td>Bathroom, ceramic tile/thin set</td>
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<td>RM-4</td>
<td>867-02108-004A</td>
<td>None Detected</td>
<td>North roof, asphalt roofing/felt/tar</td>
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<tr>
<td>RM-4</td>
<td>867-02108-004B</td>
<td>None Detected</td>
<td>North roof, asphalt roofing/felt/tar</td>
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<td>RM-4</td>
<td>867-02108-004C</td>
<td>None Detected</td>
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<td>RM-5</td>
<td>867-02108-005</td>
<td>5-10% Chrysotile</td>
<td>North roof, penetration mastic</td>
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Limit of Quantitation of Method is Estimated to be 1% Asbestos Using a Visual Area Estimation Technique

Laboratory Analyst

Greg Hanes

ASBESTOSTEM LABORATORIES, INC. 1350 Freeport Blvd., Unit 104, Sparks, NV 89431 (775) 359-3377

With Main Office in Berkeley, CA (510) 704-8930
**C&G ENVIRONMENTAL CONSULTING, INC.**  
P.O. Box 19476  Reno, NY 89511  Ph: (775) 746-3838  Fax: (775) 787-6846

***BULK SAMPLE SUBMISSION FORM / CHAIN-OF-CUSTODY REPORT***

**Analysis Type:** PLM  
**Point Count**  TEM  
**Turnaround:** 2.5 hrs 6 hrs 8 hrs 24 hrs 2 Days 3 Days

**Job Site:** 1395 MAIN Street, Barrowville  **Job No.:** 04010917

**Sample number**  | **Location**  | **Description**
--- | --- | ---
FT-1  | STATION Entryway  | Floor Tile / Black Mastic
CTG-2  | BATHROOM  | Grout / Mortar
CTG-3  | BATHROOM  | Ceramic Tile / Thin Set
RM-4  | NORTH ROOF  | Asphalt Roofing / Felt / TAR
RM-5  |  | PENETRATION MASTIC

**Special Instructions:**

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Send Original to Lab - Keep Yellow Copy
Former Eagle Gas Station – 1395 Main Street Gardnerville

January 9, 2014 – XRF Lead Sampling Inspection Field Notes:

**Station Interior Readings**
Door Trim - Blue Paint – 0.18 mg/cm²
Door Trim - Blue Paint – 0.21 mg/cm²
Office/Sink Room - Olive Green Paint – 0.00 mg/cm²
Office/Sink Room - Olive Green Paint – 0.01 mg/cm²
North Wall - White Paint – 0.08 mg/cm²
East Wall – White Paint – 0.06 mg/cm²
Cement Floor - Red Paint – 0.02 mg/cm²

**Station Exterior Readings**
Rear CMU Block Wall - Grey Paint – 0.05 mg/cm²
East Exterior Wall – White Paint – 0.00 mg/cm²
West Exterior Wall – White Paint – 0.00 mg/cm²
South Sofitt – Blue Paint – 0.01 mg/cm²
South Roof Facia - Blue Paint – 0.03 mg/cm²
Structural Beams on Roof - Red Paint – 0.04 mg/cm²

**Canopy**
Canopy Facia White Paint – 0.10 mg/cm²
Blue Paint - 0.08 mg/cm²
Cream Paint - 0.24 mg/cm²
Beige Paint – 0.45 mg/cm²

Canopy Structural Poles - Blue Paint - >1.0 mg/cm²
Gas Pump Bollards - Yellow Paint - >1.0 mg/cm²
Structural Beams on Roof - Red Paint – 0.04 mg/cm²