Limited Hazardous Materials Survey Report

Contra Costa Community College
C-1059 Men’s Locker Room Boiler Replacement
2600 Mission Bell
San Pablo, California

RGA Project No: R1157332

April 16, 2015

Prepared for:

Rob Mohr c/o
Contra Costa Community College District
500 Court Street
Martinez, California 94553

Prepared by:

RGA Environmental, Inc.
1466 66th Street
Emeryville, CA 94608

Report prepared by: ___________________________ Mike Bishop
Sr. Industrial Hygienist, CAC 07-4275

Report reviewed by: ___________________________ Kenneth Pilgrim
Project Manager, CAC 03-3503
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Limited Hazardous Materials Survey Report

Contra Costa College
C-1059 Men’s Locker Room Boiler Replacement
2600 Mission Bell Drive
San Pablo, California

1. Executive Summary

The following is a report of the limited hazardous materials survey conducted by Mike Bishop, California Certified Asbestos Consultant (CAC), with RGA Environmental, Inc. (RGA). The survey was performed on April 3, 2015 in the Boiler Room of the Men’s Locker Room of the Contra Costa College Campus located at 2600 Mission Bell Drive in San Pablo, California.

The purpose of the survey was to identify hazardous materials including asbestos containing materials (ACMs) and lead containing paint with the potential to be impacted by the boiler replacement. The survey area was limited to materials and surfaces within the boiler room of the Men’s Locker Room.

During the survey, seven (7) homogenous suspect asbestos containing materials (ACMs) were identified. Two (2) of the homogeneous suspect ACMs tested positive for asbestos content. Inaccessible internal refractory materials potentially present were assumed to be asbestos containing.

Three (3) painted finishes were sampled for potential lead content. All three (3) of the materials sampled were reported above the laboratory detection limit for lead. None of the materials was reported to contain lead in concentrations greater than the lead-based threshold of 5,000 parts per million (ppm).

Table I summarizes the materials identified as ACMs. Table II summarizes the materials that were determined to be negative for asbestos content. Table III summarizes the lead concentrations in the paint.
2. Scope of Work

The scope of the survey was as follows:

- Inspect the survey area for the presence of suspect ACMs and lead-containing paints with the potential to be impacted by the planned boiler replacement.

- Collect a representative number of samples of suspect ACMs following the National Emissions Standard for Hazardous Air Pollutants (NESHAPs) protocol for sample collection for a renovation survey. Analyze asbestos bulk samples using polarized light microscopy (PLM) in accordance with EPA’s July 1993 method for the determination of asbestos in bulk building materials - EPA 600/R-93/116.

- Collect paint chip samples of the primary painted surfaces suspected to be lead containing for purposes of compliance with California Department of Occupational Safety and Health (DOSH) Lead in Construction Standard. Bulk samples and paint chips were analyzed at an accredited laboratory by Flame Atomic Absorption (AA) for Total Lead reported in parts per million (ppm).

- Submit written report including analytical results, regulatory requirements, conclusions and recommendations.

3. Methods and Sampling Strategy

Visual Inspection

Accessible materials were visually inspected in the survey area using the methods presented in the federal Asbestos Hazard Emergency Response Act (AHERA) regulations (40 CFR, Part 763) as a guideline. AHERA was originally only applicable to schools, however state and federal Occupational Safety and Health Administration (OSHA) and Asbestos School Hazard Abatement and Reauthorization Act (ASHARA) have adopted the AHERA sampling methodology for all buildings subject to demolition or renovation.

Bulk Sampling of Asbestos

Bulk samples of all suspect ACM homogeneous materials were collected. A homogeneous material is defined as a surfacing material, thermal system insulation, or miscellaneous material that is uniform in color, texture and age of construction. Examples of homogeneous materials include:

- Pipe-insulation produced by the same manufacturer and installed during the same time period;
- Resilient flooring of identical color and pattern;
- Troweled on surfacing materials located in contiguous areas.
The boiler room, boiler, and associated materials were visually inspected for the presence of suspect materials. As materials were identified, bulk samples were obtained with the aid of a coring device or other hand tool and placed into individual sampling bags. Each sample was given a discrete identification number and recorded on field notes as well as chain-of-custody forms. Refer to accompanying tables and appendices for details on material sample locations and results. Bulk samples were transported to RGA Environmental, Inc. (RGA) in Seattle, Washington.

**Bulk Sampling of Suspect Lead Containing Materials**

Paint chip and/or suspected lead containing materials were collected using a hand scraper and were placed into individual plastic sampling containers. Each sample was provided a discreet sample number, which was recorded on a chain-of-custody form. Samples were then transported to RGA for analysis.

**Bulk Sample Analysis - Asbestos**

RGA is accredited under the National Institute of Standards and Technology's National Voluntary Laboratory Accreditation Program (NVLAP) for determination of asbestos fibers in bulk materials.

All samples were analyzed using polarized light microscopy (PLM) techniques in accordance with methodology approved by the U.S. Environmental Protection Agency (EPA). As set forth in the Code of Federal Regulations, 40 CFR Part 763, Appendix A to Subpart F, Section 1.2 and 1.7.2.4, the lower limit of reliability detection for asbestos using the PLM method is approximately one percent (1%) by volume. Cal-OSHA defines asbestos containing construction materials (ACCM) as those materials having asbestos content of greater than one tenth of one percent (>0.1%).

When None Detected (ND) appears in this report, it should be interpreted as meaning no asbestos was observed in the sample material above the reliable limit of detection for the PLM method.

Note: under EPA assessment criteria, if a single sample of a homogeneous material tests positive for asbestos, all homogeneous materials within that building are considered to be asbestos containing.

**Bulk Sample Analysis – Lead**

All paint samples were analyzed for lead content using the Flame Atomic Absorption spectroscopy in accordance to EPA Method SW846-3050B-7420. When “<” appears in the lead sample report, it should be interpreted as meaning below analytical detection limit.
4. Asbestos Results

During the survey, seven (7) homogenous suspect asbestos containing materials (ACMs) were identified. Two (2) of the homogeneous suspect ACMs tested positive for asbestos content. Internal refractory materials was assumed to be asbestos containing. All identified ACMs are listed below in Table I:

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Material Location</th>
<th>Waste Category</th>
<th>Asbestos Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal System Insulation, Hard Packed Insulation on 4”-6” Outside Diameter Pipe</td>
<td>Pipes Associated with Boiler above Plaster Ceiling</td>
<td>RACM</td>
<td>15% AM 10% CH</td>
</tr>
<tr>
<td>Thermal System Insulation, Hard Packed Elbows on 4”-6” Outside Diameter Pipe</td>
<td>Pipes Associated with Boiler above Plaster Ceiling</td>
<td>RACM</td>
<td>15% AM 10% CH</td>
</tr>
<tr>
<td>Boiler Brick and Refractory</td>
<td>Boiler Interior</td>
<td>RACM</td>
<td>ASSUMED</td>
</tr>
</tbody>
</table>

NA = Not Applicable, CH = Chrysotile, RACM = Regulated asbestos containing material (friable), Cat. I = Non-friable (note ACM must be reclassified as a RACM if rendered friable during removal), Cat. II = Category II Non-friable (note ACM must be reclassified as a RACM if rendered friable during removal)

The materials that were reported as negative for asbestos content are listed in Table II below.

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Sample Location(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rope Packing Gasket</td>
<td>Boiler Interior Behind Access Panel</td>
</tr>
<tr>
<td>Pipe Flange Gasket</td>
<td>Flange Gasket at Top of Boiler</td>
</tr>
<tr>
<td>Yellow Mastic Associated with Paper/Foil Wrap on Fiberglass Insulation</td>
<td>4”-6” Outside Diameter Pipes Associated with Boiler</td>
</tr>
<tr>
<td>Plaster</td>
<td>Ceiling Above Boiler</td>
</tr>
</tbody>
</table>
5. Lead Results

Three (3) painted finishes were sampled for potential lead content. All three (3) of the materials sampled were reported above the laboratory detection limit for lead. None of the materials was reported to contain lead in concentrations greater than the lead-based threshold of 5,000 parts per million (ppm). Table III below summarizes the sampling locations and results for the materials.

<table>
<thead>
<tr>
<th>Sample Number</th>
<th>Description/Location of Sample</th>
<th>Results mg/kg (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pb-1</td>
<td>Gray Paint on Concrete Floor</td>
<td>87</td>
</tr>
<tr>
<td>Pb-2</td>
<td>Yellow Paint on Metal Pipe</td>
<td>140</td>
</tr>
<tr>
<td>Pb-3</td>
<td>Red Paint on Metal Pipe</td>
<td>530</td>
</tr>
</tbody>
</table>

ppm = parts per million

7. Regulatory Requirements

Asbestos

Asbestos-containing building materials in the boiler room contain asbestos in concentrations greater than one tenth of one percent (0.1%). Impacting materials containing greater than 0.1% asbestos either through repair, maintenance, renovation or demolition activities triggers numerous regulations enforced by such agencies as OSHA (worker protection) and EPA (environmental exposure, transportation and disposal). Listed below are the regulations that apply if the materials are removed:

- Any individual who contracts to provide health and safety services relating to ACMs must be certified by Cal-OSHA as either a Certified Asbestos Consultant or a Site Surveillance Technician. The activities they are certified to provide include: conducting asbestos surveys; writing work plans or specifications for abatement; monitoring the work of abatement contractors; collecting air samples; and determining if the work area is safe for re-occupancy by non-asbestos workers. Regulation: Cal-OSHA 8 CCR 1529 (q)(1).

- If more than 100 square feet of materials that contain greater than 0.1% asbestos will be abated, they must be abated by a Cal-OSHA registered asbestos abatement contractor. Regulation: Cal-OSHA 8 CCR 1529 (R).

- ACMs that are classified by OSHA as thermal system insulation/surfacing materials are present. Removal of these materials is considered a Class I activity according to Cal-OSHA regulations. Work practices and engineering controls for Class I work are specified in Cal-OSHA 1529 (g) (4-6).
• ACMs that are classified by OSHA as other/miscellaneous materials are present. Removal of these materials is considered a Class II activity according to Cal-OSHA regulations. Work practices and engineering controls for Class II work are specified in Cal-OSHA 8 CCR 1529 (g) (7-8).

• If more than 100 square feet or 100 linear feet of friable ACM will likely be removed, the abatement contractor must notify the Bay Area Air Quality Management District ten (10) days prior to removing the material. Regulation: BAAQMD Regulation 11, Rule 2.

• Friable ACMs greater than 1% asbestos must be manifested, transported, and disposed of as hazardous waste in accordance with the Department of Toxic and Substances Control (DTSC), a division of Cal-EPA. DTSC regulates disposal of asbestos waste. DTSC issues U.S. EPA hazardous waste generator identification numbers.

**Lead-Containing Materials**

Lead-containing paints were identified during the survey. Impacting lead-containing materials either through renovation or demolition activities triggers numerous regulations enforced by such agencies as OSHA (worker protection), EPA (environmental exposure, transportation and disposal), and Department of Public Health (DPH).

Listed below are the regulations that apply if the lead containing materials are impacted during renovation activities:

• Federal OSHA as well as California OSHA regulates all worker exposure during construction activities that impact lead-containing materials. California OSHA enforces the Lead in Construction Standard in Title 8 CCR 1532.1. The scope covers construction work where employees may be exposed to lead during such activities as demolition, removal, surface preparation for re-painting, renovation, clean-up and routine maintenance. The OSHA specified method of compliance includes respiratory protection, protective clothing and equipment, housekeeping, hygiene facilities, medical surveillance, and training, among other requirements.

• California OSHA requires Department of Public Health Lead-Related Construction training if any lead related construction work in public buildings will exceed OSHA’s permissible exposure limit (PEL) for lead.

• Disposal of all lead-containing paint and bulk materials is regulated at concentrations at or exceeding 1,000 ppm as stated in 40 Code of Federal Regulations (CFR) Part 263 - Land Disposal Regulations and Title 22, Division 4 Environmental Health of the California Administrative Code. Lead containing materials that exceed 50 ppm must be additionally analyzed to determine possible waste disposal restrictions with respect to lead. However, lead related work at any lead concentration is regulated under the OSHA statutes.
8. Recommendations to Implement Regulatory Requirements

Asbestos

- Develop a performance abatement specification or work plan for the removal of the ACMs identified in the survey that will be disturbed by the planned renovation. The purpose of an abatement specification is to clearly define the scope of work for more competitive and accurate bidding as well as to reduce the number of costly delays and change orders during the project.

- Conduct a pre-bid job-walk for abatement contractors in order to obtain the most competitive pricing.

- Project Management to include all health & safety and environmental construction management such as: project bidding; review of abatement contractor submittals; consultation on regulatory requirements; project tracking; scheduling; attending progress meetings; coordination with all members of the project team; senior project oversight of abatement contractor.

- Retain a Certified Asbestos Consultant or Site Surveillance Technician to provide on-site construction supervision of the asbestos abatement contractor to ensure utilization of proper work practices as stated in the work plan or specification. The Consultant also ensures that all local, state and federal regulations are followed and that the project remains on schedule. The on-site Consultant generates documentation of contractor work practices and training, and asbestos air sampling results. The on-site Consultant also ensures that all asbestos materials are removed by the abatement contractor and properly manifested.

- Request the Asbestos Consultant to collect a sufficient number of air samples on a daily basis to validate that the abatement contractor is not causing any releases of airborne asbestos fibers outside their work area.

- Request the Asbestos Consultant to visually review the work of the abatement contractor to verify that all the ACMs are abated. If the work areas pass the visual clearance, then final air clearance samples are collected to ensure that the area is safe for re-occupancy, or unregulated work.

- Request a final written report outlining all activities that transpired throughout the course of the abatement project.
Lead-Containing Paint

Lead containing debris that will be landfilled should be classified as hazardous waste if lead waste concentrations exceed either the total lead concentration or soluble lead concentration regulatory limits. Total lead concentration is determined by Total Threshold Limit Concentration (TTLC). Soluble or leachable lead is determined by the Soluble Threshold Limit Concentration (STLC, California required test) and/or Toxicity Characteristic Leaching Procedure (TCLP) (Federal EPA required test). Regulatory limits characterize a lead containing waste as a hazardous waste if lead concentration exceeds 1,000 ppm by TTLC or 5 milligram per liter by STLC or TCLP. Solubility testing (STLC and TCLP) is required if the lead containing material exceeds 50 ppm by TTLC.

We recommend the following actions prior to the start of renovation:

- Remove any peeling, stratified or blistered lead-containing paint. Stabilize existing lead containing paint to reduce paint from peeling or separating from the substrate prior renovation.

- Remove lead containing paint from metal surfaces prior to any planned hot work.

- Use only trained workers for disturbance of building components containing lead. All demolition work should be performed in accordance with the OSHA Lead in Construction Standard, Title 8 CCR 1532.1. Removal of lead-based paint should be performed by Department of Public Health Lead Related Construction trained workers.

- Worker exposure, environmental monitoring, and proper engineering controls should be implemented throughout the lead related work.

- Contractor should adhere to OSHA and other applicable state and local regulations for worker protection, hazard communications, work practices, engineering controls and proper waste disposal.

- Proper waste stream categorization is required for the disposal of lead-containing materials such as paint debris, ceramic tile, and painted building components (intact) in accordance with the Department of Toxic Substance Control (DTSC). The disposal of lead-containing materials shall be coordinated with the landfill.

9. Limitations

RGA Environmental Inc. (RGA) warrants that the findings contained herein have been prepared in general accordance with accepted professional practices as applied by similar professionals in the community at the time of its preparation. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.
The field and laboratory results reported herein are considered sufficient in detail and scope to determine the presence of ACMs and lead-containing paint identified in this report. Also, note that this is a survey report and not an abatement specification. This document is not appropriate for competitive bidding or for use as an abatement specification.
Appendix 1

Laboratory Results and Chain of Custody - Asbestos
### Contra Costa Community College District
- **Project Location:** Contra Costa College, MLR Boiler Room

### Report Key

<table>
<thead>
<tr>
<th>Client Sample ID</th>
<th>RGA Lab ID</th>
<th>Layer ID (if applicable)</th>
<th>Layer Description</th>
<th>Asbestos Components</th>
<th>Non-Asbestos Fibrous Components</th>
<th>Non-Fibrous Components</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1A</td>
<td>White fibrous material</td>
<td></td>
<td>No Asbestos Detected</td>
<td>100% Synthetic</td>
<td></td>
</tr>
<tr>
<td>15005607</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1B</td>
<td>White fibrous material</td>
<td></td>
<td>No Asbestos Detected</td>
<td>100% Synthetic</td>
<td></td>
</tr>
<tr>
<td>15005608</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1C</td>
<td>White fibrous material</td>
<td></td>
<td>No Asbestos Detected</td>
<td>100% Synthetic</td>
<td></td>
</tr>
<tr>
<td>15005609</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2A</td>
<td>Tan fibrous crystalline material</td>
<td></td>
<td>No Asbestos Detected</td>
<td>60% Wollastonite 30% Cellulose</td>
<td>10% Mineral Particles</td>
</tr>
<tr>
<td>15005610</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2B</td>
<td>Tan fibrous crystalline material</td>
<td></td>
<td>No Asbestos Detected</td>
<td>60% Wollastonite 30% Cellulose</td>
<td>10% Mineral Particles</td>
</tr>
<tr>
<td>15005611</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3A</td>
<td>L-1 Yellow mastic</td>
<td>Paper wrap</td>
<td>No Asbestos Detected</td>
<td>70% Cellulose 30% Filler and Binder</td>
<td></td>
</tr>
<tr>
<td>15005612</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3B</td>
<td>L-1 Yellow mastic</td>
<td>Paper wrap</td>
<td>No Asbestos Detected</td>
<td>45% Cellulose 25% Synthetic 20% Foil</td>
<td>10% Filler and Binder</td>
</tr>
<tr>
<td>15005613</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This report relates only to the items tested. If samples are not collected by RGA Environmental personnel, accuracy of the results is limited by the methodology and expertise of the sample collector. Analyses are cross- checked with other laboratories for quality assurance purposes. This report shall not be reproduced except in full, without written approval of RGA Environmental. It shall not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government.

Sampled By: Mike Bishop
Received By: Cheuk-Wa Angela Ng
Reviewed By: Cheuk-Wa Angela Ng
Analyzed By: Matthew Breuer
**Contra Costa Community College District**  
Project Location: Contra Costa College  
MLR Boiler Room

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**Report Key**

<table>
<thead>
<tr>
<th>Client Sample ID</th>
<th>Layer ID (if applicable)</th>
<th>Asbestos Components</th>
<th>Non-Asbestos Fibrous Components</th>
<th>Non-Fibrous Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGA Lab ID</td>
<td>Layer Description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Layer Comments (if applicable)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 3C               | L-1                      | No Asbestos Detected | 90% Resin and Binder         | 10% Mineral Particles  |
| 15005614         | Yellow mastic            |                     |                               |                       |
|                  | L-2                      | No Asbestos Detected | 45% Cellulose                 | 20% Foil              |
|                  | Paper wrap               |                     | 25% Synthetic                 | 10% Filler and Binder |

| 4A               | Gray plaster             | No Asbestos Detected | 50% Sand                      | 30% Mineral Filler and Binder |
| 15005615         |                          |                     | 20% Mineral Particles         |                            |

| 4B               | Gray plaster             | No Asbestos Detected | 50% Sand                      | 30% Mineral Filler and Binder |
| 15005616         |                          |                     | 20% Mineral Particles         |                            |

| 4C               | Gray plaster             | No Asbestos Detected | 50% Sand                      | 30% Mineral Filler and Binder |
| 15005617         |                          |                     | 20% Mineral Particles         |                            |

| 5A               | Thermal system insulation| 15% Amosite         | 50% Filler and Binder         | 25% Mineral Particles     |
| 15005618         |                          | 10% Chrysotile      |                               |                       |

| 5B               | Thermal system insulation| 15% Amosite         | 50% Filler and Binder         | 25% Mineral Particles     |
| 15005619         |                          | 10% Chrysotile      |                               |                       |

| 5C               | Thermal system insulation| 15% Amosite         | 50% Filler and Binder         | 25% Mineral Particles     |
| 15005620         |                          | 10% Chrysotile      |                               |                       |

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Sampled By: Mike Bishop  
Received By: Cheuk-Wa Angela Ng  
Reviewed By: Cheuk-Wa Angela Ng  
RGA Batch Number: 15-0606  
RGA Project Number: R1157332  
Number of Samples: 17  
4/6/2015  
4/7/2015  
Page 2 of 3
Contra Costa Community College District  
Project Location: Contra Costa College  
MLR Boiler Room  

RGA Batch Number: **15-0606**  
RGA Project Number: **R1157332**  
Number of Samples: **17**

<table>
<thead>
<tr>
<th>Client Sample ID</th>
<th>Layer ID (if applicable)</th>
<th>Asbestos Components</th>
<th>Non-Asbestos Fibrous Components</th>
<th>Non-Fibrous Components</th>
</tr>
</thead>
</table>
| **6A**  
15005621 | Thermal system insulation | 15% Amosite  
10% Chrysotile | | 50% Filler and Binder  
25% Mineral Particles |
| **6B**  
15005622 | Thermal system insulation | 15% Amosite  
10% Chrysotile | | 50% Filler and Binder  
25% Mineral Particles |
| **6C**  
15005623 | Thermal system insulation | 15% Amosite  
10% Chrysotile | | 50% Filler and Binder  
25% Mineral Particles |

This report relates only to the items tested. If samples are not collected by RGA Environmental personnel, accuracy of the results is limited by the methodology and expertise of the sample collector. Analytes are cross-checked with other laboratories for quality assurance purposes. This report shall not be reproduced except in full, without written approval of RGA Environmental. It shall not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government.

Sampled By: Mike Bishop  
Received By: Cheuk-Wa Angela Ng  
Reviewed By: Cheuk-Wa Angela Ng  
4/6/2015  
4/7/2015  
Analyzed By: Matthew Breuer  
4/7/2015
# ACM BULK SAMPLE DATA SHEET

- ✔ PLM Analysis (Analyze all samples)
- ❏ Stop Analysis at First Positive
- ❏ Point Count Analysis (400-point)

**Page 1 of 2**

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**Project Name/Address/Building No.**
- Contra Costa College

**Project #**
- E1157332

**Sampled By:** Mike B

**Sampling Date:** 4/3/15

**Sample(s) sent to:**
- [X] RGA
- [ ] EMSL
- [ ] Other

**TAT**
- [ ] Rush
- [X] 24HRS
- [ ] 3-5 days

***FAX OR E-MAIL REPORT TO: SEE ABOVE PROJECT MANAGER (PM)***

***ADDITIONAL REPORT RECIPIENT(S):***

<table>
<thead>
<tr>
<th>HM#</th>
<th>Material Description</th>
<th>Sample ID</th>
<th>Sample Location &amp; Material Location</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Roped Packing Gasket</td>
<td>1A</td>
<td>Boiler Interior</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1B</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Pipe Flange Gasket</td>
<td>2A</td>
<td>Flange Gasket on top of Boiler</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2B</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Yellow Nastic Assoc w/ Paper/Foil Pipe Wrap</td>
<td>3A</td>
<td>4&quot; OD Pipe Assoc w/ Boiler</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3B</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3C</td>
<td>6&quot; OD</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Plastic</td>
<td>4A</td>
<td>Ceiling Above Boiler</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4B</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4C</td>
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**Relinquished By:** Mike B

**Date/Time:** 4/3/15

**Received By:** [Handwritten]

**Date/Time:** [Handwritten]

**Relinquished By:** [Handwritten]

**Date/Time:** [Handwritten]

**Received By:** [Handwritten]

**Date/Time:** 4/6/2015 035

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1466 66th Street Emeryville CA 94608 Tel: (510) 547-7771 Fax: (510) 547-1983
<table>
<thead>
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<th>HM#</th>
<th>Material Description</th>
<th>Sample ID</th>
<th>Sample Location &amp; Material Location</th>
<th>Quantity:</th>
<th>Pipe</th>
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<tbody>
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<td>TSI, Hard Packed Insulation on 4&quot; C. OD</td>
<td>5A</td>
<td>C&quot; OD Pipe Above Plaster Ceiling</td>
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<td>5B</td>
<td>&quot; &quot;</td>
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<th>Quantity:</th>
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<td>4&quot; OD Pipe Above Plaster Ceiling</td>
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<td>4/6/2015 48:30</td>
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</table>

1466 66th Street Emeryville CA 94608 Tel: (510) 547-7771 Fax: (510) 547-1983
Sample Log
Chain of Custody

Client:                Contact Person
Company: Contra Costa Community College District
Client Address: 500 Court Street
Martinez CA 94553-
Phone #: Phone #:
Fax #: Fax #:
e-mail Address:

Project Manager: Ken Pilgrim
Project Location: Contra Costa College
MLR Boiler Room

Condition:  Good  Damaged  Severe Damage

Type of Analysis

<table>
<thead>
<tr>
<th>ASBESTOS</th>
<th>METALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCM (air)</td>
<td>Paint</td>
</tr>
<tr>
<td>X PLM (bulk)</td>
<td>Wipe</td>
</tr>
<tr>
<td>Pt. Count (bulk)</td>
<td>TCLP</td>
</tr>
<tr>
<td>MOLD: P&amp;K 100 101 102 105 117</td>
<td></td>
</tr>
</tbody>
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Other Method:

Turn Around Time (other): 24 hour
2 hour / 4 hour Same Day One Day
Two Days 3 Days 5 Days

Price per Sample: $_____

<table>
<thead>
<tr>
<th>#</th>
<th>Client Sample ID</th>
<th>RGA Laboratory ID</th>
<th>Comments</th>
<th>#</th>
<th>Client Sample ID</th>
<th>RGA Laboratory ID</th>
<th>Comments</th>
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<tbody>
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</table>

Signature: Mike Bishop
Date: 4/8/2015
Time: 9:35

Sampled by:
Relinquished by:
Received by:
Relinquished by:
Received for Laboratory by:
Analyzed by:
Preliminary Results Reported to P.M. by:
Final Report to P.M. by:

Due by 4/7/2015

*Unless requested in writing, all samples will be properly disposed of 30 days after final report date.
Appendix 2

Laboratory Results and Chain of Custody - Lead
April 06, 2015

**RGA Batch #** 15-0607

**Client:** Client Contact  
**Company:** Contra Costa Community College District  
**Address:** 500 Court Street  
**City:** Martinez, CA 94553

**Project:** Contra Costa College  
**Location:** LMR Boiler Room  
**Matrix:** Paint Chips - Total Lead  
**Date Sampled:** 4/3/2015  
**Date Received:** 4/6/2015  
**Date Analyzed:** 4/6/2015  
**Job #:** R1157332  
**P.O. #:** N/A  
**Sampled By:** Mike Bishop  
**Method:** EPA SW-846 Method 7420  
**Analyst:** Matthew Breuer

## Lead Sample Results

<table>
<thead>
<tr>
<th>RGA Lab ID</th>
<th>Client ID</th>
<th>RL (mg/kg)</th>
<th>Concentration (mg/kg)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>15005624</td>
<td>Pb-1</td>
<td>28</td>
<td>87</td>
<td>0.009</td>
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<tr>
<td>15005625</td>
<td>Pb-2</td>
<td>27</td>
<td>140</td>
<td>0.014</td>
</tr>
<tr>
<td>15005626</td>
<td>Pb-3</td>
<td>27</td>
<td>530</td>
<td>0.053</td>
</tr>
</tbody>
</table>

**QA/QC Results**  
**Batch QC MS** 109% Recovery  
**Method Blank** <0.5 ug/ml  
**RL - reporting limit**  
mg - milligrams  
kg - kilograms  
< - less than

Reviewed by: Cheuk-Wa Angela, Lab Director
**LEAD PAINT SAMPLE DATA SHEET**

* Lead Analysis 
  Flame AA (EPA 7420) 
  TTLC

**PAGE 1 OF 1**

---

**Project Name/ Address/ Building No.**: Contra Costa College LMR Bakes Room

**Project #:** 2157332

**Sampled By:** Mike Bridge

**Sampling Date:** 4/5/15

**Sample(s) sent to:**
- [X] RGA
- [ ] ESLM
- [ ] Other

**TAT:**
- [ ] Rush
- [X] 24HRS
- [ ] 3-5 days

---

**FAX OR E-MAIL REPORT TO:** SEE ABOVE PROJECT MANAGER (PM)**

**ADDITIONAL REPORT RECIPIENT(S):**

---

<table>
<thead>
<tr>
<th>Sample ID</th>
<th>Paint Description and Sample Location</th>
<th>Condition (I/F/P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pb-1</td>
<td><strong>Gray</strong> Concrete Floor</td>
<td>(F)</td>
</tr>
<tr>
<td></td>
<td>Paint Location: Bldg # Unit # Room</td>
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</tr>
<tr>
<td>Pb-2</td>
<td><strong>Yellow</strong> Metal Pipe</td>
<td>(F)</td>
</tr>
<tr>
<td></td>
<td>Paint Location: Bldg # Unit # Room</td>
<td></td>
</tr>
<tr>
<td>Pb-3</td>
<td><strong>Red</strong> Metal Pipe</td>
<td>(I)</td>
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<tr>
<td></td>
<td>Paint Location: Bldg # Unit # Room</td>
<td></td>
</tr>
</tbody>
</table>

**Relinquished By:** Mike Bridge

**Signature:**

**Date/Time:** 4/5/15

---

**Received By:** Angela Ng

**Signature:**

**Date/Time:** 4/6/2015 04:15

---

1466 66th Street Emeryville CA 94608 Tel: (510) 547-7771 Fax: (510) 547-1983
### Sample Log
#### Chain of Custody

**Client:** Contact Person  
**Company:** Contra Costa Community College District  
**Client Address:** 500 Court Street  
**City:** Martinez  
**State:** CA  
**Zip:** 94553-

**Phone #:**  
**2nd or Cell #:**  
**Fax #:**  
**e-mail Address:**

**Project Manager:** Ken Pilgrim  
**Project Location:** Contra Costa College  
LMR Boiler Room

**Number of Samples:** 3

#### Type of Analysis

<table>
<thead>
<tr>
<th>ASBESTOS:</th>
<th>METALS:</th>
<th>Pb</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCM (air)</td>
<td>X</td>
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</tr>
<tr>
<td>PLM (bulk)</td>
<td></td>
<td>Wipe</td>
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<tr>
<td>Pt. Cont (bulk)</td>
<td></td>
<td>TCLP</td>
</tr>
</tbody>
</table>

**MOLD:** P&K 100 101 102 105 117

**Other Method:**

**Turn Around Time (other): 24 hour**

<table>
<thead>
<tr>
<th>2 hour / 4 hour</th>
<th>Same Day</th>
<th>One Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two Days</td>
<td>3 Days</td>
<td>5 Days</td>
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**Price per Sample:** $_______

<table>
<thead>
<tr>
<th>#</th>
<th>Client Sample ID</th>
<th>RGA Laboratory ID</th>
<th>Comments</th>
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<tr>
<td>1</td>
<td>Pb-1</td>
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**Signature:** Mike Bishop  
**Date:** 4/7/15  
**Time:**

**Sampled by:**  
**Relinquished by:**  
**Received by:** Anita Islley  
**Date:** 4/7/15  
**Time:**

**Relinquished by:**  
**Received for Laboratory by:**  
**Date:** 4/16/2015  
**Time:** 0845

**Analyzed by:**  
**Date:** 4/16/15  
**Time:** 1530

**Preliminary Results Reported to P.M. by:**  
**Date:** 4/16/2015  
**Time:**

**Final Report to P.M. by:**  
**Date:** 4/16/2015  
**Time:**

**Special Instructions:**  
**Due by:** 4/7/2015

---

*Unless requested in writing, all samples will be properly disposed of 30 days after final report date.*
Appendix 3

Inspector Certificates
State of California
Division of Occupational Safety and Health
Certified Asbestos Consultant

Michael R Bishop
Name
Certification No. 07-4275
Expires on 10/18/15

This certification was issued by the Division of
Occupational Safety and Health as authorized by
Sections 7180 et seq. of the Business and
Professions Code.
State of California Department of Public Health
Lead-Related Construction Certificate
Certificate Type
Sampling Technician
Expiration Date
09/28/2015
Michael R. Bishop
ID # 20519