May 12, 2015

Lake Oswego School District #7J
Rob Dreier
Director of Facility Operations
2455 Country Club Road
PO Box 70
Lake Oswego, Oregon 97034-0070

Re: Limited Asbestos, Lead Paint, and Fungal Investigation
Lake Oswego School District Swim Pool Building
PBS Project No. 21600.036 Phase 0001

Dear Mr. Dreier:

On April 13, 2015, PBS Engineering and Environmental Inc. (PBS) conducted a limited asbestos, lead paint, and fungal investigation on a wall assembly section located above the bleachers. The study area was approximately 4–6 square feet in size. Moisture impacts and deteriorated wallboard materials were observed. The wall assembly consisted of gypsum wallboard with mudded joints and wood framing. PBS tested the gypsum wallboard for asbestos and fungal impacts. The paint on the gypsum wallboard was also tested for lead content. Below is a summary of our findings.

FINDINGS
Asbestos Results
PBS collected one (1) bulk sample from the gypsum wallboard assembly. The joint compound layer tested positive for asbestos. Please refer to the attached PBS bulk sample inventory and associated laboratory report for further details.

Lead Paint Results
PBS collected one (1) lead paint sample from the impacted gypsum wallboard area above the bleachers. The white, peeling paint tested negative for lead paint. The results were below the limit of detection. Please refer to the attached lead sample inventory and associated laboratory report for further details.

Fungal Sampling and Results
PBS collected two (2) bulk samples from moisture impacted wall assembly. No fungi were observed on either sample. Please refer to the attached laboratory report for further details.

CONCLUSIONS/RECOMMENDATIONS
- Asbestos-containing joint compound was identified in the damaged wall assembly. This material must be handled, removed, and disposed of by certified asbestos abatement workers.
- Lead was not detected in the white paint found in this location.
- Fungal activity was not identified in this location.
Feel free to contact me if you have any questions or concerns. My direct line is 503.417.7607.

Sincerely,
PBS Engineering and Environmental Inc.

Bob Kleckner
Sr. Project Manager

Attachments:
- Photo Documentation
- PBS Asbestos Bulk Sample Inventory
- Lab/Cor Portland Inc. Asbestos Analysis Laboratory Report
- PBS Lead Paint Sample Inventory
- RJ Lee Group Lead Paint Analysis Laboratory Report
- Lab/Cor Inc. Fungal Identification Analysis Laboratory Report
- AHERA Certification
Photo 1: Gypsum wallboard impacts. Wall assembly above the bleachers.

Photo 2: Close-up of previous.
<table>
<thead>
<tr>
<th>Code</th>
<th>Material</th>
<th>Location</th>
<th>Results</th>
<th>Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>21600.036-0003</td>
<td>Gypsum Wallboard/Joint Compound</td>
<td>West wall; above bleachers, gypsum wallboard/joint compound</td>
<td></td>
<td>Lab Cor</td>
</tr>
<tr>
<td></td>
<td><strong>Layer:</strong></td>
<td><strong>Description:</strong></td>
<td><strong>Analysis:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Layer 1</td>
<td>fine compact powder, off-white, with paint, white, and fibrous backing</td>
<td>2% Chrysotile</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Layer 2</td>
<td>chalky material, white</td>
<td>No Asbestos Detected</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Layer 3</td>
<td>friable fibrous material, brown</td>
<td>No Asbestos Detected</td>
<td></td>
</tr>
</tbody>
</table>
BULK SAMPLE ASBESTOS ANALYSIS

Client: PBS Engineering and Environmental
4412 SW Corbett Avenue
Portland, OR 97239

Job Number: 150912
Project Name: 
Project Number: 21600.036 Phase 0001

Report Number: 150912R01
Report Date: 04/20/2015
P.O. No: n/a

<table>
<thead>
<tr>
<th>Client Sample ID</th>
<th>Sample ID</th>
<th>Date Analyzed</th>
<th>Analyst</th>
</tr>
</thead>
<tbody>
<tr>
<td>21600.036-0003</td>
<td>S1</td>
<td>04/20/2015</td>
<td>Ellie Brown</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Asbestos Mineral Fibers</th>
<th>Layer</th>
<th>Chrysotile</th>
<th>Amosite</th>
<th>Crocidolite</th>
<th>Percent Asbestos</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layer 01</td>
<td></td>
<td>40 %</td>
<td>2 %</td>
<td>-</td>
<td>2 %</td>
</tr>
<tr>
<td>fine compact powder, off-white, with paint, white, and fibrous backing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Layer 02 | chalky material, white | 15 % | - | - | NAD |

| Layer 03 | friable fibrous material, brown | 45 % | - | - | NAD |

<table>
<thead>
<tr>
<th>Other Fibers</th>
<th>Fibrous Glass</th>
<th>Cellulose</th>
<th>Mineral Wool</th>
<th>Synthetic</th>
<th>Other</th>
<th>Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layer 01</td>
<td>-</td>
<td>3 %</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>95 %</td>
</tr>
<tr>
<td>Layer 02</td>
<td>-</td>
<td>Trace</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>100 %</td>
</tr>
<tr>
<td>Layer 03</td>
<td>10 %</td>
<td>5 %</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>85 %</td>
</tr>
</tbody>
</table>

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous. "Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM. Asbestos detection interferences may result from material binders. Qualitative and quantitative TEM analysis may be recommended for difficult samples. Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos. The following estimate of error for this method by visual estimation of asbestos percent are as follows: 1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error. This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

Ellie Brown
Analyst
Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender.

**SENDER**

**Date Sent:** April 13, 2015

PBS Engineering + Environmental
4412 SW Corbett Avenue
Portland, OR 97239
503.248.1939, Fax: 866.727.0140

[Signature]

**Company:** Lab Cor

**Address:** 4321 SW Corbett Ave Ste A
Portland, OR 97239
503-224-5055

[Signature]

**Sender's ID No.**

21600.036-0003

**Brief Description**

________________________________________

**Receiver's ID No.**

**Please analyze the enclosed 1 sample(s) for asbestos content using PLM with dispersion staining. PBS requests prior notification if samples will be disposed. Request verbal results by: __________ AM/PM __________ Date.**

**TURNAROUND DESIRED:** 5 Day

**SPECIAL INSTRUCTIONS:**


<table>
<thead>
<tr>
<th>Code</th>
<th>Material</th>
<th>Analysis</th>
<th>Location</th>
<th>Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>LB21600.036-1001</td>
<td>Paint</td>
<td>&lt;99.5 ppm</td>
<td>West wall above bleachers; wall, gypsum/joint compound, white, peeling condition</td>
<td>R.J. Lee Group</td>
</tr>
</tbody>
</table>
# LABORATORY REPORT

<table>
<thead>
<tr>
<th>Client Sample ID</th>
<th>RJ Lee Group ID</th>
<th>Sampling Date</th>
<th>Analyte</th>
<th>Minimum Reporting Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PA140420150013-001</td>
<td></td>
<td>Lead</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td></td>
<td>&lt; 0.0095</td>
<td>&lt; 99.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.00995</td>
<td>99.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>04/14/2015</td>
</tr>
</tbody>
</table>

### Comments:

- **E** = Value above highest calibration standard
- **J** = Value below lowest calibration standard but above MDL (Method Detection Limit)
- **L** = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits
- **P** = PA-DEP Accredited (PA DEP Lab ID 02-00396, NELAP)
- **N** = NY ELAP Accredited (NY ELAP Lab Code 10884)
- **C** = CA ELAP Accredited (CA ELAP Certificate 1970)
- **H** = Holding times for preparation or analysis exceeded
- **B** = Analyte detected in the associated Method Blank
- **S** = Spike Recovery outside accepted limits
- **R** = RPD (relative percent difference) outside accepted limits
- **D** = RL (reporting limit verification) outside accepted limits
- **NP** = Not Provided

**Report Qualifiers (Q):**

- **P** : PA-DEP Accredited
- **C** : CA ELAP Accredited

**Notes:**

- Test (analyte-matrix-preparation-analysis) is performed under RJLG’s General Quality System requirements and is not part to any of the above scopes of accreditations.

These results are submitted pursuant to RJ Lee Group’s current terms and conditions of sale, including the company’s standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples.

This laboratory operates in accord with ISO 17025:2005 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to http://www.rjlg.com/about-accreditations/ for more information and current status. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

Unless otherwise noted (either in the comments section of the report and/or with the appropriate qualifiers under the report qualifiers (Q) column) the following apply: (a) Samples were received in good condition, (b) All QC samples are within acceptable established limits, (c) All samples designated as NELAP meet the requirements of the NELAC standard; if not applicable qualifiers will be used to designate the non-compliance and (d) Results have not been blank corrected. Quality Control data is available upon request.

---

**Signature:**

Philip Grindle
Laboratory Supervisor
TRANSMITTAL AND CHAIN OF CUSTODY FOR LEAD BULK SAMPLES

Project No.: 21600.036  Phase 0001

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender.

SENDER
Date Sent: April 13, 2015

PBS Engineering + Environmental
4412 SW Corbett Avenue
Portland, OR 97239
503.248.1939, Fax: 866.727.0140

RECEIVER
Date Received: 04-14-15

Company: R.J. Lee Group
Address: 350 Hochberg Road
Monroeville, PA 15146
724-325-1776

Sender's ID No.  
LB21600.036-1001

Brief Description

Please analyze the enclosed 1 sample(s) for LEAD content using Atomic Absorption Method. PBS requests prior notification if samples will be disposed.

Please fax and mail the results to the above address.

TURNAROUND DESIRED:
5 Day

Receiver's ID No.

SPECIAL INSTRUCTIONS:

☑ Paint
☐ Wipe
☐ Soil/Misc.
☐ Air
☐ TCLP

Authorized Signature  Date

Authorized Signature  Date
Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

<table>
<thead>
<tr>
<th>Lab/Cor Sample #</th>
<th>Client Sample # and Description</th>
<th>Analysis</th>
<th>Analysis Notes</th>
<th>Date Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>150291 - S1</td>
<td>002 - West Wall, Above Bleachers, All Layers</td>
<td>NV, Bulk, Fungal ID Qual.</td>
<td>No Fungi Observed</td>
<td>4/15/2015</td>
</tr>
<tr>
<td>150291 - S2</td>
<td>003 - West Wall, Above Bleachers, Underlying Layers</td>
<td>NV, Bulk, Fungal ID Qual.</td>
<td>No Fungi Observed</td>
<td>4/15/2015</td>
</tr>
</tbody>
</table>

Nonviable Bulk: Bulk samples follow preparation and analysis techniques outlined in Method 6 of the laboratory SOP. Sub-samples were collected from areas of known or suspected microbial growth on the submitted sample. If appropriate, each layer was separated and sampled to determine whether fungal colonization was present.

Characteristic morphologies were observed by optical microscopy at a magnification of 600x. Bulk samples that were analyzed qualitatively were reported in Relative Abundance of fungal and particulate types; High, Moderate, Low, and Trace. The Minimum Reporting Limit for qualitative samples is Trace (1-10 count in sample portion examined). Bulk samples that were analyzed quantitatively were reported as the total concentration for each fungal and particulate type.

Disclaimer: The results reported relate only to the samples tested or analyzed; the laboratory is not responsible for data collected by personnel who are not affiliated with the laboratory. Results reported in both structures/cm³ and structures/mm² are dependent on the sample volume and area. These parameters are measured and recorded by non-laboratory personnel and are not covered by the laboratory’s accreditation. Interpretation of these results is the sole responsibility of the client.

If further clarification of these results is needed, please call us. Thank you for allowing the staff at Lab/Cor, Inc. the opportunity to provide you with the analytical services.

Sincerely,

Derk Wipprecht
Laboratory Supervisor
**Client:** PBS Engineering and Environmental

**Address:** 4412 SW Corbett Ave.

**City, State, Zip:** Portland, OR 97239

**Contact:** Bob Kleeher

**Phone:** (503) 209-1476

**Fax:**

**Email:** bob.kleeher@pbserv.com

**Project Name:** Lake Oswego Swim Ctr.

**Project Number:** 21600 036

**P.O. Number:** 00002

**Analysis Type:**
- Nonviable Options:
  - Fungal ID
  - Fungal & Particulate ID
  - Particulate ID
  - Quantitative Analysis (Total Count)
  - Qualitative Analysis (Relative Abundance)

**Viable Options:**
- Complete Analysis
- Genera Only
- Stachy Only

<table>
<thead>
<tr>
<th>Sample #</th>
<th>Sample Description</th>
<th>Sample Type</th>
<th>Media Type</th>
<th>Sampling Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>002</td>
<td>West Wall, above bleachers, All layers</td>
<td>NV V NV V NV V NV V</td>
<td>X</td>
<td>4-13-15</td>
</tr>
<tr>
<td>003</td>
<td>West Wall, above bleachers, underlying layers</td>
<td>NV V NV V NV V NV V</td>
<td>X</td>
<td>4-13-15</td>
</tr>
</tbody>
</table>

*Call ahead for TATs of 24 hours or less*
THIS IS TO CERTIFY THAT

NATHAN CARLSON

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE
for
ASBESTOS INSPECTOR REFRESHER

In accordance with TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR

Course Date: 07/11/2014
Course Location: Portland, OR
Certificate: IR-14-1775B

Expiration Date: 07/11/2015

AHERA is the Asbestos Hazard Emergency Response Act enacting Title II of Toxic Substance Control Act (TSCA)

For verification of the authenticity of this certificate contact:
PBS Environmental
4412 SW Corbett Avenue
Portland, OR 97239
(503) 248-1939

David Stover, Director of Training