Pre-Demolition Hazardous Waste Assessment

Chambers Grove Park
Bathroom Building
Duluth, Minnesota

TPT#16A0159

Prepared for:

Ms. Tari Rayala, AIA
City of Duluth- Architect
Property & Facilities Management
1532 West Michigan Street
Duluth, Minnesota 55806

March 25, 2016
March 25, 2016

TPT#16A0159

Ms. Tari Rayala, AIA
City of Duluth- Architect
Property & Facilities Management
1532 West Michigan Street
Duluth, Minnesota 55806

Re: Pre-Demolition Hazardous Waste Assessment
Chambers Grove Park
Bathroom Building
Duluth, Minnesota

Dear Ms. Rayala,

The following is a report outlining the pre-demolition hazardous waste assessment completed in the bathroom building located at Chambers Grove Park in Duluth, Minnesota. This report contains the following information:

- Introduction
- Asbestos
- Hazardous Waste Inventory
- Discussion/ Recommendations

INTRODUCTION

Twin Ports Testing, Inc. (TPT) was contacted by Ms. Tara Rayala, City of Duluth- Architect, regarding pre-demolition hazardous waste assessment at the above mentioned property. Mr. Gary Christner, of TPT, a Minnesota Department of Health certified Asbestos Inspector, conducted the inspection on March 22, 2016. TPT personnel certifications are attached as Appendix A.

ASBESTOS

TPT collected four samples that were potentially asbestos containing materials (ACMs). These samples included brick, mortar, caulk and putty. The samples were sent to EMSL Analytical, Inc. in Minneapolis, Minnesota for analysis by polarized light microscopy (PLM). The table on the following page lists the areas that were sampled for asbestos (bold and shading indicates positive results), sample number, sample description, sample location and asbestos percent (if applicable). Laboratory analytical results are attached as Appendix B.
<table>
<thead>
<tr>
<th>Sample #</th>
<th>Sample Description</th>
<th>Sample Location</th>
<th>Asbestos % Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Brick</td>
<td>Exterior building, black</td>
<td>None Detected</td>
</tr>
<tr>
<td></td>
<td>Mortar</td>
<td>Exterior building between brick, gray</td>
<td>None Detected</td>
</tr>
<tr>
<td>2</td>
<td>Caulk</td>
<td>Around exterior electric conduit, clear</td>
<td>None Detected</td>
</tr>
<tr>
<td>3</td>
<td>Caulk</td>
<td>Around exterior electric conduit, gray</td>
<td>None Detected</td>
</tr>
<tr>
<td>4</td>
<td>Putty</td>
<td>Around exterior water pipes, gray</td>
<td>None Detected</td>
</tr>
</tbody>
</table>

According to the Minnesota Department of Health (MDH) rules and regulations, asbestos containing materials are materials that contain greater than 1% asbestos. None of the materials sampled are considered asbestos containing.

**REGULATED WASTE**

TPT identified the following items that must be removed and properly disposed of before demolition. The following list is merely a guideline for removal; items may have been missed and quantities may not be exact. Any additional regulated waste that is discovered should be removed prior to demolition.

**Utility Room:**
- 1 Compact fluorescent
- Electrical boxes
- Solid waste (Grocery cart, grill racks)

**Men's bathroom:**
- Solid waste (Gabage can)

**Women's bathroom:**
- Solid waste (Gabage can)

**DISCUSSION/RECOMMENDATIONS**

All samples are negative for asbestos; no special precautions are required when working with these materials.

TPT recommends proper removal and disposal of the regulated wastes prior to demolition.

TPT would like to thank you for the opportunity to assist you with this project. If you have any questions or concerns regarding this report please call us at your convenience.

Sincerely,

**Twin Ports Testing, Inc.**

Gary Christner  
Industrial Hygiene Technician  
Inspector# 3694

3-25-16
Appendix A

Licenses/Certifications
Certified by:
State of Minnesota
Department of Health
Expires: 01/07/2017
Gary J Christner
632 N 60th Ave W #2
Duluth, MN 55807

No. AI3654  Issued: 01/26/2016

Director, Env. Health Div.
Appendix B

Asbestos Analytical Results
**Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy**

<table>
<thead>
<tr>
<th>Sample</th>
<th>Description</th>
<th>Appearance</th>
<th>Non-Asbestos % Fibrous</th>
<th>Non-Fibrous %</th>
<th>Asbestos % Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Brick</td>
<td>Black</td>
<td>100% Non-fibrous</td>
<td>None Detected</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Brick &amp; mortar, black/gray</td>
<td>Non-Fibrous</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>351601668-0001</td>
<td>Homogeneous</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Mortar</td>
<td>Gray</td>
<td>100% Non-fibrous</td>
<td>None Detected</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Brick &amp; mortar, black/gray</td>
<td>Non-Fibrous</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>351601668-0001A</td>
<td>Homogeneous</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Caulk, clear</td>
<td>Clear</td>
<td>100% Non-fibrous</td>
<td>None Detected</td>
<td></td>
</tr>
<tr>
<td></td>
<td>351601668-0002</td>
<td>Non-Fibrous</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Caulk, gray</td>
<td>Gray</td>
<td>100% Non-fibrous</td>
<td>None Detected</td>
<td></td>
</tr>
<tr>
<td></td>
<td>351601668-0003</td>
<td>Non-Fibrous</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Putty, gray/white</td>
<td>Grey</td>
<td>100% Non-fibrous</td>
<td>None Detected</td>
<td></td>
</tr>
<tr>
<td></td>
<td>351601668-0004</td>
<td>Non-Fibrous</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Analyst(s)**

Miles DelBusso (5)

Rachel Travis, Laboratory Manager
Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-fibrous organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%.

Samples analyzed by EMSL Analytical, Inc. Minneapolis, Mn NVLAP Lab Code 200015-0

Initial Report From: 03/23/2016 13:10:39

PLM - 1.67 Printed: 3/23/2016 12:10 PM
Asbestos Chain of Custody
EMSL Order Number (Lab Use Only):

EMSL Analytical, Inc.
14375 23rd Avenue North
Minneapolis, MN 55447
PHONE: (763) 448-4922
FAX: (763) 448-4924

Company: Twin Ports Testing, Inc.
Street: 1501 North 3rd Street
City: Superior
State/Province: WI
Zip/Postal Code: 54880
Country: United States
Telephone #: (218) 390-0162
Fax #: 715-352-7163
Purchase Order:

Third Party Billing requires written authorization from third party

If Bill to is Different please instruct recipient

Report To (Name): Tracy Jacobs
Email Address: tracy.jacobs@twinports testing.com

U.S. State Samples Taken: MN
Connecticut Samples: Commercial Residential

Turnaround Time (TAT) Options* - Please Check
☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PGM - Air
☐ Check if samples are from NY
☐ NIOSH 7400
☐ w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)
☐ PLM EPA 800-R-83/116 (<1%)
☐ PLM EPA NOB (<1%)
☐ Point Count
☐ 400 (<2.5%) ☐ 1000 (<0.1%)
☐ Point Count w/Gravimetric
☐ 400 (<2.5%) ☐ 1000 (<0.1%)
☐ NYS 198.1 (fibrous in NY)
☐ NYS 198.6 NOB (non-fibrous-NY)
☐ NIOSH 9002 (<1%)

TEM - Air
☐ 44.6hr TAT (AHERA only)
☐ TEM - Bulk
☐ TEM EPA NOB
☐ NYS NOB 198.4 (non-fibrous-NY)
☐ NYS 198.1 (fibrous in NY)
☐ NYS 198.6 NOB (non-fibrous-NY)
☐ NIOSH 9002 (<1%)

TEM - Water
☐ TEM Mass Analysis-EPA 600 sec. 2.5
☐ TEM Qual. via Filtration Technique
☐ TEM Qual. via Drop-Mount Technique

TEM - Dust
☐ Microvac - ASTM D 5765
☐ Wipe - ASTM D 6480
☐ Carpet Sonication (EPA 600/1-93/167)

Self/Rock/Varniculate
☐ PLM CARB 435 - A (0.25% sensitivity)
☐ PLM CARB 435 - B (0.1% sensitivity)
☐ PLM CARB 435 - C (0.01% sensitivity)
☐ TEM Qual. via Filtration Technique
☐ TEM Qual. via Drop-Mount Technique

Other:
☐

Check For Positive Stop - Clearly Identify Homogenous Group

Filter Pore Size (Air Samples):
☐ 0.6um ☐ 0.45um

Sampler Name: Gary Christen
Sampler's Signature: Gary Christen

Sample # Sample Description
1 Brick mortar, black/grey
2 Caulk, clear
3 Caulk, gray
4 Putty, grey/white

Volume/Area (Air)
HA # (Bulk)
Date/Time Sampled

Client Sample # (s):

Retain/Released (Client):
Date: 3-22-16
Time: 12:00

Received (Lab): 3/22/16
Date: 3-22-16
Time: 12:00

Comments/Special instructions:

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