November 16, 2018

Mr. Tim Thatcher
King County Housing Authority
700 Andover Park W
Tukwila, Washington 98188

**Subject:** **Wayland Arms**
**307 S. Division Street**
**Auburn, Washington 98188**

Dear Mr. Tim Thatcher:

MC Consultants Inc. (MC) is pleased to submit the following report for the limited lead-based paint inspection performed at the subject facility to King County Housing Authority. This report contains the FLAA analysis and certifications from the inspection on November 1, 2018. This inspection was completed using the inspection protocol given in Chapter 7 of the *HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (1997).*

**The results of the FLAA analysis indicate that lead-based paint was not detected in amounts greater than or equal to 0.5% by weight in the affected areas, with the following exceptions:**

FLAA Analysis Summary - Table #1

| Sample No. | Room Equivalent | Component | Color | Substrate | Concentration | Quantity |
|---|---|---|---|---|---|---|
| **L-1** | **Stairwells** | **HVAC Units** | **Tan** | **Metal** | **0.75% By Weight** | **≈50 Sq. Ft.** |

If there are any questions please do not hesitate to contact us at (623) 691-6400.

Sincerely,

Roy L. Dunn CIH, CEICC, CMC
Vice President/Senior Scientist

*Attachment: Limited Lead-Based Paint Survey Report*

THE AMERICAN BOARD OF INDUSTRIAL HYGIENE INCORPORATED
CERTIFICATION NUMBER 10206 CP
EXPIRES 6-1-2023
PENNSYLVANIA-1969
ROY L. DUNN, CIH

# LIMITED LEAD-BASED PAINT SURVEY REPORT

Wayland Arms
307 S. Division Street
Auburn, Washington 98188
Project Number: A18-00622
Report Date: November 16, 2018

Project Submitted to:

Mr. Tim Thatcher
King County Housing Authority
700 Andover Park W
Tukwila, Washington 98188

Report Prepared by:

Debora Mullins
Project Manager

Report Reviewed by:

Roy L. Dunn, CIH, CEICC, CMC
Vice President/Sr. Scientist

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# 1.0 EXECUTIVE SUMMARY

MC Consultants Inc. (MC), conducted a limited inspection of suspected Lead-Based Paint (LBP) from the Wayland Arms located at 307 S. Division Street, Auburn, Washington 98188, on November 1, 2018.

## 1.1 Inspector(s)

Ms. Debora Mullins, Project Manager of MC, performed the limited lead inspection of the subject property in accordance with U.S. Department of Housing and Urban Development guidelines as provided in: *Guidelines for The Evaluation and Control of Lead Based Paint Hazards in Housing, Chapter 7*.

## 1.2 Project Scope of Work

The inspection was conducted due to an upcoming remediation project. The purpose of the limited inspection was to determine if the materials that are planned to be removed during remediation activities contained regulated levels of lead-based paint prior to repair work being conducted. No destructive testing was performed to access obstructed building materials.

All affected materials were sufficiently sampled to satisfy OSHA, HUD, and EPA requirements.

## 1.3 FLAA Analysis

A total of two (2) testing combinations were analyzed by FLAA throughout the property.

## 1.4 Inspection Summary

**The results of the FLAA analysis indicate that lead-based paint was not detected in amounts greater than or equal to 0.5% by weight in the affected areas, with the following exceptions:**

FLAA Analysis Summary - Table #1

| Sample No. | Room Equivalent | Component | Color | Substrate | Concentration | Quantity |
|---|---|---|---|---|---|---|
| **L-1** | **Stairwells** | **HVAC Units** | **Tan** | **Metal** | **0.75% By Weight** | **≈50 Sq. Ft.** |

It should be noted that areas not tested for lead based paint should be assumed to be above the limits until testing proves the areas do not contain lead-based paint.

Per 24 CFR Part 35 and 40 CFR Part 745, the following is required language for a Lead Based Paint Inspection Report. Some of the language may or may not be appropriate for this survey.

A copy of this summary must be provided to new lessees (tenants) and purchasers of this property under Federal law (24 CFR part 35 and 40 CFR part 745) before they become obligated under a lease or sales contract. The complete report must also be provided to new purchasers and it must be made available to new tenants. Landlords (lessors) and sellers are also required to distribute an educational pamphlet and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards. If there are any questions, please do not hesitate to contact us at (623) 691-6400.

# 2.0 LEAD INSPECTION METHODOLOGY

The EPA defines a lead-based paint inspection as a surface-by-surface investigation to determine the presence of lead-based paint (40 CFR part 745 and Title X of the *1992 Housing and Community Development Act*). The inspection also evaluates the condition of the painted surfaces sampled as intact or non-intact. Painted surfaces include any surface coated with paint, shellac, varnish, stain,

paint covered by wallpaper, or any other coating. Wallpaper should be assumed to cover paint unless building records or physical evidence indicates no paint is present.

Lead-based paint is defined under HUD and EPA as paint or other surface coating with lead content equal to or greater than 1.0 mg/cm² of surface area by XRF analysis or 0.5% by weight (5,000 parts per million) by FLAA paint chip analysis. The applicable standards in the jurisdiction of the State of Arizona are congruent with HUD and EPA levels.

Lead paint concentrations should be reported in mg/cm² because this unit of measurement does not depend on the number of layers of non-lead-based paint and can usually be obtained without damaging the painted surface. All measurements of lead in paint should be in mg/cm², unless the surface area cannot be measured or if all paint cannot be removed from the measured surface area. In such cases, concentrations may be reported in weight percent (%) or parts per million (ppm). For the purposes of the HUD/EPA lead-based paint disclosure rule, 1.0 milligram per square centimeter (mg/cm²) or 0.5% by weight are the standards that must be used.

The substrate is the material underneath the paint. Substrates should be classified into one of six types: brick, concrete, drywall, metal, plaster, or wood (ceramic is used by inspectors frequently as well).

A building component type consists of doors, windows, walls, and so on that are repeated in more than one room equivalent in a unit and have a common substrate. If a unique building component is present in only one room, it is considered to be a testing combination. Each testing combination may be composed of more than one building component (such as two similar windows within a room equivalent).

A testing combination is characterized by the room equivalent, the component type, and the substrate. For each unit, common area, and exterior site to be inspected, all testing combinations in each room equivalent were identified. A room equivalent is an identifiable part of a residence (e.g., room, house exterior, foyer, etc.).

The test location is a specific area on a testing combination where either an XRF reading or an FLAA paint-chip sample will be taken.

A lead-based paint inspection will:

- Determine whether lead-based paint is present including common areas and exterior surfaces.
- Determine which building components contain lead-based paint.

## 3.0 FINDINGS

The following table lists the detailed information of the lead-based paint survey of the Wayland Arms:

| Room Equivalent | | 1 | North Stairwell | | | | | |
|---|---|---|---|---|---|---|---|---|
| # | Component | Color | Substrate | Test Location | FLAA Result PPM | Class (P,N,I)* | Condition | Estimated Quantity (If Positive) |
| **L-1** | **HVAC Units** | **Tan** | **Metal** | **B Left** | **7520** | **P** | **Intact** | **≈50 Sq. Ft.** |

*Positive, Negative, Inconclusive

| Room Equivalent | | 1 | Roof | | | | | |
|---|---|---|---|---|---|---|---|---|
| # | Component | Color | Substrate | Test Location | FLAA Result PPM | Class (P,N,I)* | Condition | Estimated Quantity (If Positive) |
| L-2 | Roof Flashing | Tan | Metal | B Center | 1260 | N | Intact | N/A |

*Positive, Negative, Inconclusive

Please see Appendix 1 of this report for a property sketch of the areas/locations tested.

It should be noted that some of the areas may have lead present below the HUD limit of 1.0 mg/cm2 or 0.5% by weight (5000 parts per million). If the areas are subjected to abrading, scraping, or grinding activities, lead-containing dust may be produced. When conducting construction or demolition activities which disturb lead in any amount or create an exposure to workers, the employer is required to provide worker protection and conduct exposure assessments. Employers should consult Federal OSHA Regulations at 29 CFR 1926.62, “Lead in Construction” standards for complete requirements prior to construction or demolition activities.

Notification must be given to all other contractors at the work site prior to the start of activities that may create a lead hazard. Characterization and disposal of Lead-Containing Waste Materials (LCWMs) must comply with federal, state and local authorities. Contractors must maintain current licenses as required by applicable state or local jurisdictions for the removal, transport, disposal of LCWMs, or other regulated lead-based paint activities.

This report should be kept by the owner and distributed as necessary per the federal law found in 24 CFR Part 35.

## 4.0 REFERENCES

The following references are used as guidelines for the industrial hygiene survey:

1. American Conference of Government Industrial Hygienist (ACGIH): Industrial Ventilation 24th Edition; 2001; published by ACGIH

2. American Conference of Government Industrial Hygienist (ACGIH): Theshold Limit Values for Chemical Substances and Physical Agents; 2003; published by ACGIH

3. American Industrial Hygiene Association (AIHA): The Occupational Environment – Its Evaluation and Control; AIHA, 1998.

4. National Safety Council (NSC): Fundamentals of Industrial Hygiene; 1996; published by the NSC

5. National Institute for Occupational Safety and Health (NIOSH): Pocket Guide to Chemical Hazards; 1997; published by US Department of Health and Human Services

6. Occupational Health and Safety Administration (OSHA): 29 CFR Part 1926 OSHA Safety and Health Standards for the Construction Industry; 2000; published by The Industrial Commission of Arizona

7. Occupational Health and Safety Administration (OSHA): 29 CFR Part 1910 Occupational Safety and Health Standards for General Industry; 2000; published by The Industrial Commission of Arizona

8. Proctor & Hughes: Chemical Hazards of the Workplace; 1996, published by John Wiley & sons.

9. U.S. Department of Housing and Urban Development, Guidelines for The Evaluation and Control of Lead Based Paint Hazards in Housing, Chapter 7: Lead-Based Paint Inspections. Revised 1997

10. U.S. Environmental Protection Agency, Lead; Renovation, Repair, and Painting Program, Part 745 - Lead-Based Paint Poisioning Prevention In Certain Residential Structures: Subpart E Residential Property Renovation. based on publication in April 22, 2008 and March 20, 2009 *Federal Register*

## 5.0 LIMITATIONS AND EXCLUSIONS OF WARRANTY

This investigation was performed using procedures and a level of diligence typically exercised by professional consultants performing similar services. Hidden or changed conditions, activities that may have occurred after the time of the investigation, and possible inaccuracies of information supplied to MC by others might have a material bearing on the findings, conclusions, and recommendations. MC reserves the right to change its opinion when new information is encountered.

The procedures used for this survey attempt to establish a balance between the competing goals of limiting investigative costs and time, and reducing the uncertainty about unknown conditions. It would be cost prohibitive to do an exhaustive investigation. Because an exhaustive investigation was not performed or necessary, the recommendations should not be construed as a guarantee that all safety or health hazards that may exist at the subject property have been identified.

No warranty or guarantee, expressed or implied, is made regarding the findings, conclusions or recommendations contained in this report. The limitations presented above supersede the requirements or provisions of all other contracts or scopes of work, implied or otherwise, except as expressly stated or acknowledged herein. MC is not responsible for the actions other parties involved in this project.

It is expressly agreed that MC will have no liability to any party for reliance upon any of the findings or recommendations contained in this report. To the extent that this provision is found unenforceable by any court, any liability MC may have arising out of its agreement with the contracting party is expressly agreed to be limited to the amount paid to MC.

# APPENDIX 1

## Laboratory Reports & Chains of Custody

Website: www.aerobiology.net

Date: 11/9/18

# Environmental Chemistry Analysis Report

Performed and Report Prepared by:

**Quantem Labs, Inc.**

Under Subcontract with **Aerobiology Laboratory Associates, Inc.**

Aerobiology Project Number: 18042584
Client: MC Consultants
Client Project Number: A18-00620 Wayland ARMS 110118
Quantem Labs Job #: 301648

780 Simms Street, Suite 104, Golden, CO 80401 - **(866) 620-9348** Fax (303) 232-0863 - email: denver@aerobiology.net
43760 Trade Center Place, Suite 100, Dulles, VA 20166 - **(877) 648-9150** Fax (703) 661-8379 - email: lab@aerobiology.net
4501 Circle 75 Parkway, Suite A1190, Atlanta GA 30339 - **(866) 620-9313** Fax (770) 947-2938 - email: ATL@aerobiology.net
2228 West Northern Avenue, Suite B110, Phoenix, AZ 85021 - **(855) 738-5619** Fax (602) 441-2818 - email: phoenix@aerobiology.net
1761 Hotel Circle South, Suite 121, San Diego, CA 92108 - **(650) 302-2223** Fax (720) 235-5916 - e-mail: aerobiologywest@aerobiology.net

QUANTEM LABORATORIES
2033 HERITAGE PARK DR, OKLAHOMA CITY, OK 73120 | 1.800.822.1650

# Environmental Chemistry Analysis Report

**QuanTEM Set ID:** 301648
**Date Received:** 11/06/18
**Received By:** Taylor Hooper
**Date Sampled:**
**Time Sampled:**
**Analyst:** CR
**Date of Report:** 11/09/18

AIHA ID: 101352

**Client:** Aerobiology Laboratory Associates, Inc
K Davis
228 W Northern Av. B110
Phoenix, AZ 85021

**Acct. No.:** B864

**Project:** 18042584
**Location:** N/A
**Project No.:** N/A

| QuanTEM ID | Client ID | Matrix | Parameter | Results | Reporting Limits | Units | Date/Time Analyzed | Method |
|---|---|---|---|---|---|---|---|---|
| 001 | L-1 | Paint | Lead | 7,520 | 49.5 | ppm | 11/08/18 11:13 | P EPA 7000B (1) |
| 002 | L-2 | Paint | Lead | 1,260 | 69.9 | ppm | 11/08/18 11:13 | P EPA 7000B (1) |

**Authorized Signature:** _____
Cherry Rossen, Technical Manager

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission. QuanTEM is not responsible for user-supplied data used in calculations.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified. EPA 7000B Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preparation Modified. EPA 7082 Analysis Modified

# Supplemental Report
# QAQC Results

**QA ID:** 16795 **Date:** 11/8/2018 **Lab Number:** 301648
**Test:** Lead **Matrix:** Paint **Approved By:** Cherry Rossen
**Date Approved:** 11/8/2018

**Notes:**

**Blank Data:**

| Type of Blank | Blank Value |
|---|---|
| ICB | 0 |
| Matrix Blank | 0 |
| FCB | 0 |

**Standards Data:**

| Standard | Low Limit | Obtained | High Limit |
|---|---|---|---|
| CCV | 4.5 | 4.9 | 5.5 |
| FCV | 4.5 | 5.1 | 5.5 |
| ICV | 0.9 | 1 | 1.1 |
| RLVS | 0.05 | 0.07 | 0.15 |

**Duplicate Data:**

| Sample Number | Result | Duplicate | % RPD |
|---|---|---|---|
| 301548-003 | 5.770 | 5.629 | 2.5 |

**Recovery Data:**

| Sample Number | Result | Spike Level | Result + Spike | % Recovery | Dup. Result + Spike | % Dup. Recovery | % Spike RPD |
|---|---|---|---|---|---|---|---|
| LCS-P1 | 0.000 | 2.002 | 2.375 | 118.6 | 2.023 | 101.0 | 16.0 |

**Authorized Signature:** Cherry Rossen

Cherry Rossen, Technical Manager

Aerobiology Laboratory Associates, Incorporated
Expertise Since 1997

Lab Use:
18042584
11/5/2018

ELITE — AZ, CA, CO, FL, GA, VA, NJ
NVLAP — AZ, CA, CO, VA
AZ, CA, CO, FL GA, NJ, VA

Page _____ of _____

| | | | |
|---|---|---|---|
| Aerobiology Client | MC Consultants | | |
| Field Contact | Debie Mullins | Collected By/Date: D. Mullins 11/1/18 | Relinquished By/Date: D. Mullins / 11/2/18 |
| Reporting Address | 307 S. Division Ahberen, WA | Relinquished By/Date: D. Mullins 11/2/18 | Received By/Date: 11/5/18 12 |
| Billing Address | | Sampler Type: Andersen ☐ SAS ☐ | SampleAire ☐ AeroTrap ☐ Other X BioCulture ☐ |
| Phone/Fax | | PO#/Job#: AIB-00620 | |
| Reporting Email (s) | roydunn@mcconsultants.com | Project Name: Wayland Arms | |
| Routine ☐ 4day | 24 Hour ☐ Same Day ☐ 4 Hour ☐ 2 Hour ☐ | Notes: LEAD PAINT CHIPS | |
| SAMPLING LOCATION ZIP CODE | 98001 | CC Info: MULLDGP@aol.com | |

| | Sample No. | Test Code | Sample Location | Total Volume/Area |
|---|---|---|---|---|
| 1 | | | Please send out | |
| 2 | L-1 | Lead | HVAC Units | |
| 3 | L-2 | | Roof Flashing. | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | | |
| 13 | | | | |
| 14 | | | | |
| 15 | | | | |

| | | | |
|---|---|---|---|
| 1054 | Direct, Non-viable Spore Trap | 1015 | Culture - WATER Legionella |
| 1051 | Direct, Qualitative- **Swab/Tape** | 1017 | Culture - SWAB Legionella |
| 1050 | Direct, Qualitative- **Bulk** | 1010 | WATER - Potable - E. coli/total coliforms |
| 1005 | AIR Culture - Bacterial Count w/ ID's | 1012 | SWAB - E. coli/total coliforms |
| 1030 | AIR Culture - Fungal Count w/ ID's | 1028 | SWAB - Sewage Screen (E. coli/Entero/fecal coliforms) |
| 1006 | SWAB Culture - Bacterial Count w/ ID's | 2056 | WATER - Heterotrophic Plate Count |
| 1031 | SWAB Culture - Fungal Count w/ ID's | 3001 | ASBESTOS - Point count |
| 1008 | BULK Culture - Bacterial Count w/ ID's | 3002 | ASBESTOS - PLM Analysis |
| 1033 | BULK Culture - Fungal Count w/ ID's | 3003 | ASBESTOS - Particle characterization |
| 1007 | WATER Culture - Bacterial Count w/ID's | 3004 | ASBESTOS - PCM Analysis |

Washington, D.C. (877) 648-9150 | Atlanta, GA (770) 947-2828 | Denver, CO (303) 232-3746 | Phoenix, AZ (602) 441-3700 | Cherry Hill, NJ (856) 486-1177 | Los Angeles, CA (714) 895-8401 | Ft. Lauderdale, FL (954) 451-3725