HAZARDOUS BUILDING MATERIALS SURVEY

Demolition

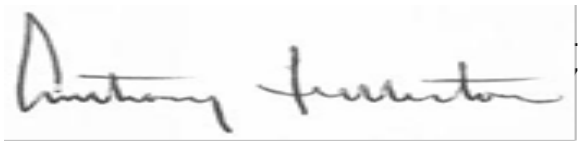
Commercial Structure
2306 11th Street
Tacoma, Washington

Submitted to:

WSP
33301 Ninth Avenue South, Suite 300
Federal Way, Washington 98003-2600

Prepared by:

Med-Tox Northwest
Post Office Box 1446
Auburn, WA
MTNW Project A-8842.1



Anthony Fullerton
AHERA BI #169219 Exp. 08/29/2019
July 2019

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Acronyms

AAS	atomic absorption spectroscopy
ACM	asbestos-containing materials
AHERA	Asbestos Hazard Emergency Response Act
ASHARA	Asbestos Schools Hazard Abatement Reauthorization Act
ASTM	American Society of Testing and Materials
CFC	chlorofluorocarbons
CFR	Code of Federal Regulation
EA	each
ECD	electron capture detectors
EPA	U.S. Environmental Protection Agency
GC	gas chromatography
GWB	gypsum wallboard
HBM	hazardous building materials
HM	homogeneous material
LBP	lead-based paint
mg/cm^2	milligrams per square centimeter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MTNW	Med-Tox Northwest
ND	none detected
NVLAP	National Voluntary Laboratory Accreditation Program
OSHA	Occupational Safety and Health Administration
PCB	polychlorinated biphenyl
PLM	polarized light microscopy
ppm	parts per million
PSCAA	Puget Sound Clean Air Agency
RCRA	Resource Conservation and Recovery Act
SAT	Seattle Asbestos Test, LLC
SF	square feet
TCLP	toxicity characteristic leaching procedure
TSI	thermal system insulation
WAC	Washington Administration Code
WDOC	Washington Department of Commerce
WISHA	Washington Industrial Safety and Health Act
WRD	WISHA Regional Directive
XRF	x-ray fluorescence
% wt.	percent in weight

Survey Summary

On June 26, 2019, Kim Riche and Anthony Fullerton of Med-Tox Northwest (MTNW) conducted a hazardous building materials (HBM) survey of the property located at 2306 11th Street, Tacoma, Washington. This work was conducted on behalf of the Port of Tacoma under subcontract to WSP. The commercial building was vacant the time of the survey.

This report identifies building materials that contain asbestos, estimates the quantity of asbestos-containing material (ACM) present and documents building materials that potentially contain lead-based paint (LBP), polychlorinated biphenyls (PCBs), and other hazardous materials that require removal or management as part of demolition activities. Washington Administrative Code (WAC) 296-155-775 requires identification of asbestos and hazardous materials and their hazards eliminated before demolition is started.

As required by WAC 296-62-077 and Puget Sound Clean Air Agency (PSCAA), a building inspector certified under the Asbestos Hazard Emergency Response Act (AHERA) and employed by MTNW conducted the asbestos portion of the survey. Copies of the inspector's AHERA Building Inspector certificate and Washington State Department of Commerce (WDOC) LBP Risk Assessor certificate are included in **Appendix A**.

No previous HBM surveys or as-built construction documents were available as part of the survey.

Building Information

Photographic documentation of the structure and the major systems described herein are provided in **Appendix B**.

General and Structural: The commercial, one-story warehouse building with mezzanine storage was constructed in 1919 and is approximately 4,800 square feet (SF) in size. The building has metal siding, except for the front (west side) which is constructed with brick and mortar. Interior spaces are minimal; there is a front office space and the rest appears to have used for warehouse space. The building is heated by ceiling hung overhead space heaters. Construction is wood framing with exterior wood siding on a concrete slab. The roof of the building is finished with torch-down tar sheeting over wood sheeting. Windows are a combination of aluminum and wood-framed and the doors are solid or hollow core wood.

There is one shed located on the southeast corner of the building. It is also wood-frame constructed and has a pitched roof finished with torch-down tar sheeting over wood sheeting. There were no other improvements observed.

Heating and Mechanical Systems: Heat for the building is provided by ceiling hung space heaters. There was no hot water heater observed at the time of the survey. All visible pipes observed were void of insulation.

Walls/Ceiling: The walls in the office space are finished with un-textured gypsum wallboard system (GWB). Additional wall finishes include wood wall paneling and vinyl cove base with adhesive. The ceiling is finished with 1- x 1-foot acoustical ceiling tiles that are splined and stapled to the wood framing.

The warehouse space has unfinished wood walls and exposed framing for the walls and ceiling consists of the underside of the wood sheeting from the roof.

Floor Systems: The floors in the office space were observed to be finished with carpeting glued down to wood sheeting. The warehouse space has a finished concrete floor. The upper mezzanine storage areas have wood floors.

Asbestos Survey

The AHERA regulation, 40 Code of Federal Regulation (CFR) 763, is the primary governing regulation when performing asbestos surveys. This regulation was originally enacted for school buildings but has since been applied to public and commercial buildings by the Asbestos School Hazard Abatement Reauthorization Act (ASHARA) in 1994 and by the Occupational Safety and Health Administration's (OSHA) worker protection regulations in 1995, specifically 29 CFR 1926.1101(k).

PSCAA also requires compliance with AHERA's survey and sampling requirements. This applies to any renovation or demolition activities where suspect ACM may be disturbed. PSCAA is a local agency that receives statutory authority from the U.S. Environmental Protection Agency (EPA) to enforce environmental regulations.

AHERA divides suspect ACM into three categories; "surfacing materials" (i.e., sprayed fireproofing, popcorn ceiling texture, etc.), "thermal system insulation" (TSI) (i.e., pipe or building insulation, etc.), and "miscellaneous materials" (i.e., flooring material, roofing, construction mastics, etc.). The following sections summarize the potential ACMs identified for each of these three categories. For a complete listing of suspect materials sampled, see **Appendix C**. See **Appendix J** for drawings with asbestos, lead and PCB sample and material locations.

The following sections summarize the potential ACMs identified by homogeneous material (HM) description as they relate to each of the AHERA categories and clarify location along with the number of samples collected for regulatory compliance.

Thermal System Insulation

There was one TSI material observed in the building.

- Paper, black mastic, with yellow fiberglass insulation (HM-01). This material was observed inside the wall cavities throughout the building. Three samples were collected and analyzed for asbestos content; this material was determined to be negative for asbestos.

All visible pipes observed in the building were un-insulated.

Surfacing Materials

There were no surfacing materials observed in the building.

Miscellaneous Materials

- Grey, tan and black carpet with padding and black mastic on wood (HM-02). This material was identified in the office area. Two samples were collected and analyzed for asbestos content; this material was determined to be negative for asbestos.
- Black caulking on expansion joint (HM-03). This material was identified in the warehouse. Two samples were collected and analyzed for asbestos content; this material was determined to be negative for asbestos.
- 4" black cove base with tan and black mastic (HM-04). This material was identified on the walls of the office area. Two samples were collected and analyzed for asbestos content; this material was determined to be negative for asbestos.
- Un-textured GWB system (HM-05). The office area walls are finished with un-textured GWB system. Two samples of un-textured GWB were collected and analyzed for asbestos content; the joint compound was determined to contain 2% Chrysotile; however, when composited as a system (joint compound, tape and GWB) the overall asbestos content is less than 1%.
- 1'x 1' white ceiling tile with pin and dot pattern (HM-06). This material was identified in the office area. Two samples were collected and analyzed for asbestos content; this material was determined to be negative for asbestos.
- **Brown mastic (HM-07).** This material was identified behind the wood paneling in the office area. Two samples were collected and analyzed for asbestos content; **this material was determined to contain 3% Chrysotile asbestos.**
- White caulking (HM-08). This material was identified around the exterior windows. Two samples were collected and analyzed for asbestos content; this material was determined to be negative for asbestos.

- Dark grey caulking (HM-09). This material was identified around the exterior windows. Two samples were collected and analyzed for asbestos content; this material was determined to be negative for asbestos.
- Red brick and white mortar (HM-10). This material was observed on the exterior of the building around the main entrance. Two samples were collected and analyzed for asbestos content; this material was determined to be negative for asbestos.
- Off-white brick and mortar (HM-11). This material was observed on the exterior brick chimneys. Two samples were collected and analyzed for asbestos content; this material was determined to be negative for asbestos.
- Black gasket (HM-12). This material was observed around the screws that affix the metal siding to the wood framing. Two samples were collected and analyzed for asbestos content; this material was determined to be negative for asbestos.
- Black asphaltic mastic (HM-13). This material was observed to be a patch material on the roof. Two samples were collected and analyzed for asbestos content; this material was determined to be negative for asbestos.
- Torch down tar sheeting over wood board (HM-14). The main roof is finished with torch down tar sheeting over wood boards. Two samples were collected and analyzed for asbestos content; this material was determined to be negative for asbestos.
- Torch down tar sheeting over plywood (HM-15). The roof of the shed is finished with torch down tar sheeting over plywood sheeting. Two samples were collected and analyzed for asbestos content; this material was determined to be negative for asbestos.
- **Electrical panels internals (assumed).** There are several electrical panels in the building. The internal components are assumed to be asbestos containing.

Table 1 summarizes ACM identified in the structure surveyed by MTNW.

Table 1. Summary of Asbestos-Containing Materials

Material	Location	Friable	Quantity
Brown mastic (under wood paneling) HM-07	Office area	No	400 SF
Electrical panel internals (Assumed)	Interior	No	4 EA

EA=each, SF= square feet. Note: This table is not to be used without the complete survey document including appendices for additional information.

Table 2 lists all suspect materials sampled that have been determined to be non-asbestos containing.

Table 2. Summary of Suspect Materials Determined Non-Asbestos Containing

Material Location	Material Description
Interior	Paper, black mastic with yellow fiberglass insulation
Office area	Grey, tan and black carpet with padding and black mastic on wood
Warehouse	Black caulking on joint compound
Office area	4" black cove base with tar and black mastic
Office area	1' x1' white ceiling tile with pin and dot pattern
Exterior	White caulking around window frames
Exterior	Dark grey caulking around window frames
Exterior	Red brick and mortar
Exterior	Off-white brick and mortar
Exterior	Around screws associated with the metal siding
Roof	Black asphaltic mastic
Roof	Torch down tar sheeting over wood board
Shed	Torch down sheeting over plywood sheeting

Note: This table is not to be used without the complete survey document including appendices for additional information.

Table 3 lists all suspect materials sampled that have been determined to be <1% asbestos-containing.

Table 3. Summary of Suspect Materials Determined <1% Asbestos

Material	Location
Un-textured GWB system	Office area

Note: This table is not to be used without the complete survey document including appendices for additional information.

The material identified in **Table 3** was found to contain less than 1% Chrysotile asbestos. Materials with asbestos content less than 1% will require special handling during removal and/or demolition as detailed in Washington Industrial Safety and Health Act (WISHA) Regional Directive (WRD) 23.10, *Occupational Exposure to Asbestos*.

Lead-Based Paint Summary

Lead was commonly used in most paint products until 1978, when it was banned from residential paints at concentrations greater than 600 parts per million (ppm); however, commercial applications with lead are still utilized and available. Lead is poisonous to the human body and presents a potential health hazard during any kind of disturbance (such as maintenance, including grinding, welding, and cutting) and if improperly disposed, where lead can enter drinking water supplies.

EPA defines LBP as a concentration of 1.0 milligrams per centimeter squared (mg/cm^2) or greater by x-ray fluorescence (XRF) or 0.5 percent by weight (% wt.) or greater by total lead analysis; equivalent to 5,000 milligrams per kilogram (mg/kg). This EPA action level triggers requirements for protection of the environment, maintenance workers, and building occupants in child occupied facilities as defined by 40 CFR 745. Additionally, building components exceeding EPA lead levels may cause demolition waste streams to fail waste designation sampling performed for compliance with WAC 173-303 Dangerous Waste Regulations.

WISHA worker protection regulations have not defined a minimum concentration for regulating lead and has clarified that lead at any detectable concentration shall be considered regulated by WAC 296-155-176, Lead. Paint sample results can be expressed in mg/kg (same as ppm), % wt. or mg/cm^2 by area depending on the type of analytical methods used. Any positive result, regardless of the reporting method by the laboratory, will require compliance with WAC 296-155-176.

Lead in Painted Surfaces

Interior and exterior painted surfaces were tested for LBP using bulk sample collection and chemical analysis. A total of five paint chip samples were collected. Analytical results are provided in **Table 4**.

Table 4. Summary of Bulk Paint Chip Sample Results

Sample Number	Location	Component	Substrate	Color	Result (% wt.*)
8842.1-2306-01Pb	Throughout	Framing	Wood	Brown	<0.0085
8842.1-2306-02Pb	West wall	Wall	Wood	Green	**0.017**
8842.1-2306-03Pb	Office walls	Wall	GWB	Tan	**0.015**
8842.1-2306-04Pb	North wall	Wall	Wood	White	**0.19**
8842.1-2306-05Pb	Center warehouse	Floor	Concrete	Yellow	<0.0085

% wt. = percent in weight. GWB = gypsum wallboard. **Bolded values** – bulk paint chip samples with lead detected above the laboratory reporting limit have been bolded. The WISHA worker protection regulations have stated that lead at any detectable concentration shall be considered regulated WAC 296-155-176, Lead. Do not use this table without the complete survey document.

Waste Designation Survey

Waste designation sampling has been performed for the building demolition, including Toxicity Characterization Leaching Procedure (TCLP) analytical sampling of affected building components. The TCLP procedure is used to simulate the transfer of lead from lead-containing waste into the ground water system upon co-disposal of the lead-containing waste and municipal solid waste in unlined solid waste landfills. The TCLP attempts to simulate rain or ground water leaching, or both, of lead from the buried waste. In order for the procedure to yield an accurate predictor of the subsurface (in-ground) leaching process, a representative sample of the volume of the waste must be selected and submitted for leaching and analysis. The result of the sampling, leaching, and analysis process is used to determine the waste handling and disposal protocols to be followed and to document compliance with applicable laws, regulations, and requirements. WAC 173-303 Dangerous Waste Regulations defines hazardous waste as it relates to lead by toxicity as 5.0 milligrams per Liter (mg/L) by TCLP.

A visual inspection of the survey area was conducted to separate the major components of the structures to be demolished into the following categories:

- **Recyclables**. It is anticipated that many of the metal items (i.e., metal piping, tanks, door frames, doors, handrails, flashing, aluminum window frames, etc.) and un-painted clean concrete materials in the survey area will be recycled or reused. These items were not tested for waste pre-designation. Additionally, glass is recyclable and not included in the waste designation survey.

- **Potential Wastes**. Items that are not likely to be recycled were sampled and tested for waste pre-designation. Samples of other building finish materials likely to be landfill disposed were collected, composited and submitted for TCLP testing.

- **Assumed hazardous waste**. None.

One composited sample was collected from the site and tested by TCLP analysis for Resource Conservation and Recovery Act (RCRA) metal – lead. The result for the sample is presented in **Table 5**:

Table 5. Summary of TCLP Sample Results

Sample	Location and Composition	Result (mg/L)
8842.1-2306-01TCLP	Painted and unpainted building components	<0.40

mg/L = milligrams per liter. Note: Do not use this table without the complete survey document.

The TCLP sample collected from the building was determined to have leachable lead less than the regulated level of 5.0 mg/L. Demolition waste from this structure can be disposed of as general construction debris.

Other Hazardous Building Materials

Chlorofluorocarbons

MTNW inspected the building for cooling systems with potential chlorofluorocarbons (CFCs). There were none observed.

PCB Light Ballasts and Fluorescent Light Tubes

Older fluorescent light ballasts have small capacitors that may contain high concentrations of PCBs. Nearly all ballasts manufactured before 1979 contain PCBs. All ballasts manufactured after July 1, 1978 that do not contain PCBs are required to be clearly marked "No PCBs". Unmarked ballasts or ballasts without a date code should be assumed to be PCB ballasts. PCBs are toxic chemicals according to the EPA. While there is only a small amount, about one ounce, of PCBs in each light ballast capacitor, there are a large number of ballasts in the United States. A "No PCB" label means there are less than 50 ppm PCBs however, in the state of Washington PCB in oils are regulated at 2 ppm (WAC 173-303-9904).

There were fluorescent light fixtures observed in the building. In addition, smoke detectors may be regulated as universal or hazardous waste and will require dismantling and special handling. **Table 6** provides a summary of these items in the building:

Table 6. Summary of Fluorescent Lights and Smoke Detectors

Location/floor	8-foot, 1-bulb	8-foot, 2-bulb	8-foot, 4-bulb	4-foot, 2-bulb	4-foot, 1-bulb	Smoke detectors
Throughout	61	16	9	19	3	2
Total	**61**	**16**	**9**	**19**	**3**	**2**

Do not use this table without the complete survey document.

Typically, there is one ballast for every two-light tubes in a fluorescent light fixture; accordingly, there are 117 ballasts in the light fixture requiring recycling or PCB hazardous waste disposal. There are also 41, 4-foot and 129, 8-foot light tubes that will need to be recycled during demolition.

PCB in Caulking and Paint

PCBs were used in paint and caulk formulations as drying oils (resins) and plasticizers or softening agents (liquids). Wood, concrete, gypsum wallboard and metal may have painted surfaces containing PCBs.

PCBs were tested in representative paints on the interior and exterior of the building **Table 7** below provides a summary of PCB sample results.

Table 7. Summary of PCB Sample Results

Sample Number	Location	Material	Result (mg/kg*)
8842.1-2306-01PCB	Exterior	Siding caulk	4.7 (Aroclor 1254) 3.6 (Aroclor 1260_
8842.1-2306-02PCB	Exterior	White paint on wood siding	ND
8842.1-2306-03PCB	Interior	White paint on GWB wall	ND

*mg/kg= milligrams per kilogram, ND= none detected. PCB-containing waste in demolition debris cannot be recycled. It may go to a subtitle D landfill. Profiling and special transport requirements apply.

Mercury Containing Switches

Heating system thermostats were investigated for mercury containing systems. The thermostats observed in the building were electric; therefore, not suspect of containing mercury.

Laboratory Analytical Methods

Asbestos-Containing Materials

Bulk samples were analyzed by PLM dispersion staining EPA Method 600/R-93/116 by Seattle Asbestos Test, LLC (SAT). SAT is accredited through the National Voluntary Laboratory Accreditation Program (NVLAP) of the U. S. Department of Commerce. This accreditation does not constitute endorsement, but rather a finding of laboratory competence. The NVLAP participant number for SAT is 200768-0 (certification copies are located in **Appendix D**). Analytical results are in **Appendix E**.

Lead-Based Paint

Bulk paint chip samples were submitted to EMSL Analytical, Inc. for analysis using atomic absorption spectroscopy (AAS) to determine the presence and percentage of lead. Procedures for analyzing metals are found in the American Society of Testing and Materials (ASTM) D-3335-78 and EPA Method Manual SW-846, Method 6010. EMSL used SW 846-7000B, an equivalent analytical method.

One TCLP sample was also collected and submitted to EMSL Analytical, Inc. for analysis using AAS. The extraction of the TCLP sample was performed using SW846-1311/7000B/SM 3111B.

Analytical results for paint chip results are provided in **Appendix F**. EMSL Analytical, Inc., laboratory certification is attached in **Appendix G**.

PCBs

Bulk PCB samples were submitted to On-Site Environmental, Inc., for analysis using gas chromatography (GC) equipped with electron capture detectors (ECD). Samples were analyzed using EPA Method SW-846 8082A. Analytical results are provided in **Appendix H**. On-Site Environmental, Inc. laboratory certification is attached in **Appendix I**.

A sample location drawing is provided in **Appendix J**.

Comments and Recommendations

Asbestos-Containing Materials

MTNW recommends, and state law requires, that all asbestos materials identified in **Table 1** be removed prior to demolition.

MTNW recommends that this survey report be placed on-site during renovation and/or demolition and copies provided to the contractor(s) bidding and performing work. WISHA, OSHA and PSCAA require that the report be on-site and available for review during the entire project duration.

Limited destructive investigation was conducted during the survey; however, additional destructive investigation will be required prior to demolition.

1. All pipes observed were bare of insulation, so it is not anticipated that hidden pipes will be insulated. During the course of demolition, if pipe or pipe fitting insulation suspected of containing ACM is made visible, the material must be sampled by an AHERA building inspector prior to being disturbed.
2. Electrical systems were not sampled due to power being live. Sample and verify that asbestos is not present prior to building demolition.
3. The doors to the structure did not appear to be fire doors with suspect asbestos content. Prior to any activity that will impact the doors, drill into the doors and door frames to determine if suspect fire protection is located inside.

The material identified in **Table 3** was found to contain less than 1% Chrysotile asbestos. Materials in this report with asbestos content less than 1% will require special handling during removal and/or demolition as detailed in WRD 23.10, *Occupational Exposure to Asbestos*. A copy of this directive is available at:

http://www.lni.wa.gov/safety/rules/policies/pdfs/wrd2310.pdf

29 CFR 1926.1101/WAC 296-65 requires ACM be removed by trained and licensed contractors using certified asbestos abatement workers and supervisors (except for deregulated roofing sealants, mastics, and coatings). A 10-day prior notification is also required before abatement can begin. In addition, PSCAA requires notification and fees prior to beginning removal of friable ACM.

MTNW recommends third party oversight of asbestos abatement and renovation activities by an AHERA accredited building inspector to ensure regulatory compliance and completion of the additional destructive methods recommended herein.

Lead-Based Paint

For lead, any percentage of lead in the material should be an assumed risk to human health. All painted surfaces should be assumed to contain at least trace levels of lead in paint, therefore requiring compliance with WAC 296-155-176 during any disturbance of painted surfaces. The WISHA criteria are used to determine if materials are hazardous during a demolition.

Disposal options under WAC 173-303 are also determined by whether the material contains lead. The TCLP sample collected was determined to be less than the regulated level of 5.0 mg/l. Demolition waste from site can be disposed of as general construction debris.

PCB

There was paint that were determined to contain PCB's. PCB-containing waste in demolition debris cannot be recycled. It may go to a subtitle D landfill. Profiling and special transport requirements (i.e., lined containers) may apply.

Work procedures for proper removal and protection of workers should be provided to contractors in accordance with WAC 296-155 and WAC 296-841. This includes Hazardous Communications training as it pertains to PCB's considered a remediation waste.

During demolition, the asbestos abatement contractor should be tasked with dismantling light fixtures, collecting all lighting ballasts for proper disposal, and recycling the light tubes. Ballasts without "No-PCB" labels are considered PCB-containing and must be disposed as a hazardous waste. "No-PCB" ballasts may designate as Washington Dangerous Waste and should be sent to an EPA licensed facility for proper disposal.

Other Hazardous Building Materials

Fluorescent light tubes contain mercury and can be recycled as a universal waste for minimal cost. Smoke detectors also should be collected/recycled as a universal waste.

Limitations

A good faith effort has been made to identify ACM, LBP and other HBM in preparation for building demolition. This survey was performed for complete demolition of the building. Additional destructive investigation and sampling will be required depending on inaccessible building systems including mechanical spaces and/or mechanical/electrical system routing.

Sampling was performed consistent with the level of care and skill ordinarily exercised by professionals currently practicing under similar conditions in the area. No other warranty, expressed or implied, is made.

This report has been prepared for the exclusive use of WSP and Port of Tacoma and its' designates for this project only. The analyses, conclusions, and recommendations presented in this report are based on conditions encountered at the time of our survey and our experience and judgment. MTNW cannot be held responsible for interpretation by others of the data contained in this report; any use of this report shall include the entire document. This survey is not intended for use as abatement plans and/or specifications which MTNW recommends for regulatory compliance.

.

Appendix A
AHERA Building Inspector and WDOC Risk Assessor Certificates

Certificate of Completion

This is to certify that

Anthony L. Fullerton

has satisfactorily completed
4 hours of refresher training as an

AHERA Building Inspector

to comply with the training requirements of
TSCA Title II, 40 CFR 763 (AHERA)

EPA Provider # 1085

169219
Certificate Number

Instructor

ARGUS PACIFIC
TRAINING • CONSULTING
A Terracon COMPANY

Aug 29, 2018 — Expires in 1 year.
Date(s) of Training

Exam Score: N/A
If appropriate:

ARGUS PACIFIC, INC / 1900 WEST NICKERSON ST, SUITE 315 / SEATTLE, WASHINGTON 98119 / 206.285.3373 / ARGUSPACIFIC.COM

STATE OF WASHINGTON

Department of Commerce

Lead-Based Paint Abatement Program

Anthony L Fullerton

Has fulfilled the certification requirements of
WAC 365-230
and has been certified to conduct lead-based paint activities as a
Risk Assessor

Certification #	Issuance Date	Expiration Date
0242	05/25/2017	04/03/2020

STATE OF WASHINGTON

Department of Commerce

Lead-Based Paint Abatement Program

Kimberly D Riche

Has fulfilled the certification requirements of WAC 365-230 and has been certified to conduct lead-based paint activities as a

Risk Assessor

Certification #	Issuance Date	Expiration Date
6702	07/09/2019	07/09/2022

Certificate of Completion

This is to certify that

Kimberly D. Riche

has satisfactorily completed
4 hours of refresher training as an

AHERA Building Inspector

to comply with the training requirements of
TSCA Title II, 40 CFR 763 (AHERA)

EPA Provider # 1085

173932
Certificate Number

ARGUS PACIFIC
TRAINING • CONSULTING
A Terracon COMPANY

Jul 9, 2019 — Expires in 1 year.
Date(s) of Training

Exam Score: N/A
(if applicable)

Instructor

ARGUS PACIFIC, INC / 21905 64th AVE W, SUITE 100 / MOUNTLAKE TERRACE, WASHINGTON 98043 / 206.285.3373 / ARGUSPACIFIC.COM

Appendix B
Building and Building System Photographic Documentation

Hazardous Building Materials Survey
Port of Tacoma
2306 11th Street, Tacoma, WA
July 2019

Photo 1: South and west sides of the building facing northeast.

Photo 2: North side of the building facing southeast.

Photo 3: Roof of shed. The roofing is non asbestos containing.

Photo 4: Interior of building facing east.

Photo 5: Front end sales area facing north.

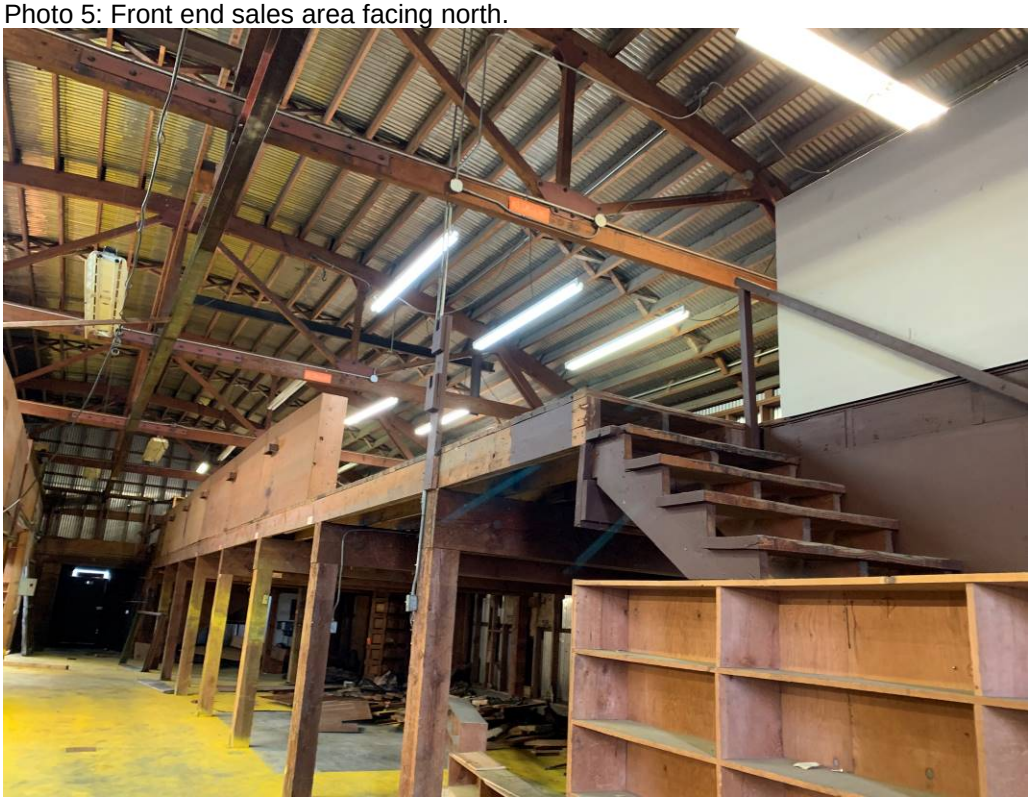

Photo 6: 2nd floor mezzanine storage area facing southeast.

Photo 7: Typical finishes observed in the bathroom.

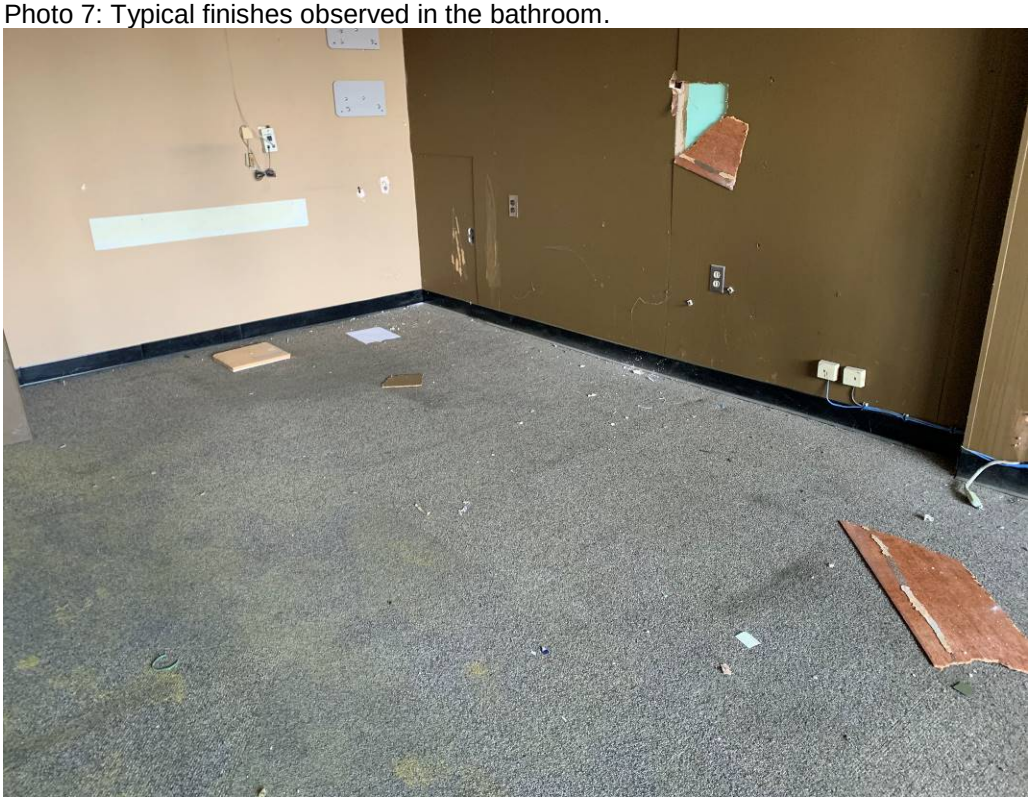

Photo 8: Typical finishes observed in the office area. The paneling mastic is ACM.

Photo 9: Non asbestos roofing debris on the north side exterior.

Appendix C
Summary of Materials Sampled for Asbestos

Summary of Materials Sampled for Asbestos Content

Sample	Material	Location	AHERA Type	HM	Result
8842.1-2306-01	Paper, black mastic, with yellow fiberglass insulation	Batt insulation throughout the walls of the building	TSI	1	ND
8842.1-2306-02	Paper, black mastic, with yellow fiberglass insulation	Batt insulation throughout the walls of the building	TSI	1	ND
8842.1-2306-03	Paper, black mastic, with yellow fiberglass insulation	Batt insulation throughout the walls of the building	TSI	1	ND
8842.1-2306-04	Grey, tan, and black carpet with padding and black mastic on wood	Flooring in office	Misc.	2	ND
8842.1-2306-05	Grey, tan, and black carpet with padding and black mastic on wood	Flooring in office	Misc.	2	ND
8842.1-2306-06	Black caulking	Expansion joint	Misc.	3	ND
8842.1-2306-07	Black caulking	Expansion joint	Misc.	3	ND
8842.1-2306-08	4” Black cove base with tan and black mastic	Base of walls in office	Misc.	4	ND
8842.1-2306-09	4” Black cove base with tan and black mastic	Base of walls in office	Misc.	4	ND
8842.1-2306-10	Un-textured GWB system (white joint compound and gypsum wallboard)	Walls in office space	Misc.	5	Layer 1: 2% CHR Layer 2: ND Less than 1% as a composite
8842.1-2306-11	Un-textured GWB system (white joint compound and gypsum wallboard)	Walls in office space	Misc.	5	Layer 1: 2% CHR Layer 2: ND Less than 1% as a composite
8842.1-2306-12	1’x1’ white ceiling tile with pin dot pattern	Ceiling in office space	Misc.	6	ND
8842.1-2306-13	1’x1’ white ceiling tile with pin dot pattern	Ceiling in office space	Misc.	6	ND
8842.1-2306-14	**Brown mastic**	**Behind wall paneling in office space**	**Misc.**	**7**	**3% CHR**

Sample	Material	Location	AHERA Type	HM	Result
8842.1-2306-15	**Brown mastic**	**Behind wall paneling in office space**	**Misc.**	**7**	**3% CHR**
8842.1-2306-16	White caulking	Around exterior windows	Misc.	8	ND
8842.1-2306-17	White caulking	Around exterior windows	Misc.	8	ND
8842.1-2306-18	Dark grey caulking	Around exterior windows	Misc.	9	ND
8842.1-2306-19	Dark grey caulking	Around exterior windows	Misc.	9	ND
8842.1-2306-20	Red brick and white mortar	On front exterior of building	Misc.	10	ND
8842.1-2306-21	Red brick and white mortar	On front exterior of building	Misc.	10	ND
8842.1-2306-22	Off-white brick and mortar	Chimneys	Misc.	11	ND
8842.1-2306-23	Off-white brick and mortar	Chimneys	Misc.	11	ND
8842.1-2306-24	Black gasket	Around screws associated with the metal siding	Misc.	12	ND
8842.1-2306-25	Black gasket	Around screws associated with the metal siding	Misc.	12	ND
8842.1-2306-26	Black asphaltic mastic	Patch areas on roofing	Misc.	13	ND
8842.1-2306-27	Black asphaltic mastic	Patch areas on roofing	Misc.	13	ND
8842.1-2306-28	Torch down tar sheeting over wood board	Main roofing	Misc.	14	ND
8842.1-2306-29	Torch down tar sheeting over wood board	Main roofing	Misc.	14	ND

Sample	Material	Location	AHERA Type	HM	Result
8842.1-2306-30	Torch down sheeting over plywood	Shed	Misc.	15	ND
8842.1-2306-31	Torch down sheeting over plywood	Shed	Misc.	15	ND

HM= homogeneous material, Misc.= Miscellaneous, ND= non detected, TSI= Thermal System Insulation

Appendix D
SAT National Voluntary Laboratory Accreditation Program Certificate

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200768-0

Seattle Asbestos Test, LLC

Lynnwood, WA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2018-10-01 through 2019-09-30

Effective Dates

For the National Voluntary Laboratory Accreditation Program

Appendix E
Analytical Reports- Asbestos

SEATTLE ASBESTOS TEST

Lynnwood Laboratory: 19701 Scriber Lake Road, Suite 103, Lynnwood, WA 98036, Tel: 425.673.9850, Fax: 425.673.9810, NVLAP Lab Code: 200768-0

ANALYTICAL LABORATORY REPORT

PLM by Method EPA/600/R-93/116

Attn.: Anthony Fullerton
Client: Med-Tox, Northwest
Address: PO Box 1446, Auburn, WA 98071-1446
Job#: 8842.1
Batch#: 201911092
Date Received: 6/27/2019
Samples Rec'd: 31
Date Analyzed: 7/3/2019
Samples Analyzed: 31
Project Loc.: 2306 11th Street, Tacoma, WA

rev code: MPm924

Analyzed by: Yajun Gao

Reviewed by: SZhang Steve (Fanyao) Zhang, President

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-fibrous Components	%	Non-asbestos Fibers
1	8842.1-2306-01	1	Tan paper with black mastic		None detected	Filler, Asphalt/binder	68	Cellulose
		2	Yellow fibrous material		None detected	Filler, Glass beads	90	Glass fibers
2	8842.1-2306-02	1	Tan paper with black mastic		None detected	Filler, Asphalt/binder	70	Cellulose
		2	Yellow fibrous material		None detected	Filler, Glass beads	88	Glass fibers
3	8842.1-2306-03	1	Tan paper with black mastic		None detected	Filler, Asphalt/binder	66	Cellulose
		2	Yellow fibrous material		None detected	Filler, Glass beads	90	Glass fibers
4	8842.1-2306-04	1	Gray/tan/black woven fibrous material		None detected	Filler, Binder	88	Synthetic fibers
		2	White mastic with white woven plastic		None detected	Mastic/binder, Plastic	3	Cellulose
		3	Multi-colored woven fibrous material		None detected	Filler, Binder	85	Synthetic fibers
		4	Brown wood debris with black mastic		None detected	Wood debris, Asphalt/binder	7	Cellulose
5	8842.1-2306-05	1	Gray/tan/black woven fibrous material		None detected	Filler, Binder	85	Synthetic fibers
		2	White mastic with white woven plastic		None detected	Mastic/binder, Plastic	2	Cellulose
		3	Multi-colored woven fibrous material		None detected	Filler, Binder	86	Synthetic fibers
		4	Brown wood block with black mastic		None detected	Wood aggregates, Asphalt/binder	5	Cellulose
6	8842.1-2306-06	1	Black asphaltic material with fibrous material and trace paint		None detected	Asphalt/binder, Filler	25	Cellulose
7	8842.1-2306-07	1	Black asphaltic material with fibrous material and trace paint		None detected	Asphalt/binder, Filler	28	Cellulose
8	8842.1-2306-08	1	Black rubbery material		None detected	Rubber/binder	2	Cellulose
		2	Tan/black mastic with trace paint		None detected	Mastic/binder, Paint	3	Cellulose
9	8842.1-2306-09	1	Black rubbery material		None detected	Rubber/binder	2	Cellulose
		2	Tan/black mastic		None detected	Mastic/binder	2	Cellulose