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**DPW PROJECT 18908
DISTRICT #6 SALMON COMPLEX
IDAHO DEPARTMENT OF TRANSPORTATION (ITD)
SALMON, IDAHO**

**ASBESTOS-CONTAINING BUILDING MATERIAL AND LEAD PAINT
SURVEY AND ASSESSMENT REPORT**



OCTOBER 2017

AECOM



October 5, 2017

Mr. Josh Lewis
STATE OF IDAHO
Division of Public Works
502 N. 4th Street
P.O. Box 83720
Boise, Idaho 83720-0072

SUBJECT: DPW PROJECT #18908
DISTRICT #6 SALMON COMPLEX
IDAHO DEPARTMENT OF TRANSPORTATION (ITD)
SALMON, IDAHO

Dear Josh:

Enclosed are five hard copies (two for DPW and three for ITD) and one PDF copy (sent via email) of the Asbestos and Lead-Paint Survey Report for the ITD District #6 Salmon Complex, which is located on U.S. 93 north of Salmon, Idaho.

The District #6 Building 6141/addition, Buildings 6142, 6243 and 6144, and the fueling station storage tank compound are in good -to-fair condition. Regulated asbestos-containing drywall joint compound and residual amounts of 9-inch beige/green vinyl floor tile and black mastic were found within Building 6141.

No regulated asbestos-containing building materials (ACM) were found within Buildings 6142, 6143 and 6144 and the fueling station storage tank compound.

The composite samples of the yellow trim paint collected from Building 6141 contain lead at concentrations which exceed the Environmental Protection Agency (EPA)/U.S. Department of Housing and Urban Development (HUD) guideline of 0.5% by weight.

No additional lead-containing coatings (paint) were identified in the course of laboratory analysis of the remaining lead paint chip samples collected during the site inspection. The yellow trim lead-containing paint coating found on the exterior and interior of Buildings 6141 is in good-to-fair (stable) condition and can be managed in place.

If you should have any questions, please call me at 386-5854.

Sincerely,

Tim A. Bird
Asbestos Project Manager

Enclosure as Stated
cc: File 2547.18908.01

**ASBESTOS-CONTAINING BUILDING MATERIAL
AND LEAD PAINT
SURVEY AND ASSESSMENT REPORT**

**DPW PROJECT #18908
DISTRICT #6 SALMON COMPLEX
IDAHO DEPARTMENT OF TRANSPORTATION (ITD)
SALMON, IDAHO**

**PREPARED FOR:
STATE OF IDAHO
DIVISION OF PUBLIC WORKS
502 N. 4TH STREET
BOISE, IDAHO 83720**

PREPARED BY:



**756 East Winchester Street, Suite 400 •
Salt Lake City, UT 84107
3326.18908.01**

October 2017

ASBESTOS SURVEY AND ASBESTOS REPORT

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1.0 INTRODUCTION

1.1 Background and Scope

The Idaho Department of Transportation – District #6 Salmon Complex is located on U.S. 93 north of Salmon, Idaho. The following five (5) buildings were inspected for asbestos-containing materials and lead-based paint as part of this investigation:

- District #6 Building 6141/addition – primary building of interest, metal and wood frame and concrete construction.
- Brien Building 6142 – metal, wood/concrete construction.
- Bridge Storage Building 6143 – metal, wood/concrete construction.
- Salt shed Building 6144 – metal, wood/concrete construction.
- Fueling station storage tank compound – metal/concrete construction.

On September 19th, 2017, Tim Bird of AECOM – N&E Technical Services, LLC (AECOM) conducted an inspection and survey for asbestos-containing materials (ACM) within the buildings. This inspection and survey were conducted at the request of the Idaho Department of Public Works (DPW) represented by Josh Lewis, Asbestos Program Coordinator, and included inspection of the structure to facilitate future renovation.

AECOM was authorized to survey and collect samples of all accessible suspect building materials and components for the presence of asbestos, to verify condition, location, and quantity of ACM, and to make recommendations and provide estimates regarding the removal cost of ACM throughout the building.

In addition Mr. Lewis requested that AECOM collect a limited number of composite lead paint chip samples within the District #6 Salmon Complex and submit them for analysis as part of the asbestos survey. The lead paint sample analysis findings have been included as part of this report.

1.2 Summary of Findings

The District #6 Building 6141 is assumed to be originally constructed in the 1970's; it appears that the addition on the north side of Building 6141 was constructed at some later date. Buildings 6142, 6143 and 6144 and the fueling station storage tank compound were constructed at some date later than Building 6141.

Renovation has taken place within Building 6141 since the initial construction as evidenced by the addition located on the north side of building as well as new metal roofing and siding, 2'x4' ceiling tiles and 12-inch vinyl floor tile found in the structure. Building 6141 was occupied at the time of the survey, and is scheduled for renovation at some point in the future. Regulated asbestos-containing drywall joint compound and residual amounts of 9-inch beige/green vinyl floor tile and black mastic were found within Building 6141. **No** regulated asbestos-containing building materials (ACM) were found within Buildings 6142, 6143 and 6144 and the fueling station storage tank compound.

The composite paint and coating samples of the yellow trim paint contain lead at concentrations which exceed the Environmental Protection Agency (EPA)/U.S. Department of Housing and Urban Development (HUD) guideline of 0.5% by weight.

No additional lead-containing coatings (paint) were identified in the course of laboratory analysis of the remaining lead-paint-chip samples collected during the site inspection. The yellow trim lead-containing paint found on the exterior and interior of Building 6141 is in good-to-fair (stable) condition and can be managed in place.

1.2.1 Asbestos

The following non-friable drywall joint compound was found on interior walls and ceilings (3% Chrysotile) and residual amounts of non-friable beige/green 9-inch vinyl floor tiles (3% Chrysotile) were identified within Building 6141.

These materials were found to be in good-to-fair condition and can be managed in place. The non-friable asbestos-containing materials, if not managed properly, may become damaged (airborne), which poses a potential health threat to the building occupants and state employees.

Place the asbestos-containing materials in an operation and maintenance program and maintain in-place until the materials can be removed and disposed of properly. Control access to the materials, ensuring that the materials are not subjected to sanding, grinding, cutting, drilling, and/or abrading, until a competent abatement contractor can abate the asbestos-containing materials. Prior to demolishing the building, the asbestos-containing materials should be removed by a licensed and competent asbestos abatement contractor.

The following sampled materials were found not to contain regulated quantities of asbestos:

Building 6141/addition

- Rigid foam board foil covered insulation – found within the original section of Building 6141.
- Batt insulation – found within the attic and inside the exterior walls of addition.
- 2'x4' ceiling tiles – large office break room area.
- Beige 12-inch vinyl floor tile and mastic – found in the office areas, hallways and restroom.
- Brown vinyl cove base/mastic – found within the hallways.
- CMU block and mortar – exterior walls of the original section of the building.

All samples of suspect ACM presented in this report have been analyzed by Polarized Light Microscopy (PLM). If any of the samples taken of a homogeneous material location were positive for asbestos at greater than 1 percent (>1%), the material, in its entirety, was considered to contain asbestos.

Each sample listed within the report is identified by a unique alpha/numeric sample designation, such as ITD-6141-A-01. The first three letters and four numbers designate "ITD District #6 Building



6141", the "A" denotes a suspect asbestos material and the final two digits represent a sequential number of samples taken within that building. See Section 2.0, Survey Results, photographic documentation, description and location of all sampled materials.

As stated previously, prior to demolition of the building, the non-friable asbestos-containing materials need to be removed by a competent asbestos abatement contractor as required under NESHAP and per 29 CFR 1926.1101 OSHA Construction Standard. The ACM should be disposed of at a facility permitted under 40 CFR Subchapter I to accept asbestos waste.

The conclusions provided within this report are professional opinions based solely upon visual site observations and interpretations of analyses as previously described. The opinions presented herein apply to the site conditions existing at the time of our limited asbestos survey, and interpretation of current regulations pertaining to asbestos-containing materials. Therefore, these opinions and recommendations may not apply to future conditions that may exist at the site. All applicable federal, state and local regulations should always be verified prior to any work that may disturb suspected ACM.

1.2.2 Preliminary ACM Abatement Cost Estimates

The following preliminary cost information reflects cost estimates used throughout the industry, and is based on removal of all ACM within the building as a single abatement project, with the building unoccupied. The abatement costs are based on the State's standard PCM clearance requirements.

This is not a recommendation for removal, but a monetary budget guide in case removal, renovation, or demolition should be undertaken. Reinstallation and replacement cost estimates would have to be considered at the time of future abatement due to possible renovation.

Preliminary abatement cost estimates are:

<u>Material Description</u>	<u>Abatement cost</u>
• Drywall joint compound – Building 6141, approximately 7,000 SF	\$35,000.00
• Beige/green vinyl floor tile – Building 6141, approximately 2 SF	<u>\$500.00</u>
Total	\$35,500.00

1.2.3 Lead Coatings

As previously mentioned, the yellow trim paint-chip samples collected from the exterior and interior of Building 6141 were found to contain lead at concentrations above the EPA/HUD guidelines of 0.5% by weight.

The lead-containing yellow trim paint found within of Building 6141 is in good-to-fair condition (stable, <10% flaking or damage) and can be managed in place. Place the exterior paint in an operation and maintenance program and maintain in-place until the material can be removed and disposed of properly.

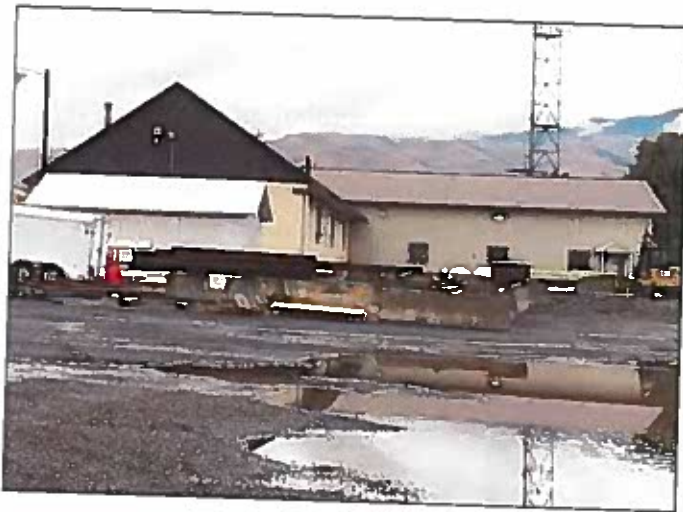
The yellow trim paint found on the exterior and within the interior of Building 6141 was found to be good condition and contain lead at concentrations below the EPA/HUD guideline of 0.5% by weight. However, the painted interior building components should be handled appropriately.

All samples of suspect lead paint presented in this report have been analyzed by flame AAS (ASTM D3335-85A) "Standard Method to Test for Low Concentrations of Lead in Paint by Atomic Absorption Spectrophotometry." If any of the samples taken of a coating material were positive for lead at greater than the regulatory limit of 0.5 percent (0.5% by weight EPA/HUD guidelines), the material in its entirety was considered to be lead-containing paint.

Each sample listed within the report is identified by a unique alpha/numeric sample designation, such as ITD-6141-L-01. The first three letters and four numbers designate "ITD District #6 Building 6141," the "L" denotes a suspect lead coating, and the final two digits represent a sequential number of samples taken within the building. See Section 2.0, Survey Results, for a complete description and location of all sampled materials and photographic documentation.

2.0 SURVEY RESULTS

2.1 Photo Log of the Buildings, Materials & Conditions Observed During the Site Inspection



1. View of the addition attached to the rear of Building 6141. No ACM was observed within the rear addition of the building.

2. View of the salt storage shed Building 6144 and the fueling station located on the south east side of the Building 6141. No suspect ACM was observed within these structures.





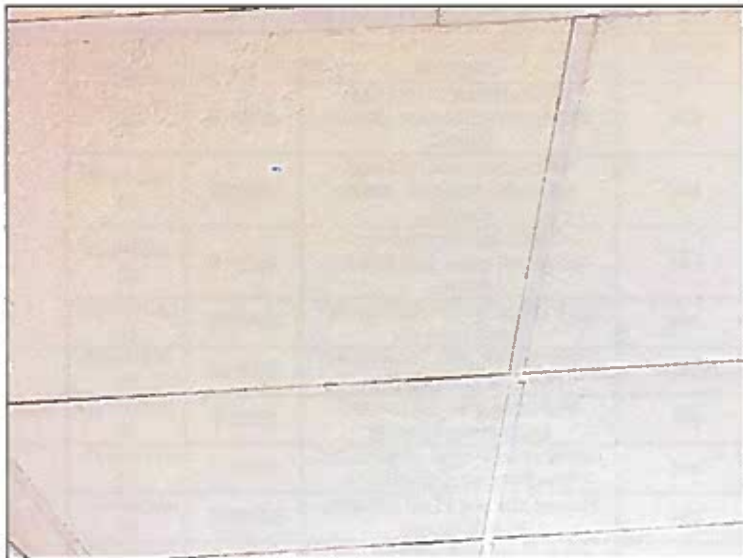
3. **View of the brine storage Building 6142 compound located on the north east side of the Building 6141. No suspect ACM was observed within this structure.**

4. **View of the bridge department storage Building 6143 compound located on the east side of the Building 6141. No suspect ACM was observed within this structure.**



5. **View of the interior of Building 6141 shop area within the original section of the building. The sheetrock ceiling within this area contains asbestos drywall joint compound.**

6. **View of the non-asbestos rigid foam board foil covered insulation and batt insulation found within walls of the loft area new shop; this material is similar to that found in the addition to Building 6141.**



7. **View of the non-asbestos 2'x4' ceiling tiles found within the large office and break room of 6141.**

Drywall with asbestos-containing joint compound was found above the ceiling tiles.

8. **View of the non-asbestos beige 12-inch vinyl floor tile found within the large office space, restroom and hallways in the original section of Building 6141.**



2.2 Laboratory Report, Chain of Custody

2.2.1 Asbestos/AHERA Inspector Certificate



PAGE 8 OF 2
DATE SEPTEMBER 25, 2017
rpt0540

Environmental Services Geotechnical Engineering Construction Materials Testing Special Inspections

JOSH LEWIS
STATE OF IDAHO DPW
502 N. 4TH ST.
BOISE, ID 83702

MTI FILE #: B170007c

Project: ITD District #6 Salmon Complex Date Received: 9/25/2017
P.O. Number: DPW #18908 Date Reported: 9/25/2017

ASBESTOS BULK SAMPLE ANALYSIS REPORT

Sample Number	Lab Number	Sample Type, Location, and Description	Asbestos Fibers	Non-Asbestos Fibers	Non-Fibrous Materials	Comments
ITD-6141-A-01	B148180	Rigid foam board insulation foil covered, original Bldg.-yellow/silver compact	NAD		100% Other	
ITD-6141-A-02	B148181	Rigid foam board insulation foil covered, shop walls-yellow/silver compact	NAD		100% Other	
ITD-6141-A-03	B148182	Rigid foam board insulation foil covered, shop ceiling-yellow/silver compact	NAD		100% Other	
ITD-6141-A-04	B148183	Batt insulation, walls of original Bldg.-pink loose fibrous	NAD	100% Glass		
ITD-6141-A-05	B148184	Batt insulation, walls between shop & loft-pink loose fibrous	NAD	100% Glass		
ITD-6141-A-06	B148185	Batt insulation, at damage metal siding-pink loose fibrous	NAD	100% Glass		
ITD-6141-A-07	B148186	2x4 ceiling tile, large office/breakroom area-tan semi compact fibrous	NAD	90% Cellulose	10% Other	
ITD-6141-A-08	B148187	2x4 ceiling tile, by heat vent-tan semi compact fibrous	NAD	90% Cellulose	10% Other	
ITD-6141-A-09	B148188	2x4 ceiling tile, along west wall-tan semi compact fibrous	NAD	90% Cellulose	10% Other	
ITD-6141-A-10	B148189	Drywall/joint compound, ceilings & walls various areas-white semi compact powdery with fibers	3% Chrysotile in joint compound	15% Cellulose	85% Other	
ITD-6141-A-11	B148190	Drywall/joint compound, front office-white semi compact powdery with fibers	3% Chrysotile in joint compound	15% Cellulose	85% Other	
ITD-6141-A-12	B148191	Drywall/joint compound, hallway-white semi compact powdery with fibers	3% Chrysotile in joint compound	15% Cellulose	85% Other	
ITD-6141-A-13	B148192	Beige 12-inch floor tile with yellow and black mastic-hard compact granular	NAD		2% Mastic 98% Other	
ITD-6141-A-14	B148193	Beige 12-inch floor tile with yellow and black mastic, large office area-hard compact granular	NAD		2% Mastic 98% Other	
ITD-6141-A-15	B148194	Beige 12-inch floor tile with yellow and black mastic, hallway-hard compact granular	NAD		2% Mastic 98% Other	

"Assuring the Strength, Safety, and Security of Your Future"

2791 S. Victory View Way, Boise ID 83709 208 376-4748 Fax 208 322-6515
E-Mail mti@mti-id.com www.mti-id.com



**MATERIALS
TESTING &
INSPECTION**

- Environmental Services Geotechnical Engineering Construction Materials Testing Special Inspections

Sample Number	Lab Number	Sample Type, Location, and Description	Asbestos Fibers	Non-Asbestos Fibers	Non-Fibrous Materials	Comments
ITD-6141-A-16	B148195	Beige/green 9-inch floor tile with black mastic-hard compact granular with fibers	3% Chrysotile in tile		2% Mastic 98% Other	Black mastic NAD
ITD-6141-A-17	B148196	Beige/green 9-inch floor tile with black mastic, exposed in hallway-hard compact granular with fibers	3% Chrysotile in tile		2% Mastic 98% Other	Black mastic NAD
ITD-6141-A-18	B148197	Green 9-inch floor tile with black mastic, presumed concealed beneath some walls-hard compact granular with fibers	3% Chrysotile in tile		2% Mastic 98% Other	Black mastic NAD
ITD-6141-A-19	B148198	Brown vinyl cove base/mastic-compact resilient	NAD		2% Mastic 98% Other	
ITD-6141-A-20	B148199	Brown vinyl cove base/mastic, hallway-compact resilient	NAD		2% Mastic 98% Other	
ITD-6141-A-21	B148200	Brown vinyl cove base/mastic, restroom-compact resilient	NAD		2% Mastic 98% Other	
ITD-6141-A-22	B148201	CMU block/mortar exterior walls of original building-grey cementitious granular	NAD		100% Other	
ITD-6141-A-23	B148202	CMU block/mortar exterior walls of original building, beneath metal siding-grey cementitious granular	NAD		100% Other	
ITD-6141-A-24	B148203	CMU block/mortar wall between original building on newer mechanic's shop-grey cementitious granular	NAD		100% Other	

Sample component percentages may not total 100% for multi-layered samples

Glossary of Acronyms

NAD - No Asbestos Detected
PP-NAR - Presume Positive-No Analysis Required
AFC - Asbestos Found As Contaminant

TRACE - Detectable but not quantifiable
IS - Insufficient Sample -percentages may be inaccurate

Sampled by: Tim A. Bird

Analyzed by: Laurie Kuther
Chief Microscopist

Reviewed by: Will DuBois
Microscopist

Sample components are identified using polarized light microscopy (PLM) coupled with dispersion staining methods as determined by visual estimation. Small asbestos fibers may not be detected by PLM due to the resolution limitations of the optical microscope. Detecting asbestos in non-friable organically bound materials is not consistently reliable using PLM analysis. This test report relates only to the items tested in the sample as submitted to the laboratory.

Analysis method: Polarized Light Microscopy (PLM) by EPA/600/R-93/116 with Central Stop Dispersion by NIOSH 9002
American Industrial Hygiene Association (AIHA) Performance Analytical Testing (PAT) Laboratory Number 101571

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2791 S. Victory View Way, Boise ID 83709 208 376-4748 Fax 208 322-6515
E-Mail mti@mti-id.com www.mti-id.com



AECOM - N&E Technical Services, LLC
 788 East Winchester Street, Suite 400
 Salt Lake City, UT 84107

Contact Person: Tim A. Bird W.C. # 3326-18908
 Project Name: ITD District #6 Salmon Complex

Analysis Type: PEL PCM TEM LEAD AIR BULK I/OA I/OA-OC (SPLIT) Other
 Turnaround Time: Rush 24 Hour Standard Requested Hard Copy E-mail
 Sample Status: Return to client Archive Sample for One Year

INVOICE TO:
 Company Name: State of Idaho DPW
 Address: 502 N. 4th Street
 City/State/Zip: Boise, ID 83720
 Phone #: (208) 332-1908
 Contact Person: Josh Lewis
 Project/PO #: DPW # 18908

Special Notes: Standard Turn
Please email report/doc to
tim.bird@aecom.com
Thank you!
Tim

Lab #	Client Sample #	Date	Sample Type	Sample Description	Type Pump#	Time Started	Time Ended	Total Minutes	Flow Rate LPM	Volume (Liters)	Analyst	Fibers/Fields	F/mm	F/cc
1	ITD-6141-A-01	9/19/17	Bulk	Rigid foamboard insulation foil covered, original Bldg										
2	ITD-6141-A-02			" " Shop walls										
3	ITD-6141-A-03			" " Shop Ceiling										
4	ITD-6141-A-04			Batt insulation walls of org. Bldg										
5	ITD-6141-A-05			" " Wall between Shop & Loft										
6	ITD-6141-A-06			" " at damage Metal Siding										
7	ITD-6141-A-07			2'x4' Ceiling Tile Large Office/Break Room Area										
8	ITD-6141-A-08			" " by heat vent										
9	ITD-6141-A-09			" " along west wall										
10														

BI70007e 1770546

TYPE P - Standard EL - Escalator Limit, PA - Pre-Abatement, C - Clearance, IWA - Inside Work Area, OWA - Outside Work Area, NAA - Negative Air Machine Exhaust, HF - High Flow, LF - Low Flow
 Relinquished by (Date/Time): 9/21/17 11:30 AM
 Relinquished by (Date/Time): 9-21-17
 Received by (Date/Time): 9/21/17
 Received by (Date/Time): 10/3



AECOM - N&E Technical Services, LLC
758 East Winchester Street, Suite 400
Salt Lake City, UT 84107

ASBESTOS/LEAD CHAIN OF CUSTODY/
SAMPLE TRANSMITTAL FORM

INVOICE TO:
Company Name: State of Idaho DPW
Address: 502 4th Street
City/State/Zip: Boise ID 83720
Phone#: (208) 332-1908
Contact Person: Josh Lewis
Project/PO #: DPW#18908

No.

Special Notes: Standard Turn
Please email report for to
tim.a.bird@aecom.com
Thank you!
Tim

Contact Person: Tim Bird W.O. # 3326-18908
Project Name: ITD District #6 Salmon Complex

Analysis Type: PCM IEM LEAD AIR BULK AA TCLP CA OC (SPLIT) Other
Turnaround Time: 24 Hour Standard Requested Field Copy e-mail
Sample Status: Return to client Negative Sample for One Year

Calibration Method: Tim Bird

Lab #	Client Sample #	Date	Sample Type	Sample Description	Type Pump#	Time Started	Time Ended	Total Minutes	Flow Rate LPIM	Volume (Liters)	Analyst	Fibers/Fields	F/mm	F/cc
1	ITD-6141-A-10	9/19/17	Bulk	Drywall / Joint + Compound Ceilings # walls various areas										
2	ITD-6141-A-11			" "										
3	ITD-6141-A-12			Front Office										
4	ITD-6141-A-13			Hallway										
5	ITD-6141-A-14			12-inch Vinyl Floor Tile (Beige) / Yellow Black Mastic										
6	ITD-6141-A-15			Large Office area										
7	ITD-6141-A-16			Hallway										
8	ITD-6141-A-17			9-inch Vinyl Floor Tile (Beige or darker) with Black Mastic										
9	ITD-6141-A-18			Exposed in Hallway										
10				Presumed Concealed beneath some wall										

Received by (Date/Time): 9-21-17 11:30 AM
Received by (Date/Time): 9-21-17 11:30 AM
Received by (Date/Time): 9-21-17 11:30 AM

**ASBESTOS/LEAD CHAIN OF CUSTODY/
SAMPLE TRANSMITTAL FORM**

INVOICE TO:
 Company Name: State of Idaho DPW
 Address: 502 N. 4th Street
 City/State/Zip: Boise, ID 83720
 Phone #: (208) 332-1908
 Contact Person: Josh Lewis
 Project/PO #: DPW#18908

AECOM AECOM - N&E Technical Services, LLC
 756 East Winchester Street, Suite 400
 Salt Lake City, UT 84107

Contact Person: TIM BIRD WO. # 3326-18908
 Project Name: ITD District #6 Salmon Complex
 Analysis Type: P/LM PCM TEM LEAD AIR TCLP AA DA-OC (SPLIT) Other:
 Turnaround Time: 24 Hour Standard Requested Expedited Copy E-mail
 Sample Status: Return to client Archive Sample for One Year

No. _____
 Special Notes: Standard Turn
Please email report/Doc to
tim.bird@accom.com
Thank You!
Tim

Samples Collected by: Tim Bird Calibration Method: _____

Lab #	Client Sample #	Date	Sample Type	Sample Description	Type Pump#	Time Started	Time Ended	Total Minutes	Flow Rate LPM	Volume (Liters)	Analyst	Fibers/Fields	F/mm	F/cc
1	ITD-6141-A-19	9/19/17	Bulk	Brown Vinyl Cove Base/Mastic										
2	ITD-6141-A-20			Hallway "										
3	ITD-6141-A-21			Rest Room										
4	ITD-6141-A-22			CMU Block/Mortar Exterior Walls of original Building										
5	ITD-6141-A-23			Leasehold Metal/Siding										
6	ITD-6141-A-24			Wall between Org Bldg. on Newer Meekanic's Shop										
7														
8														
9														
10														

Received by (Date/Time): 9/21/17 11:30 AM
 Relinquished by (Date/Time): _____
 OWA = Outside Work Area, NAA3 = Negative Air Machine Exhaust, HF = High Flow, LF = Low Flow

3083



Protecting Your Workers

Certificate of Completion

Tim A. Bird

Has attended and successfully completed the
Asbestos Building Inspector

AHERA 4 Hours Refresher Training Course

In accordance with Title II of TSCA

40 CFR Part 763, Appendix C to Subpart E

Consistent with Utah Administrative Rule R307-801: Asbestos

Course Date: 1/27/2017

Certificate Number: 5620-02

Expiration Date: 1/27/2018

Steve Mabe

Instructor: Steve Mabe

Industrial Hygiene Resources – 8312 W. Northview, Suite 100 – Boise, Idaho 83704
Tel: (208) 323-8278 Fax: (208) 323-0783

2.2.2 Lead Paint



9000 Commerce Parkway Suite B
 Mt. Laurel, New Jersey 08054
 Telephone: 856-231-9449
 Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: Idaho Division Of Public Works 502 N. 4th St, PO Box 83720 Boise ID 83720-0072	Report Date: Report No.: 547025 - Lead Paint Project: ITD District #6 Salmon Complex Project No.: DPW# 189089
Client: IDA118	

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 6348199 Client No.: ITD-6141-L-01	Description: Bright Yellow Trim Paint Over Metal Location: Exterior/Interior Bldg #6141, 9/19/17	Result (% by Weight): 3.9 Result (ppm): 39000 Comments: ***
Lab No.: 6348200 Client No.: ITD-6141-L-02	Description: Bright Yellow Paint Over CMU Block Location: Interior Bldg #6141, 9/19/17	Result (% by Weight): 0.0063 Result (ppm): 63 Comments:
Lab No.: 6348201 Client No.: ITD-6141-L-03	Description: Dark Brown Paint Entry Doors Frames Location: Interior Bldg #6141, 9/19/17	Result (% by Weight): <0.0064 Result (ppm): <64 Comments:
Lab No.: 6348202 Client No.: ITD-6141-L-04	Description: Off-White Paint Walls And Ceilings Location: Interior Bldg #6141, 9/19/17	Result (% by Weight): 0.019 Result (ppm): 190 Comments:

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/21/2017
Date Analyzed: 09/26/2017
Signature:
Analyst: Chad Shaffer

Approved By:
 Frank E. Ehrenfeld, III
 Laboratory Director

Dated: 9/26/2017 4:37:15 PM

Page 1 of 2

Chain of Custody

- Environmental Lead -

Contact Information	
Client Company: <u>State of Idaho DPW</u>	Project Number: <u>DPW# 18908</u>
Office Address: <u>502 N. 4th Street, P.O. Box 83720</u>	Project Name: <u>ITD District#6 Salmon Complex</u>
City, State, Zip: <u>Boise, ID 83720-0072</u>	Primary Contact: <u>Josh Lewis</u>
Fax Number: <u>(208) 334-4031</u>	Office Phone: <u>(208) 332-1908 (Josh Lewis)</u>
Email Address: <u>tim.a.bird@aecom.com (Tim Bird)</u>	Cell Phone: <u>(208) 890-5082 (Tim Bird, AECOM)</u>

iATL is accredited by the National Lead Laboratory Accreditation Program (NLLAP) to perform analytical testing of environmental samples for lead (Pb). The accreditation is through AIHA-LAP, LLC and several other nationally recognized state programs.

Matrix/Method:

- Paint by AAS: ASTM D3335-85a, 2009
- Wipe/Dust by AAS: SW 846: 3050B: 700B, 2010
- Air by AAS: NIOSH 7082, 1994
- Soil by AAS: EPA SW 846 (Soil)
- Water by AAS-GF: ASTM D3559-03D, USEPA 40CFR 141.11B, 2010
- Other Metals (Cd, Zn, Cr) by AAS
- Toxicity Characteristic Leaching Procedure (TCLP) by AAS: USEPA 1311
- Other _____

Special Instructions:
Please Email results to tim.a.bird@aecom.com

Turnaround Time

Preliminary Results Requested Date: September 25th, 2017

Verbal Email Fax

Specific date / time

10 Day 5 Day 3 Day 2 Day 1 Day* 12 Hour** 6 Hour** RUSH**

* End of next business day unless otherwise specified. ** Matrix Dependent. ***Please notify the lab before shipping***

Chain of Custody

Relinquished (Name/Organization): <u>Tim A. Bird, AECOM</u>	Date: <u>9-20-17</u>	Time: <u>1630 hours</u>
Received (Name / iATL): _____	Date: _____	Time: _____
Sample Login (Name / iATL): _____	Date: _____	Time: _____
Analysis(Name(s) / iATL): <u>54/2017</u>	Date: _____	Time: _____
QA/QC Review (Name / iATL): <u>9/20/17</u>	Date: _____	Time: _____
Archived / Released: _____	Date: _____	Time: _____
QA/QC InterLAB Use: _____	Date: _____	Time: _____



9000 Commerce Parkway, Suite B • Mount Laurel, NJ 08054
 Phone: 877-428-4285/856-231-9449 • Fax: 856-231-9818

Sample Log

-Environmental Lead -

Client: State of Idaho DPW Project: ITD District #6 Salmon Complex

Sampling Date/Time: September 19th, 2017

Client Sample #	iATL #	Location/Description	Flow Rate	Start End	Sampling time (min)	Area (ft2) Volume (L)	Results ()
ITD-6141-L-01	6348199	Exterior/interior bldg. #6141 bright yellow trim paint over metal				2 sq-inches	
ITD-6141-L-02	6348200	Exterior bldg. #6141 pale yellow/beige paint over CMU block				1 sq-inch	
ITD-6141-L-03	6348201	Interior bldg. #6141 dark brown paint entry doors and door frames				1 sq-inch	
ITD-6141-L-04	6348202	Interior bldg. #6141 off-white paint walls and ceilings				1 sq-inch	

* = Insufficient Sample Provided to Perform QC Reanalysis (<200mg)
 ** = Insufficient Sample Provided to Analyze (<50mg) *** = Matrix / Substrate Interference Possible
 FB = Method Requires the submittal of blanks). ML = Multi Layered Sample. May result in inconsistent results.
 These preliminary results are issued by iATL to expedite procedures by clients based upon the above data. iATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed COA is to be considered the official results. All EPA, HUD, and NJDEP conditions apply.

3.0 SURVEY METHODOLOGY, REGULATIONS AND RECOMMENDATIONS

3.1 Survey Methodology

To gather the greatest quantity of information in the time available, several investigative techniques were utilized. These included interviews with building maintenance personnel, a visual inspection and assessment of the building, sampling of suspect materials, and quantification of all confirmed asbestos-containing materials.

The inspector obtained and submitted for Polarized Light Microscopy (PLM) analysis multiple bulk samples of all accessible materials suspected of containing asbestos. All bulk samples were collected in accordance with EPA and OSHA guidelines. Samples were taken at various locations representative of homogeneous materials identified throughout each segment of the building.

Materials Testing & Inspection (MTI) in Boise, Idaho was the laboratory retained by DPW for PLM bulk sample analysis of samples collected during the inspection. The laboratory is AIHA (American Industrial Hygiene Association) accredited and is a successful participant in AIHA PAT Round Robin Program (Laboratory No. 101571) for quality assurance in proficiency of bulk asbestos identification.

Lead paint chip samples were collected and analyzed in accordance with EPA and OSHA guidelines. Samples were taken at various locations representative of coatings and conditions identified throughout each segment of the building.

All lead paint samples collected during the inspection were submitted to International Asbestos Testing Laboratory (IATL) in Laurel, New Jersey for analysis. The laboratory is accredited and is a successful participant in the NLLAP (National Lead Laboratory Accreditation Program) NYSDOH – ELAP No. 11021.

Samples were randomly chosen to be representative of each homogenous material. However, AECOM makes no representation, warranty, nor guarantee that the analytical results reported by the laboratory are representative of those conditions existing throughout the homogeneous area, or that material other than or in different proportions to those indicated may exist.

Additionally, all AECOM Professional Engineer and Certified Hazardous Materials Manager reviews of this document are limited to the project information and data presented in this report; therefore, no representation, warranty, or guarantee is implied or expressed of the site conditions from the AECOM Certified Hazardous Materials Manager or Professional Engineer reviews.

3.2 Regulations

Building owners are governed by a variety of federal, state, and local regulations, which influence the way they must deal with ACM and/or lead in their facilities. Some of these regulations, particularly at the state and local level, change frequently. Building owners should contact their state and local government agencies, in addition to organizations such as the National Conference of State Legislatures (NCSL), the National Institute of Building Sciences (NIBS), or EPA environmental assistance centers for updated information on these requirements.

EPA and OSHA regulations require that employers address a number of items when employees may be exposed to asbestos fibers that could be generated during maintenance, removal, renovation, or demolition activities. These regulations are discussed briefly:

- EPA amended the worker protection rule (WPR at 40 CFR Part 763) on August 15, 2000 to adopt OSHA's standard to protect the health of all local and state government employees from the harmful effects of asbestos. The amended EPA worker protection rule extends coverage to all construction projects involving both friable and non-friable asbestos. EPA also expanded the scope of the WPR to all custodial operations that involve activities as basic as sweeping a floor or dusting a table.
- EPA NESHAP (40 CFR 61, November 20, 1990, Final Rule) promulgates emissions standards and reporting criteria for fugitive emissions of asbestos fibers. Additionally, it governs demolition and renovation projects in all facilities with notification requirements to EPA whether regulated quantities of ACM have been found or not.
- The NESHAP rule requires that owners conduct an asbestos inspection prior to demolition/renovation and have all friable regulated asbestos-containing materials (RACM) removed before demolition work begins. For renovation projects where RACM will be disturbed, the NESHAP rule may require appropriate work practices or procedures for the control of asbestos emissions. Any RACM (friable or non-friable which may become friable) poses a potential hazard that should be addressed.
- OSHA has specific requirements concerning worker protection and procedures. These include 29 CFR 1910.1001, General Industry, 29 CFR 1915.1001, Shipyard Industry, and 29 CFR 1926.1101, Construction Industry (asbestos) Standard.
- OSHA amended the General Industry Standard for asbestos (1910.1001). The previous existing asbestos standard for construction, 1926.58, was replaced with 1926.1101. A new standard, 1915.1001, was created for the shipyard industry. Analytical methods used by the OSHA laboratory were added as appendices. The Permissible Exposure Limit (PEL) was reduced by half to 0.1 f/cc TWA. OSHA presumes certain materials in pre-1981 buildings asbestos-containing materials (PACM) until sample verification of the materials asbestos content is made by an AHERA accredited building inspector.
- Public sector employees, such as city, county and/or state government employees and certain school and university employees, who are not already subject to a state OSHA plan, are covered by the EPA Worker Protection Rule (Federal Register: February 25, 1987; 40 CFR 763 Subpart G, Asbestos Abatement Projects; Worker Protection, Final Rule).

3.3 EPA and OSHA Recommendations for ACM and Lead-Based Paint O&M Plans

Generally, the EPA and OSHA recommend that ACM, PACM and lead-based paint (coatings) be managed in place and that an O&M plan be developed considering the following items:

- ACM is defined as any material, which contains greater than 1 percent asbestos (>1%). This means that any material, which contains 1% or less asbestos, is considered a non-regulated ACM.

- All non-friable materials which are positive for asbestos (>1%) which may be subjected to sanding, grinding, cutting, drilling, and/or abrading are categorized by EPA under NESHAP as either Category I or Category II non-friable RACM.
- Lead-based paint is identified as paint containing 0.5% lead by weight under EPA/HUD Guidelines. However, OSHA has no such limits and regulates work exposure based on airborne concentration of lead within the work space and/or by the type of work or activity that may expose the worker above the action level or permissible exposure limit (PEL).
- EPA and OSHA recommend that a proactive, in place asbestos and/or lead-based paint operations and maintenance (O&M) program be implemented whenever ACM and/or lead-containing paint is discovered. In order to prevent significant public exposure to airborne asbestos fibers, EPA requires that building owners remove ACM and/or lead-based paint prior to building demolition or building renovation in which the existing conditions of the ACM and/or lead-based paint may pose an imminent threat to public health.
- An EPA accredited asbestos management planner and/or competent person should be utilized when developing an O&M program.
- EPA and OSHA recommend that building owners make available all written elements of the O&M program to the building O&M staff, as well as to tenants and other building occupants. Facility owners are also encouraged to consult with legal counsel concerning appropriate record keeping strategies as a standard part of their O&M programs.
- Building owners should inform maintenance workers, occupants, and tenants about the location and physical condition of the ACM, PACM and/or lead-based paint that they might disturb, and stress the need to avoid disturbing the material. Occupants should be notified for two reasons: (1) building occupants should be informed of any potential hazard in their vicinity; (2) informed persons are less likely to disturb the material and cause fibers and/or lead to be released.
- Facility owners should control access to the areas where the materials are located, mark materials with appropriate warning labels where applicable, and repair damaged materials as soon as possible (OSHA, 29 CFR 1910.1001 (j) Communication of Hazards to Employees).

3.4 AECOM Recommendations – Permits and Notifications

Non-friable drywall joint compound was found on the interior walls and ceilings in various locations within the original section of Building 6141. In addition to the joint compound, residual amounts of asbestos-containing non-friable 9-inch beige/green vinyl floor tile with black mastic was found within the restroom hallway and is assumed to be concealed beneath some of the office wall partitions within the building.

These asbestos-containing materials were found to be in good-to-fair condition and can be managed in place. The non-friable asbestos-containing materials, if not managed properly, may become damaged (airborne), which poses a potential health threat to the building occupants and

state employees. Place the asbestos-containing materials within an operation and maintenance program and maintain in-place until the material can be removed and disposed of properly.

The lead-containing yellow trim paint found on the exterior and interior of Building 6141 is in good to fair condition (stable, <10% damage) and can be managed in place. Place the lead-containing paint found on the exterior and interior of Building 6141 in an operation and maintenance program and maintained in-place until the material can be removed and disposed of properly.

Control access to the non-friable asbestos-containing materials and Category I or Category II friable and non-friable RACM throughout the building insuring that the asbestos containing materials are not disturbed and are not subjected to sanding, grinding, cutting, drilling, and/or abrading.

AECOM makes the following general recommendations for the asbestos-containing materials and lead-containing paints identified by the survey:

Control access to the asbestos-containing materials and lead-containing paint throughout building, ensuring that the materials are not disturbed and are not subjected to sanding, grinding, cutting, drilling, and/or abrading.

Develop a plan for managing in place and controlling access to, disturbance of, and/or damage to the asbestos-containing materials and lead-containing paint identified within the building.

Routinely alert all state employees, applicable visitors, and outside contractor personnel of the presence of asbestos-containing materials and lead-containing paint or coating within the building and/or work areas.

At the time of removal or demolition, implement an asbestos abatement program as required under NESHAP. An asbestos abatement procedure should be developed that will ensure worker protection per 29 CFR 1926.1101 OSHA construction standard and in compliance with EPA regulations regarding friable ACM and Category I and Category II non-friable RACM that may be subjected to sanding, grinding, cutting, drilling, or abrading.

Prior to removal or demolition, implement a lead paint awareness program as required under OSHA. A lead hazard awareness and handling procedure should be developed that will ensure worker protection per 29 CFR 1926.62 (lead) OSHA construction standard and in compliance with EPA regulations regarding lead-containing materials that may be subjected to sanding, grinding, cutting, drilling, or abrading..

3.4.1 Permits and Notifications

Prior to demolition of the structure the Contractor will need to provide proof satisfactory to the Owner or his Representative that all necessary permits have been secured in conjunction with demolition of the structure and provide timely notification of such actions, as may be required by federal, state, regional, and local authorities. Send written notification to the Regional Office of the United States Environmental Protection Agency (EPA), as required by 40 CFR Part 61, Subpart M (NESHAPS), 10 working days prior to commencement of the work.