



September 7, 2018

Brian Avarello, P.E.
Project Manager
HDR, Inc.
1100 Superior Avenue, Suite 650
Cleveland, Ohio 44114-2518
216-912-4240

Subject: Asbestos Survey of the POR 00014 12960 Bridge (SFN #6700691/ PID 105860) State Route 14 over State Route 5 and State Route 44 in Portage County, Ohio (L&A 18-0347)

Dear Mr. Avarello

On August 14, 2018, Mr. Matt Geiger, Ohio Department of Health (ODH) Certified Asbestos Hazard Evaluation Specialist (AHES OH #35832) and Mr. Matt Kobs ODH Certified Asbestos Hazard Evaluation Specialist (AHES OH #36110) of Lawhon & Associates, Inc. (L&A) conducted an asbestos survey of the POR 00014 12960 Bridge (SFN #6700691/ PID 105860) State Route 14 over State Route 5 and State Route 44 in Portage County, Ohio. The purpose of the survey was to determine the presence of asbestos-containing materials (ACM) located on the structure.

The survey consisted of an inspection of all accessible areas of the bridge to determine the presence, location and quantities of asbestos-containing materials. Bulk samples were collected from suspect materials that could potentially be impacted during demolition/renovation work activities. All sample locations were determined at random. L&A reviewed all available bridge plans for this bridge and no mention of ACM was noted.

Suspect Materials

The materials suspected of being asbestos-containing identified during the survey are presented in Table 1 along with an indication of their friability. A bulk sample location diagram can be found in Appendix C.

Table 1: Suspected Materials

Table with 3 columns: Material, Locations, and Friability. It lists various materials like Road Tar / Sealant, Parapet Wall Expansion Joint, Reflector Caulk Type 1-3, Gas Line Pipe Wrap, Tan Surfacing Paint, Blue/White Paint, and Transite Pipe, along with their locations and friability status.

Sample Descriptions, Locations and Results

Sample descriptions, locations, and asbestos content as determined by Polarized Light Microscopy (PLM) are presented in Table 2.

Table 2: Sample Descriptions, Locations and Results

Sample #	Sample Description and Location	Asbestos %
1	Road Tar / Sealant – East Side, South End	No Asbestos Detected
2	Road Tar / Sealant – East Side, Middle	No Asbestos Detected
3	Road Tar / Sealant – West Side, North End	No Asbestos Detected
4	Parapet Wall Expansion Joint – East Side, South End	No Asbestos Detected
5	Parapet Wall Expansion Joint – East Side, Middle	No Asbestos Detected
6	Parapet Wall Expansion Joint – West Side, North End	No Asbestos Detected
7	Reflector Caulk Type 1 – East Side, South End	No Asbestos Detected
8	Reflector Caulk Type 1 – East Side, Middle	No Asbestos Detected
9	Reflector Caulk Type 1 – East Side, North End	No Asbestos Detected
10	Reflector Caulk Type 2 – East Side, South End	No Asbestos Detected
11	Reflector Caulk Type 2 – East Side, Middle	No Asbestos Detected
12	Reflector Caulk Type 2 – East Side, North End	No Asbestos Detected
13	Reflector Caulk Type 3 – East Side, South End	No Asbestos Detected
14	Reflector Caulk Type 3 – East Side, Middle	No Asbestos Detected
15	Reflector Caulk Type 3 – East Side, North End	No Asbestos Detected
16	Gas Line Pipe Wrap – Below Deck, East Side	No Asbestos Detected
17	Gas Line Pipe Wrap – Below Deck, East Side	No Asbestos Detected
18	Gas Line Pipe Wrap – Below Deck, East Side	No Asbestos Detected
19	Tan Surfacing Paint – Above Deck, East Side	No Asbestos Detected
20	Tan Surfacing Paint – Above Deck, East Side	No Asbestos Detected
21	Tan Surfacing Paint – Below Deck, West Side North End	No Asbestos Detected
22	Blue/White Paint – Below Deck, West End	No Asbestos Detected
23	Blue/White Paint – Below Deck, West End	No Asbestos Detected
24	Blue/White Paint – Below Deck, Middle	No Asbestos Detected
25	Transite Pipe – Below Deck, East End	25% Chrysotile 5.0 Crocidolite% (PC)

Materials Identified as Asbestos-Containing

Under the current EPA/NESHAP regulations, materials that contain greater than 1% asbestos are considered to be an asbestos-containing material (ACM). Six lines of pipe located below the deck on the East side of the bridge were found to be Asbestos Containing Material as defined by U.S. EPA/NESHAP regulations.

Any contractors disturbing this material must adhere to OSHA 29 CFR 1910 and 29 CFR 1926. The transite pipes encompass a total of 1,540 linear feet or 2,420 square feet on the East side of the bridge.

Attachments

Appendix A contains the laboratory results and chain-of-custody documentation for the bulk asbestos samples collected.

Appendix B contains the Ohio Department of Health certifications for Mr. Matt Geiger and Mr. Matt Kobs.

Appendix C contains the Bulk Sample Location Diagram.

Appendix D contains the Ohio Environmental Protection Agency Notification of Demolition and Renovation.

Summary

On August 14, 2018, Mr. Matt Geiger, Ohio Department of Health (ODH) Certified Asbestos Hazard Evaluation Specialist (AHES OH #35832) and Mr. Matt Kobs ODH Certified Asbestos Hazard Evaluation Specialist (AHES OH #36110) of Lawhon & Associates, Inc. (L&A) conducted an asbestos survey of the POR 00014 12960 Bridge (SFN #6700691/ PID 105860) State Route 14 over State Route 5 and State Route 44 in Portage County, Ohio. The purpose of the survey was to determine the presence of asbestos-containing materials (ACM) located on the structure. Asbestos Containing Materials (ACM) were identified in the course of the survey. L&A collected one confirmatory sample of the Transite Pipe. The pipe was confirmed to be an Asbestos Containing Material as defined by U.S. EPA/NESHAP regulations. Any contractors disturbing this material must adhere to OSHA 29 CFR 1910 and 29 CFR 1926.

If you have any questions, please contact Jordan Mederer at (614) 481-8600.

Sincerely,



Matt Geiger, AHES 35832
Project Manager



Jordan Mederer, AHES 35005
HBM Department Manager

APPENDIX A
ASBESTOS SAMPLE RESULTS AND
CHAIN OF CUSTODY INFORMATION

CERTIFICATE OF ANALYSIS

Client: Lawhon & Associates Inc.
1441 King Avenue
Columbus OH 43212

Report Date: 8/29/2018
Report No.: 571552 - PLM
Project: POR-00014-12960
Project No.: 18-0347

Client: LAW411

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6591583	Analyst Observation: Black Tar	Location: East Side, South End
Client No.: 1	Client Description: Road Tar/Sealant	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 6591584	Analyst Observation: Black Tar	Location: East Side, Middle
Client No.: 2	Client Description: Road Tar/Sealant	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 6591585	Analyst Observation: Black Tar	Location: West Side, North End
Client No.: 3	Client Description: Road Tar/Sealant	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 6591586	Analyst Observation: White Expansion Joint	Location: East Side, South End
Client No.: 4	Client Description: Parapet Wall Expansion Joint	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 6591587	Analyst Observation: White Expansion Joint	Location: East Side, Middle
Client No.: 5	Client Description: Parapet Wall Expansion Joint	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 6591588	Analyst Observation: White Expansion Joint	Location: West Side, North End
Client No.: 6	Client Description: Parapet Wall Expansion Joint	Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 8/27/2018
Date Analyzed: 08/29/2018
Signature:
Analyst: Robert Betsch

Approved By:
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Lawhon & Associates Inc.
1441 King Avenue
Columbus OH 43212

Report Date: 8/29/2018
Report No.: 571552 - PLM
Project: POR-00014-12960
Project No.: 18-0347

Client: LAW411

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6591589 **Analyst Observation:** Grey Caulk **Location:** East Side, South End
Client No.: 7 **Client Description:** Reflector Caulk Type 1 **Facility:**
Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:
None Detected None Detected 100

Lab No.: 6591590 **Analyst Observation:** Grey Caulk **Location:** East Side, Middle
Client No.: 8 **Client Description:** Reflector Caulk Type 1 **Facility:**
Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:
None Detected None Detected 100


Lab No.: 6591591 **Analyst Observation:** Grey Caulk **Location:** East Side, North End
Client No.: 9 **Client Description:** Reflector Caulk Type 1 **Facility:**
Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:
None Detected None Detected 100

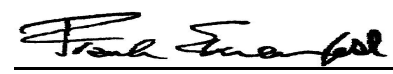
Lab No.: 6591592 **Analyst Observation:** Grey Caulk **Location:** East Side, South End
Client No.: 10 **Client Description:** Reflector Caulk Type 2 **Facility:**
Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:
None Detected None Detected 100

Lab No.: 6591593 **Analyst Observation:** Grey Caulk **Location:** East Side, Middle
Client No.: 11 **Client Description:** Reflector Caulk Type 2 **Facility:**
Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:
None Detected None Detected 100

Lab No.: 6591594 **Analyst Observation:** Grey Caulk **Location:** East Side, North End
Client No.: 12 **Client Description:** Reflector Caulk Type 2 **Facility:**
Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:
None Detected None Detected 100

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

Date Received: 8/27/2018
Date Analyzed: 08/29/2018
Signature: 
Analyst: Robert Betsch

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

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1441 King Avenue
Columbus OH 43212

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Report No.: 571552 - PLM
Project: POR-00014-12960
Project No.: 18-0347

Client: LAW411

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6591595 **Analyst Observation:** Black Caulk **Location:** East Side, South End
Client No.: 13 **Client Description:** Reflector Caulk Type 3 **Facility:**
Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:
None Detected None Detected 100

Lab No.: 6591596 **Analyst Observation:** Black Caulk **Location:** East Side, Middle
Client No.: 14 **Client Description:** Reflector Caulk Type 3 **Facility:**
Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:
None Detected None Detected 100


Lab No.: 6591597 **Analyst Observation:** Black Caulk **Location:** East Side, North End
Client No.: 15 **Client Description:** Reflector Caulk Type 3 **Facility:**
Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:
None Detected None Detected 100

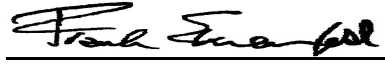
Lab No.: 6591598 **Analyst Observation:** Grey Wrap **Location:** Below Deck, East Side
Client No.: 16 **Client Description:** Gas Line Wrap **Facility:**
Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:
None Detected 50 Synthetic 50

Lab No.: 6591599 **Analyst Observation:** Grey Wrap **Location:** Below Deck, East Side
Client No.: 17 **Client Description:** Gas Line Wrap **Facility:**
Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:
None Detected 40 Synthetic 60

Lab No.: 6591600 **Analyst Observation:** Silver Wrap **Location:** Below Deck, East Side
Client No.: 18 **Client Description:** Gas Line Wrap **Facility:**
Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:
None Detected 30 Synthetic 70

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

Date Received: 8/27/2018
Date Analyzed: 08/29/2018
Signature: 
Analyst: Robert Betsch

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

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Client: Lawhon & Associates Inc.
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Project No.: 18-0347

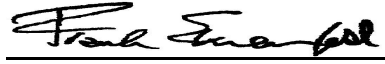
Client: LAW411

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6591601 Client No.: 19	Analyst Observation: Tan Paint Client Description: Tan Surfacing Paint	Location: Above Deck, East Side Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 6591602 Client No.: 20	Analyst Observation: Tan Paint Client Description: Tan Surfacing Paint	Location: Above Deck, East Side Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 6591603 Client No.: 21	Analyst Observation: Tan Paint Client Description: Tan Surfacing Paint	Location: Below Deck, West Side, North End Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 6591604 Client No.: 22	Analyst Observation: Blue/White Paint Client Description: Blue/White Paint	Location: Below Deck, West Side Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 6591605 Client No.: 23	Analyst Observation: Blue/White Paint Client Description: Blue/White Paint	Location: Below Deck, West Side Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 6591605(L2) Client No.: 23	Analyst Observation: Dk Grey Cementitious Client Description: Blue/White Paint	Location: Below Deck, West Side Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 8/27/2018
Date Analyzed: 08/29/2018
Signature: 
Analyst: Robert Betsch

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Lawhon & Associates Inc.
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Columbus OH 43212

Report Date: 8/29/2018
Report No.: 571552 - PLM
Project: POR-00014-12960
Project No.: 18-0347

Client: LAW411

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 6591606
Client No.: 24

Analyst Observation: Blue/White Paint
Client Description: Blue/White Paint

Location: Below Deck, Middle
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 6591607
Client No.: 25

Analyst Observation: Grey Cement Product
Client Description: Transite Pipe


Location: Below Deck, East Side
Facility:

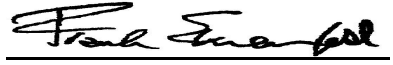
Percent Asbestos:
25 Chrysotile
PC 5.0 Crocidolite

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
70

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

Date Received: 8/27/2018
Date Analyzed: 08/29/2018
Signature: 
Analyst: Robert Betsch

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Lawhon & Associates Inc.
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Project: POR-00014-12960
Project No.: 18-0347

Client: LAW411

Appendix to Analytical Report

Customer Contact:

Method: US EPA 600, R93-116

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: cdavis@iatl.com

iATL Account Representative: Shirley Clark

Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Bulk Building Materials

Exceptions Noted: See Following Pages

General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL.com and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

Information Pertinent to this Report:

Analysis by US EPA 600 93-116: Determination of Asbestos in Bulk Building Materials by Polarized Light Microscopy (PLM).

Certifications:

- NIST-NVLAP No. 101165-0
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. PC Trace represents a <0.25% amount. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analytical Methodology Alternatives: Your initial request for analysis may not have accounted for recent advances in regulatory requirements or advances in technology that are routinely used in similar situations for other qualified projects. You may have the option to explore additional analysis for further information. Below are a few options, listed as the matrix followed by the appropriate methodology. Also included are links to more information on our website.

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB)

Loose Fill Vermiculite Insulation, Attic Insulation, Zonolite (copyright), etc.: US EPA 600 R-4/004 (multi-tiered analytical process)

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Project: POR-00014-12960
Project No.: 18-0347

Client: LAW411

Sprayed On Insulation/Fireproofing with Vermiculite (SOF-V): ELAP 198.8 (PLM-SOF-V)

Soil, sludge, sediment, aggregate, and like materials analyzed for asbestos or other elongated mineral particles (ex. erionite, etc.): ASTM D7521, CARB 435, and other options available

Asbestos in Surface Dust according to one of ASTM's Methods (very dependent on sampling collection technique – by TEM): ASTM D 5755, D5756, or D6480

Various other asbestos matrices (air, water, etc.) and analytical methods are available.

Disclaimers / Qualifiers:

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a list with highlighted disclaimers that may be pertinent to this project. For a full explanation of these and other disclaimers, please inquire at customerservice@iatl.com.

- 1) Note: No mastic provided for analysis.
- 2) Note: Insufficient mastic provided for analysis.
- 3) Note: Insufficient material provided for analysis.
- 4) Note: Insufficient sample provided for QC reanalysis.
- 5) Note: Different material than indicated on Sample Log / Description.
- 6) Note: Sample not submitted.
- 7) Note: Attached to asbestos containing material.
- 8) Note: Received wet.
- 9) Note: Possible surface contamination.
- 10) Note: Not building material. 1% threshold may not apply.
- 11) Note: Recommend TEM-NOB analysis as per EPA recommendations.
- 12) Note: Asbestos detected but not quantifiable.
- 13) Note: Multiple identical samples submitted, only one analyzed.
- 14) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.080%.
- 15) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.125%.
- 16) Note: This sample contains >10% vermiculite mineral. See Appendix for Recommendations for Vermiculite Analysis.

Recommendations for Vermiculite Analysis:

Several analytical protocols exist for the analysis of asbestos in vermiculite. These analytical approaches vary depending upon the nature of the vermiculite mineral being tested (e.g. un-processed gange, homogeneous exfoliated books of mica, or mixed mineral composites). Please contact your client representative for pricing and turnaround time options available.

iATL recommends initial testing using the EPA 600/R-93/116 method. This method is specifically designed for the analysis of asbestos in bulk building materials. It provides an acceptable starting point for primary screening of vermiculite for possible asbestos.

Results from this testing may be inconclusive. EPA suggests proceeding to a multi-tiered analysis involving wet separation techniques in conjunction with PLM and TEM gravimetric analysis (EPA 600/R-04/004).

For New York State customers, NYSDOH requires disclaimers and qualifiers for various vermiculite containing samples that direct analysis via ELAP198.6 and ELAP198.8 for samples that contain >10% vermiculite mineral where ELAP198.6 may be used to evaluate the asbestos content of the material. However, any test result using ELAP198.6 will be reported with the following disclaimer: "ELAP198.6 method does not remove vermiculite and may underestimate the level of asbestos present in a sample containing >10% vermiculite."

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional.

The following is a summary of the analytical process outlines in the EPA 600/R-04/004 Method:

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% LOQ for most samples.
- 2) **Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

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3)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Floats" only.

4)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

5)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Suspension" only.

LOQ, Limit of Quantitation estimates for mass and volume analyses.

*With advance notice and confirmation by the laboratory.

**Approximately 1 Liter of sample in double-bagged container (~9x6 inch bag of sample).

1441 King Avenue
Columbus, OH 43212
Phone: (614) 481-8600
Fax: (614) 481-8610

Sent To: IATL

No 11155

VIA: FedEx

Page 1 of 2

Date: 8-23-2018

Turn around:
3-day

ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY RECORD

Project Name: <u>POB-00014-12960</u>	Project No.: <u>18-0347</u>	Project Contact: <u>Matt Geiger</u>	Sampler (print): <u>[Signature]</u>	Signature: <u>[Signature]</u>
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Sample I.D. No.	Homog. Area No.	Sample /Homogeneous Area Description	Sample Location	Remarks
1	1	Road TAR/SEALANT	East side, South End	6591583
2	1		, middle	6591584
3	1		West side, North End	6591585
4	2	Parquet wall Expansion Joint	East side, South End	6591586
5	2		, middle	6591587
6	2		West side, North End	6591588
7	3	Reflector Caulk Type 1	East side, South End	6591589
8	3		, middle	6591590
9	3		, North End	6591591
10	4	Reflector Caulk Type 2	East side, South End	6591592
11	4		, middle	6591593
12	4		, North End	6591594
13	5	Reflector Caulk Type 3	East side, South End	6591595
14	5		, middle	6591596
15	5		, North End	6591597
16	6	Gas Line wrap	Below Deck, East side	6591598
17	6			6591599
18	6			6591600

SAMPLE ANALYSIS BY EPA METHOD 600/R-93/116 UNLESS OTHERWISE NOTED. Stop 1st Positive Analyze All Samples

Relinquished by: (signature) <u>[Signature]</u>	Date / Time <u>8-24-18 8:36am</u>	Received by: (signature) <u>[Signature]</u>	Date / Time <u>8-30-18</u>	Relinquished by: (signature) <u>[Signature]</u>	Date / Time <u>8/29/18</u>	Received by: (signature) <u>[Signature]</u>	Date / Time <u>8/29/18</u>
--	--------------------------------------	--	-------------------------------	--	-------------------------------	--	-------------------------------

1441 King Avenue
 Columbus, OH 43212
 Phone: (614) 481-8600
 Fax: (614) 481-8610

Sent To: LATL

No 11156

VIA: FedEx

Page 2 of 2

Date: 8-23-2018

Turn around:
3-day

ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY RECORD

Project Name: <u>POB-00014-12460</u>	Project No.: <u>18-0347</u>	Project Contact: <u>Matt Geiger</u>	Sampler (print): <u>[Signature]</u>	Signature: <u>[Signature]</u>
---	--------------------------------	--	--	----------------------------------

Sample I.D. No.	Homog. Area No.	Sample /Homogeneous Area Description	Sample Location	Remarks
<u>19</u>	<u>7</u>	<u>TAN Surfacing Paint</u>	<u>Above Deck, East side</u>	<u>6591601</u>
<u>20</u>	<u>7</u>	<u>└</u>	<u>└, East side</u>	<u>6591602</u>
<u>21</u>	<u>7</u>	<u>└</u>	<u>Below Deck, west side, North End</u>	<u>6591603</u>
<u>22</u>	<u>8</u>	<u>Blue/white Paint</u>	<u>Below Deck, west side</u>	<u>6591604</u>
<u>23</u>	<u>8</u>	<u>└</u>	<u>└, 2</u>	<u>6591605</u>
<u>24</u>	<u>8</u>	<u>└</u>	<u>└, middle</u>	<u>6591606</u>
<u>25</u>	<u>9</u>	<u>TRANSITE PIPE</u>	<u>Below Deck, East side</u>	<u>6591607</u>

SAMPLE ANALYSIS BY EPA METHOD 600/R-93/116 UNLESS OTHERWISE NOTED Stop 1st Positive Analyze All Samples

Relinquished by: (signature) <u>[Signature]</u>	Date / Time <u>8-24-18 8:36am</u>	Received by: (signature) <u>[Signature]</u>	Date / Time <u>8-30-18</u>	Relinquished by: (signature)	Date / Time	Received by: (signature) <u>[Signature]</u>	Date / Time <u>8/29/18</u>
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APPENDIX B
OHIO DEPARTMENT OF HEALTH CERTIFICATION



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

January 24, 2018

Matthew R Kobs
Lawhon & Associates, Inc.
1441 King Ave.
Columbus OH 43212

RE: Asbestos Hazard Evaluation Specialist
Certification Number: ES36110
Expiration Date: 01/30/2019

Dear Matthew R Kobs:

This letter and enclosed certification card approves your request to be certified as an Asbestos Hazard Evaluation Specialist. You must present your card upon request at any project site while performing duties. Copies of cards are not acceptable as proof of certification.

This certification may be revoked by the Director of the Environmental Protection Agency for violation of any of the requirements of 3745-22 or 3745-20 of the Ohio Administrative Code.

If you have any questions, please call 614-644-0226.

Sincerely,

Mark Needham
Manager, Asbestos Program
Division of Air Pollution Control

State of Ohio
Environmental Protection Agency
Asbestos Program

Asbestos Hazard Evaluation Specialist



Matthew R Kobs
Lawhon & Associates, Inc.
1441 King Ave.
Columbus OH 43212

Certification Number
ES36110

Expiration Date
01/30/2019

DOB: 04/05/1986

This certification is issued pursuant to Revised Code Chapter 3710 and Administrative Code Chapter 3745-22.

This card is not valid if altered.

50 West Tov

The InService Training Network

Asbestos Building Inspector and Management Planner Refresher Courses



Matthew Kobs

has successfully completed the Asbestos Building Inspector and Management Planner Refresher Courses and passed by at least 70% the course examinations for accreditation under Section 206 of the Toxic Substance Control Act, Title II, and Indiana 326 IAC 18-2
Provided by: The InService Training Network, Inc., 6813 Flagg Center, Columbus, OH 43229 (614) 895-9323

Course Dates: January 3, 2018

Examination Date: January 3, 2018

Course Director: _____

Kurt Varga

Course Location: Columbus, Ohio

Expiration Date: January 3, 2019

Certificate Numbers: ITNIR-6300 & ITNMPR-6300

ITN

ITN



OHIO DEPARTMENT OF HEALTH

246 North High Street
Columbus, Ohio 43215

614/466-3543
www.odh.ohio.gov

John R. Kasich/Governor

Lance Himes/Director of Health

August 24, 2017

Matthew A Geiger
Lawhon & Associates, Inc
1441 King Ave
Columbus OH 43212

RE: Asbestos Hazard Evaluation Specialist
Certification Number: ES35832
Expiration Date: 10/14/2018

Dear Matthew A Geiger:

This letter and enclosed certification card approves your request to be certified as an Asbestos Hazard Evaluation Specialist. You must present your card upon request at any project site while performing duties. Copies of cards are not acceptable as proof of certification.

This certification may be revoked by the Director of Health for violation of any of the requirements of 3701-34 of the Ohio Administrative Code.

If you have any questions, please call Kathy Butcher, Licensure Specialist, at 614-644-0226.

Sincerely,

Bill Robbins, Section Chief
Bureau of Licensure Operations
Office of Health Assurance and Licensing



The InService Training Network

Asbestos Building Inspector and Management Planner Refresher Courses



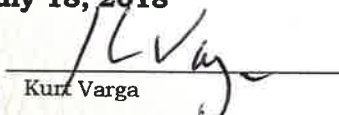
Matthew Geiger

has successfully completed the Asbestos Building Inspector and Management Planner Refresher Courses and passed by at least 70% the course examinations for accreditation under Section 206 of the Toxic Substance Control Act, Title II, and Indiana 326 IAC 18-2
Provided by: The InService Training Network, Inc., 6813 Flagg Center, Columbus, OH 43229 (614) 895-9323

Course Dates: July 18, 2018

Examination Date: July 18, 2018

Course Director:

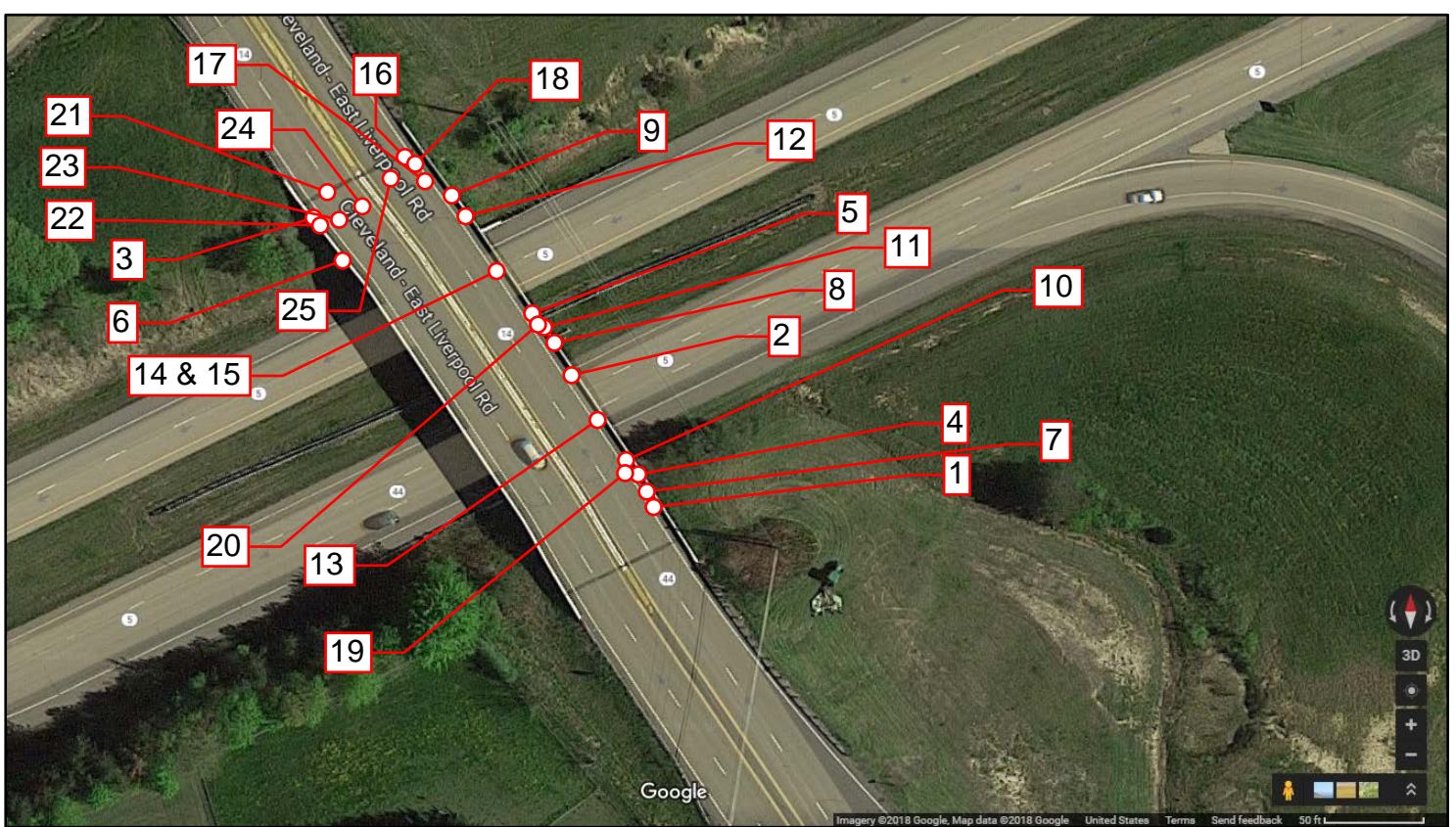

Kurt Varga

Course Location: Columbus, Ohio

Expiration Date: July 18, 2019

Certificate Numbers: ITNIR-6434 & ITNMPR-6434

APPENDIX C
BULK SAMPLE LOCATION DIAGRAM




Representative View of Road Tar / Sealant



Representative View of Parapet Wall Expansion Joint



Representative View of Reflector Caulk #1



Lawhon & Associates, Inc.
ENVIRONMENTAL CONSULTING AND ENGINEERING SERVICES

Columbus
Cleveland
Dayton

Bulk Sample Diagram

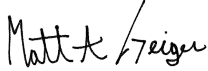
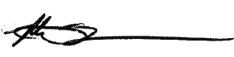
Inventory Bridge Number: POR 00014 12960

Structure File Number: 6700691

Date Sampled: August 24, 2018

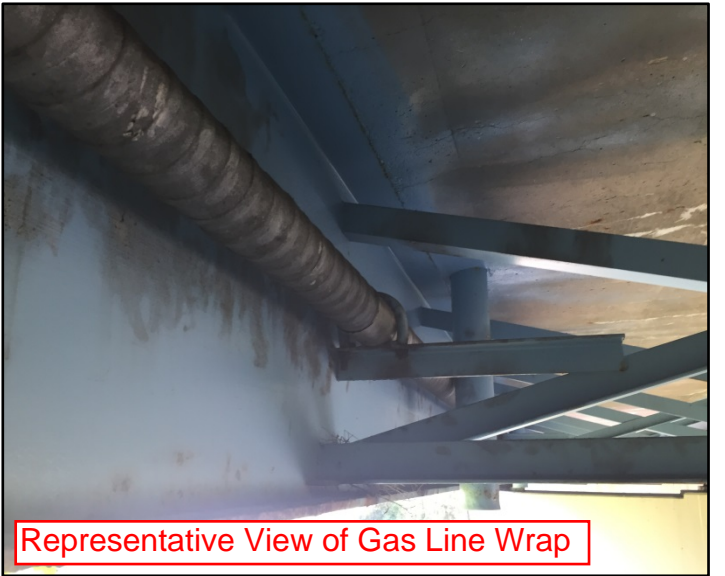
Surveyors: Matt Geiger, AHES 35832
Matt Kobs, AHES 36110


Signatures:

Page 1 of 2


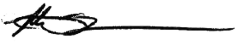
1441 King Avenue | Columbus, Ohio 43212 | P: 614.481.8600 | F: 614.481.8610 | www.lawhon-assoc.com



 **Lawhon & Associates, Inc.**
ENVIRONMENTAL CONSULTING AND ENGINEERING SERVICES

Columbus
Cleveland
Dayton

Bulk Sample Diagram
Inventory Bridge Number: POR 00014 12960
Structure File Number: 6700691
Date Sampled: August 24, 2018
Surveyors: Matt Geiger, AHES 35832
Matt Kobs, AHES 36110

Signatures:
 

Page 2 of 2

APPENDIX D
OHIO ENVIRONMENTAL PROTECTION AGENCY
NOTICE OF DEMOLITION AND RENOVATION



Notification of Demolition and Renovation/Abatement

Section 1: General Information

Division of Air Pollution Control

Work on projects cannot begin until 10 working days after a COMPLETE original notification form, **including payment**, is submitted to Ohio EPA. Instructions and a worksheet for fee calculation are available at epa.ohio.gov/asbestos. This form can be completed, and payment made, at ebiz.epa.ohio.gov. Questions? asbestos@epa.ohio.gov or (614) 466-0061.

Ohio EPA Use Only	Notification #:	Postmarked: / /	Received: / /	<input type="checkbox"/> Hand-Delivered
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1) Notification Information (Check all that apply)

<input checked="" type="checkbox"/> Original	<input type="checkbox"/> Revision # (count):	<input type="checkbox"/> Installation	<input type="checkbox"/> Emergency	<input type="checkbox"/> Annual	<input type="checkbox"/> Cancellation	County:
--	--	---------------------------------------	------------------------------------	---------------------------------	---------------------------------------	---------

2) Owner, Asbestos Abatement Contractor, Billing and Fire Department Information

Revised?

Owner					
Name: ODOT District 4					Is this a company? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Address: 2088 South Srlington Road			Contact Person:		
City: Akron		State: Ohio		Zip: 44306 -	
Email:		Phone: (330) 786 - 3100		Fax: (330) 786 - 2226	
Asbestos Abatement Contractor (if applicable)					
Name:		License #: AC		Expiration Date: / /	
Address:			Contact Person:		
City:		State:		Zip: -	
Email:		Phone: () -		Fax: () -	
Billing Contact					
Is this contact associated with the <input type="checkbox"/> Owner, <input type="checkbox"/> Asbestos Abatement Contractor, or <input type="checkbox"/> Demolition Contractor (if not installation)?					
Address:			Contact Person:		
City:		State:		Zip: -	
Email:		Phone: () -		Fax: () -	
Fire Department (if applicable)					
Name:					
Address:			Contact Person:		
City:		State:		Zip: -	
Email:		Phone: () -		Fax: () -	

3) Ohio Asbestos Hazard Evaluation Specialist and Evaluation Procedure

Revised?

Evaluation Specialist: Matt Geiger	Certification #: ES 35832	Expiration Date: 10 / 14 / 2018
Procedure, including analytical methods, employed to detect the presence of and to estimate the quantity of regulated asbestos-containing material (RACM) and Category I and Category II non-friable asbestos-containing material: <input checked="" type="checkbox"/> PLM <input type="checkbox"/> Point Count <input type="checkbox"/> TEM <input type="checkbox"/> Other Method (Explain Below):		

4) Procedures to be followed should unexpected RACM be discovered (check all that apply)

Revised?

<input checked="" type="checkbox"/> Stop work and keep wet	<input checked="" type="checkbox"/> Evacuate area	<input checked="" type="checkbox"/> Demarcate area	<input checked="" type="checkbox"/> Contact licensed abatement contractor
<input checked="" type="checkbox"/> Contact district office/local air authority			
<input type="checkbox"/> Other (Explain):			

5) Planned Demolition (check all that apply)

Revised?

Describe demolition work to be performed and method(s) to be employed, including demolition techniques to be used: <input type="checkbox"/> Implosion <input type="checkbox"/> Fire Training <input type="checkbox"/> Wet Methods <input type="checkbox"/> Manual Demolition <input type="checkbox"/> Mechanical Demolition <input type="checkbox"/> Other (Explain):
Description of affected facility components (include attachment if necessary):

Notification of Demolition and Renovation/Abatement

Section 1: General Information

Continued

Mail completed form and payment to:
Ohio EPA, DAPC – Asbestos
50 W. Town St., 7th Floor or P.O. Box 1049
Columbus, OH 43216-1049

6) Asbestos Description and Engineering Controls (if asbestos is being abated)

Revised?

For the material listed in each project, describe the type(s) of ACM to be abated, engineering controls and work practices to be used to minimize emissions and ensure proper waste handling:

Type of ACM to be abated:	<input type="checkbox"/> Surfacing	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Other		
Engineering Controls:	<input type="checkbox"/> Wet Methods	<input type="checkbox"/> Glove Bag	<input type="checkbox"/> NPE	<input type="checkbox"/> AFD	<input type="checkbox"/> Other:
Work Practices:	<input type="checkbox"/> Intact Removal	<input type="checkbox"/> Manual	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Other:	

7) Asbestos Waste Transporter (if applicable)

Revised?

Transporter #1 Name:					
Address:			Contact Person:		
City:	State:		Zip:		-
Email:	Phone: () -		Fax: () -		
Transporter #2 Name (if applicable):					
Address:			Contact Person:		
City:	State:		Zip:		-
Email:	Phone: () -		Fax: () -		

8) Asbestos Waste Disposal Site (if applicable)

Revised?

Name:					
Address:			Contact Person:		
City:	State:		Zip:		-
Email:	Phone: () -		Fax: () -		

9) Emergency Demolition (complete if you checked "Emergency" above and "Demolition" for any project)

Revised?

A copy of the issued order, including the following information, **must be attached** to this notification.

Government Official Issuing Order:	Title:
Agency:	Authority of Order (Citation of Code):
Date of Order: / /	Demolition Date: / /

10) Emergency Renovation/Abatement (complete if you checked "Emergency" above and "Renovation/Abatement" for any project)

Revised?

Date of Emergency: / /	Time of Emergency: : <input type="checkbox"/> a.m. <input type="checkbox"/> p.m.
Description of Sudden, Unexpected Event:	
Explanation of how the event caused unsafe conditions or equipment damage:	

11) Attestation

Revised?

In accordance with Ohio Administrative Code rule 3745-20-03(A)(4)(p), I certify that at least one person trained as required by paragraph (B) of rule 3745-20-04 of the Administrative Code will supervise the stripping and removal described by this notification. I acknowledge that the submission of false or misleading statements is prohibited by law and I certify that facts contained in this notification are true, accurate, and complete.

Signature:	Date: / /
Name:	Title:
Organization:	



Notification of Demolition and Renovation/Abatement

Section 2: Project Address Specific Information

Division of Air Pollution Control

Please complete Section 2 for the address included with this notification. If the project is an "Installation" per OAC 3745-20, complete a separate Section 2 page for each address associated with this notification.

Ohio EPA Use Only	Project ID #: _____
-------------------	---------------------

A. Facility Description Revised?

Building Name (if applicable): POR 00014 12960		Site Location (specific): 0.37 Mi E Of Sr 59	
Address: 41°09'08.5"N 81°12'53.9"W		County: Portage	
City: Ravenna	State: OH	Zip: 44266 -	
Building Size (square feet):	No. of Floors:	Age: 50	
Present Use: Bridge		Prior Use:	

B. Type of Operation (check all that apply) Revised?

<input type="checkbox"/> Demolition	<input checked="" type="checkbox"/> Renovation/Abatement – Type: <input type="checkbox"/> Removal <input type="checkbox"/> Repair <input type="checkbox"/> Encapsulation <input type="checkbox"/> Enclosure
-------------------------------------	---

C. Asbestos Present (check one) Revised?

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> No, previously abated	Year Abated: _____
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D. Approximate Amount of Asbestos-Containing Materials (complete table below and Section 1 #6 if asbestos is present) Revised?

	Material to be Removed				Material NOT to be Removed	
	RACM	Non-friable Asbestos-Containing Material		Non-friable Asbestos-Containing Material		
		Category I	Category II	Category I	Category II	
Pipes (linear feet)						
Surface area on other facility components (ft ²)					2,420	
Volume if length or area cannot be measured (ft ³)						

E. Asbestos Abatement Schedule and Abatement Specialist (original notification is required 10 working days prior to the start of work) Revised?

Setup Date: / /			Abatement Date: / /			Complete Date: / /	
(Shift 1) Time start/end on site	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Abatement Specialist Name:			Certification #: AS			Expiration Date: / /	
(Shift 1) Time start/end on site	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Abatement Specialist Name:			Certification #: AS			Expiration Date: / /	

F. Demolition Contractor (if applicable) Revised?

Name:		
Address:		Contact Person:
City:	State:	Zip: -
Email:	Phone: () -	Fax: () -

G. Demolition Schedule (original notification is required 10 working days prior to the start of work) Revised?

Start Date: / /	Complete Date: / /
-----------------	--------------------

H. Project Hold Revised?

Hold Begin Date: / /	Work Resume Date: / /
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