Consultants – Geologists - Scientists

Report of Pre-Demolition Asbestos Survey 420 Paper St. Wilmington, OH 45177



Phoenix Project No. 2015-1015

Prepared for:

Mr. Robert Paulson Paper Street Soap Co. 1537 Paper Street Bradford, DE 19808

Issued on:

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September 21, 2015

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THIS REPORT HAS BEEN INTENTIALLY ALTERED.
NAMES OF CLIENTS, ADDRESSES, BUSINESSES,
PHOTOS AND OTHER CLIENT-PRIVLEDGED
INFORMATION HAVE BEEN CHANGED TO PROTECT
THE CLIENT.

Reference: Pre-Demolition Asbestos Survey Report

420 Paper St.

Wilmington, OH 45177

Phoenix Project No. 2015-1015

Dear Bob:

INTRODUCTION

As you authorized, Phoenix Environmental, LLC (Phoenix) performed a pre-demolition asbestos containing materials (ACM) survey of the above referenced site. The purpose of this service was to survey the site buildings for ACM prior to demolition by intentional burning, consistent with the requirements of 40 CFR (Code of Federal Regulations) 61, Subpart M, "National Emission Standard for Asbestos" (NESHAP regulations). We understand that this asbestos survey was requested due to proposed demolition of the structures by intentional burning.

Phoenix representative Jeff Paetz visited the site on September 15, 2015. Mr. Paetz is certified as an Asbestos Hazard Evaluation Specialist (AHES) by the Ohio Department of Health (Certification Number 34086, expires May 30, 2016).

BACKGROUND

Suspect ACM is a concern of building owners and employers because ACM is regulated by the Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA). EPA regulations govern the renovation and demolition of buildings containing ACM, and the removal and disposal of ACM. OSHA regulations govern employee exposure to asbestos. Building owners and employers must comply with 29 CFR 1910 and 1926, the federal OSHA rules governing occupational exposure to asbestos; and 40 CFR 61 Subpart M, the federal NESHAP rules governing asbestos handling and waste disposal in building renovation and demolition activities.

Asbestos containing building materials are grouped in three categories: thermal system insulation (e.g. pipe and mechanical insulation), surfacing materials (e.g. plaster, ceiling texture, fireproofing) and miscellaneous materials (e.g. ceiling panels, floor tile, drywall/wallboard).

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These categories assist in determining the appropriate number of samples to collect and analyze during an asbestos survey.

Friable materials include materials that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure when dry (e.g. pipe insulation, ceiling tile). Non-friable materials are materials that cannot be crumbled, pulverized or reduced to powder with hand pressure. Under NESHAP, non-friable ACM is divided into two categories. Category I non-friable ACM can be resilient floor coverings (RFC), mastics, asphalt roofing products, packings and gaskets; and are materials that are unlikely to become friable during building renovation or demolition activities. All other non-friable materials are considered category II non-friable ACM, and include items such as transite (ACM cement) and certain materials that likely would become friable during building renovation or demolition activities.

If a resilient floor covering that is ACM, regardless whether it is Category I non-friable, will be subjected to sanding, grinding, cutting, abrading or burning during renovation or demolition activities, including waste consolidation at the site or at the disposal facility, then this material must be removed prior to the renovation or demolition. If the concrete floor slab underneath the ACM flooring will be recycled for use as fill, then resilient floor covering that is ACM should be removed.

For standard (non-burning) building demolitions, NESHAPs requires all friable and category II non-friable ACM (which may become friable during demolition activities) to be removed prior to demolition. For demolition, ACM should be removed if it will be disturbed (by sanding, grinding, abrading, drilling, cutting or chipping into the material) and thus could become friable during demolition activities. For demolition by intentional burning, <u>all ACM is required to be removed prior to burning</u>.

METHOD OF SURVEY

Phoenix performed this survey in a manner consistent with the requirements of 40 CFR (Code of Federal Regulations) 61, Subpart M, "National Emission Standard for Asbestos" (NESHAP regulations) and 29 CFR 1926.1101, "OSHA Construction Industry Standard."

The interior and exterior of the building were visually observed to identify suspect ACM. Suspect materials were classified as homogeneous, according to their location within the building, installation date, color, texture, and/or hardness, as suggested by current EPA sampling protocols. The suspect materials were then divided into Homogeneous Sampling Areas (HSAs) and each bulk material sample collected was identified with a unique sample identifier and subsequently analyzed by polarized light microscopy (PLM) and/or Point Count analysis.

BUILDING DESCRIPTIONS

The property contained two structures that were scheduled for demolition. These structures included an approximately 1,880 square foot (sf) residence and an approximately 670 sf detached garage. According to information provided by the Clinton County Auditor's website, the residence and garage were constructed in 1901 and 1981, respectively.

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The residence was a 1-story wood frame structure with a full unfinished crawl space. Exterior finishes included aluminum siding, wood trim exterior and a sloped roof with asphalt shingles, tar paper and black tar on roof seams and perforations at the residence. The interior building materials included: finished drywall systems, tacked down carpet, 12" x 12" vinyl floor tile, linoleum, ceramic tile backsplash (in master bathroom), and numerous mastics. A single forced air, natural gas furnace and a single natural gas water heater was observed within the basement. Other than black vibration cloth on the furnace, no suspect ACMs were observed on these components. Fiberglass insulation was encountered behind the walls and ceilings.

The attached garage was a concrete block structure partially covered with aluminum siding, and a sloped roof with asphalt shingles. The interior of the building was largely unfinished with finished drywall systems and textured paint/plaster.

The detached garage was located approximately thirty feet northwest of the house. It was a concrete block structure partially covered with aluminum siding, and a sloped roof with asphalt shingles. The interior of the building was unfinished. The asphalt shingles on the detached garage appeared to be the same as those on the house. Photographs of the exterior and interior of buildings are attached.

BULK SAMPLE TESTING

Phoenix personnel collected 50 bulk samples from the suspect material in the buildings. These materials included:

Residence:

- Homogenous Sampling Area (HSA)-2: Drywall, joint compound, and tape (throughout residence)
- HSA-3: Tan 12"x12" floor tile (in the kitchen)
- HSA-4: Tan 12"x12" floor tile (in the hall bathroom)
- HSA-5: Off-white 12"x12" floor tile (in the laundry room)
- HSA-6: Tan/brown 12"x12" floor tile (in the master bathroom)
- HSA-7: Ceramic backsplash mastic (in the master bathroom)
- HSA-8: Black vibration cloth (associated with the furnace)
- HSA-9: Asphalt shingles and tar paper
- HSA-10: Black tar

Attached Garage:

- HSA-1: Drywall, joint compound, surfacing texture, and tape
- HSA-11: Asphalt shingles

The bulk samples were delivered to IATL in Mount Laurel, New Jersey for asbestos analysis by Polarized Light Microscopy (PLM) and point count analysis, if needed.

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Based on the sample results, the following materials analyzed contained asbestos in concentrations greater than 1% (asbestos-containing materials):

Homogeneous Sampling Area	Description	Location	% Asbestos	Condition	Estimated Quantity
1	Light tan joint compound and white texture plaster associated with drywall walls	Garage	1.1% to 1.7% Chrysotile	Good	100 SF
2	Light tan joint compound associated with drywall walls/ceilings	Throughout the residence	1.4% to 1.5% Chrysotile	Good to Poor	1,000 SF*
4	Tan 12″x12″ floor tile	Hall bathroom	2.1% to 2.2% Chrysotile	Poor	200 SF
5	Off-white 12"x12" floor tile	Laundry room	2.5% to 2.6% Chrysotile	Good	100 SF
6	Tan/brown 12"x12" floor tile	Master bathroom	1.0% to 1.8% Chrysotile	Good	20 SF
10	Black tar	Roof of residence	3.5% to 3.8% Chrysotile	Good	20 SF

SF = Square Feet / LF = Linear Feet

The results of the analysis of bulk samples to determine asbestos content are further detailed in the attached laboratory test results and chain of custody form/bulk sample log.

CONCLUSIONS

Based on the sample results, six (6) materials (residence – joint compound associated with drywall walls/ceilings, three varieties of 12"x12" floor tile, and black roof tar; garage – joint compound and texture plaster associated with drywall walls) were determined to contain asbestos in concentrations greater than 1%.

Typically, the category I non-friable asbestos-containing materials (i.e., 12"x12" floor tile and black roof tar) may remain in-place during the demolition. However, considering that the structures are planned for demolition by intentional burning, all six of the ACMs identified above should be properly removed by a licensed contractor prior to demolition.

ODH requires notification of asbestos abatement when quantities present exceed 50 square feet/50 linear feet. As such, ODH should be notified prior to asbestos abatement.

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Additionally, notification to Ohio EPA is required at least 10 working days prior to building demolition.

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We appreciate the opportunity to be of service to you on this project. Please contact our office if you have any questions or need additional services.

Respectfully submitted,

Phoenix Environmental, LLC

Erin N. Woodward Environmental Scientist

Jeffrey L. Paetz, PG, CP Ohio Certified Asbestos Hazard Evaluation Specialist (AHES)

Attachments: A - Figure 1 (Site Location Map)

B - Photographic LogC - Bulk Sample Log

D - Laboratory Test Results/Chain of Custody