

Technical Memorandum

Blum Junk Yard Properties

Assessment of Environmental Risk Related to Demolition of
Properties at 411 and 501 E. 15th Street

9/16/15

40140060.13

Prepared For:

Steven Sampson Brown



Prepared By:



Introduction and Scope of Services

At the request of the City of Dubuque, HR Green has conducted a site visit and limited hazardous materials inventory for the Blum properties located at 411 (west side) and 501 (east side) E. 15th Street in Dubuque, Iowa (PINs 1024283001 and 1024283901). The City of Dubuque plans to purchase these properties and to demolish the existing structures. The City would like to understand the environmental hazards which could present an obstacle to demolition and redevelopment activities. Therefore, the scope of this study was to identify major environmental concerns and potential major environmental concerns. The attached Photographs include equipment, building components, and ancillary occupant items which are not expressly discussed below. These photographs are included for the purpose of documentation of the current condition of the properties at the time of the site walk.

HR Green conducted a site walk on July 22, 2015. Mr. Al Blum accompanied HR Green for a portion of the site walk explaining that his family had owned and operated the properties as a junk yard since 1942. HR Green was able to access all floors in all buildings with the exception of the upstairs and basement of the converted house on the east side property; however, Mr. Blum stated that there was nothing upstairs, and the basement only had a couple of oxygen tanks and one acetylene tank used for oxy-acetylene welding and cutting. In addition, HR Green was unable to obtain access to four semi-trailers located on the west side property grounds. These semi-trailers are empty, according to one of Mr. Blum's workers. Based on the available information, HR Green does not believe that these exceptions represent major potential environmental concerns. A visual confirmation of actual contents of these areas is recommended at the time of demolition.

The conclusions and recommendations made in this report are drawn from a review of readily visible hazards at the Blum properties as well as from asbestos sampling completed to date.

Findings

Hazardous or potentially hazardous conditions noted during the site walk are discussed below and generally located on the attached map:

1. Seven to eight 76-pound steel flask shipping containers of liquid mercury were observed in the first-floor office space of the building on the 411 E. 15th St. property. One container was segregated from the others in the main office space, while the remaining six to seven containers were located in an adjacent storage room. The containers were observed to be corroded and rusty, and Mr. Blum reported that they are secured with a "finger-tight" seal. HR Green contacted the manufacturer of these containers (Bethlehem Apparatus) to obtain current storage and shipping specifications. According to the manufacturer, the containers should be free of external corrosion and rust with the bung screws securely fastened (see photos 1 and 2). The manufacturer indicated "finger-tight" bung screws and visible external container corrosion could indicate a dangerous situation where mercury vapor is off-gassing to the surrounding environment. Secondary containment and engineering controls to prevent personnel exposure were not present. Based on previous environmental site assessment records provided, interior mercury contamination has not been assessed on either property.
2. HR Green observed a large apparent chemical spill (likely petroleum-based hydraulic fluids) in the basement of the main office building located on the 411 E. 15th St. property. HR Green staff estimated the spill extent is at least 15' x 15', but the amount of other materials stored in the area prevented a more detailed assessment. According to Mr.

Blum, the on-going source of the spill is from the baler located on the first floor; this equipment has been in operation since 1968 until present day (see photos 6 and 7). It is not known if the hydraulic fluids used by this equipment contain hazardous components such as PCBs. Additionally, multiple suspected lead-acid batteries and at least one likely PCB transformer, all badly deteriorated, were located in the basement of the office building (see photos 5 and 8). No visible secondary containment was present. The owner commented that the basement had been flooded several times (the owner noted the flooding had reached the height of the 1st floor joists) and residual soil and other debris likely covered the entire basement cement floor. Based on previous environmental site assessment records provided, basement potential polychlorinated biphenyls (PCB), total petroleum hydrocarbon (TEH), semi-volatile organic compound (SVOC), and all RCRA metals contamination has not been assessed.

3. HR Green observed a large chemical spill (likely petroleum-based hydraulic fluids) on the fourth floor of the main office building located at 411 E. 15th Street (see photos 33 and 34). The spill appears to be connected with the abandoned compressor located nearby. It is not known if the hydraulic fluids used by this equipment contain hazardous components such as PCBs. Based on previous environmental site assessment records provided, this area has not been assessed for TEHs, RCRA Metals, or PCBs.
4. Throughout the site walk, HR Green observed several batteries. One large battery in particular was observed to be leaking onto the wood pallet it was placed on top of. This observation was located on the 501 E. 15th St. property (see photos 21 and 22). No visible secondary containment was present. Based on previous environmental site assessment records provided, this area has not been assessed for RCRA Metals or PCBs.
5. HR Green observed several areas of staining around the crusher and inside the control room located next to the crusher, as well as other equipment on the outside grounds located north of the main office building (see photos 10-13; 17-19). It is not known if the hydraulic fluids used by this equipment contain hazardous components such as PCBs. Based on previous environmental site assessment records provided, TEHs, arsenic, chromium, and lead have been assessed in several locations on the grounds. Based on previous environmental site assessment records provided, this area has not been assessed for other RCRA Metals or PCBs.
6. HR Green observed what appeared to be empty chemical drums located on the 411 E. 15th St. property (see photo 15). It is not known if residual chemicals remain in these drums or if any of the drums leaked. Based on previous environmental site assessment records provided, it appears likely that chemical contamination in this area has been assessed.
7. HR Green observed a smelter/incinerator located on the 501 E. 15th St. property. It is not known if residual contamination including lead, mercury, chromium, cadmium, or other heavy metals exists. Based on previous environmental site assessment records provided, it appears likely that residual contamination in this area has not been assessed.
8. A 500-1,000 gallon diesel fuel underground storage tank (UST) is present on the west side property. The area surrounding the UST is inaccessible due to piles of solid waste.

An asbestos survey was completed by Advanced Environmental Testing and Abatement on July 23, 2015 on the 501 E. 15th St. property. This included three buildings; building one is a converted residential house, the second building is a metal warehouse, and building three is a house converted into a storage building with a second floor. Nineteen (19) samples were collected and twenty-eight (28) samples were analyzed. Testing included roofing, window glazing, transite, brick mortar, caulking, and surfacing plaster.

The following samples tested positive (>1%) for asbestos:

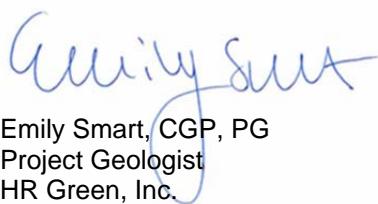
- Transite on building one and three (4,500 square feet)
- Tar on vent on building two (10 square feet)
- Window glazing on building three (20 each)
- Tar on flashing, by lean to by building one and three (50 square feet)

The asbestos assessment report is attached. An additional asbestos study will be completed on the 411 E. 15th St. property in the summer of 2016 following the removal of materials and debris from the property.

Recommendations

- **Pre-demolition:**
 - Mercury vapor air monitoring of the entire facility and physical removal of liquid mercury containers from property.
 - Obtain samples from areas containing potential TEH, RCRA Metals, SVOC, and PCB contamination. These areas include, but are not limited to, the basement and the fourth floor of the main office building. Should exceedances of Iowa DNR Statewide Standards be identified, appropriate TCLP analyses will be conducted to determine appropriate disposal methods.
 - Removal (facilitated by current owner) of concealed piles of generic solid waste located around the grounds.
 - Abatement of asbestos on the east side and west side (west side not yet assessed) properties.
 - Confirm contents of upstairs and basement of the converted house on the east side property (compressed oxygen tanks and acetylene tank, respectively).
 - Confirm contents (empty) of four semi-trailers located on the west side property grounds.
- **Post-demolition:**
 - Removal and sampling of the underground storage tank located on the property.
 - Additional (as needed) soil and groundwater sampling and analysis to quantify the nature and extent of contamination on the property. Specifically underneath building slabs, around building footings, and at locations on the grounds originally obscured by solid waste piles once removed and original grade is visible.
 - Obtain samples from areas containing potential lead and other metal contamination. These areas include, but are not limited to, the soil surrounding the smelter/incinerator equipment and battery storage area of the 501 E. 15th St. property.

Sincerely,



Emily Smart

Emily Smart, CGP, PG
Project Geologist
HR Green, Inc.



Scott Mattes

Scott Mattes, PE, CIH
Environmental Services Group Leader
HR Green, Inc.

Attachments:

- Hazardous or Potentially Hazardous Conditions Maps
- Photographs
- East Side Asbestos Survey



Legend

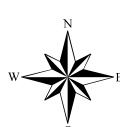
- ▲ Findings
- West Side Property
- East Side Property



Hazardous or Potentially Hazardous Conditions Map

Blum Properties

City of Dubuque
Dubuque County, Iowa



0 25 50 100 Feet





Photo 1 – View of mercury container in Mr. Blum's office.



Photo 2 –Close up view of mercury container.

Photographs

Blum Junk Yard Property
Dubuque, Iowa

Photographed:

07-22-2015





Photo 3 – Steam boiler wrapped in fiberglass insulation in basement in the main office building.



Photo 4 – View of physical state of basement in the main office building.

Photographs

Blum Junk Yard Property
Dubuque, Iowa

Photographed:

07-22-2015





Photo 5 – View of batteries located on the south side in basement of the main office building.



Photo 6 – View of large spill from the baler (main level) in basement of the main office building.

Photographs

Blum Junk Yard Property
Dubuque, Iowa

Photographed:

07-22-2015

HRG
HRGreen



Photo 7 – View of large spill from the baler (main level) in basement of the main office building.



Photo 8 – View of corroded transformer in basement of the main office building.

Photographs

Blum Junk Yard Property
Dubuque, Iowa

Photographed:

07-22-2015



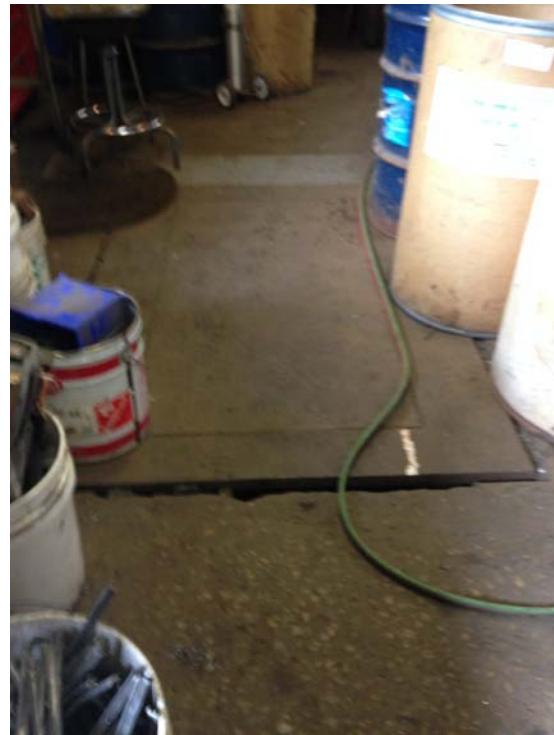


Photo 9 – View of scale on the main level (north side) of the main office building.

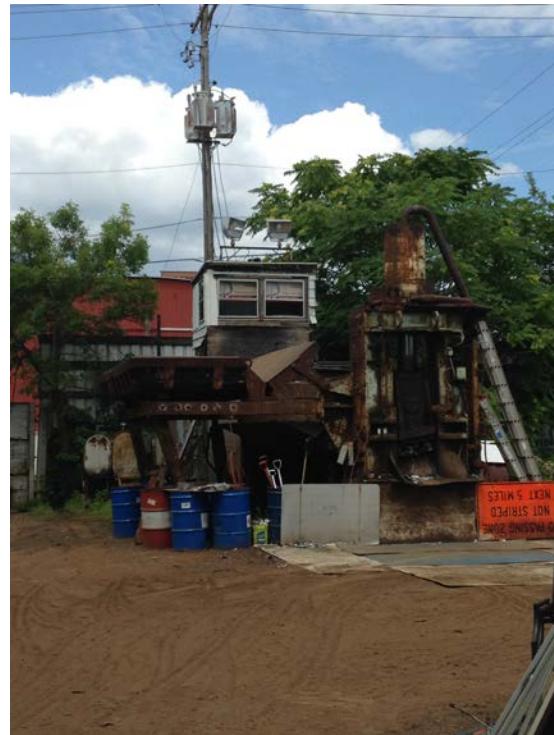


Photo 10 – View of crusher and operator building located on the grounds of the west side property.

Photographs

Blum Junk Yard Property
Dubuque, Iowa

Photographed:

07-22-2015





Photo 11 – View of staining under equipment located on the grounds of the west side property.



Photo 12 – View of staining under equipment located on the grounds of the west side property.

Photographs
Blum Junk Yard Property
Dubuque, Iowa

Photographed:
07-22-2015

HRG
HRGreen

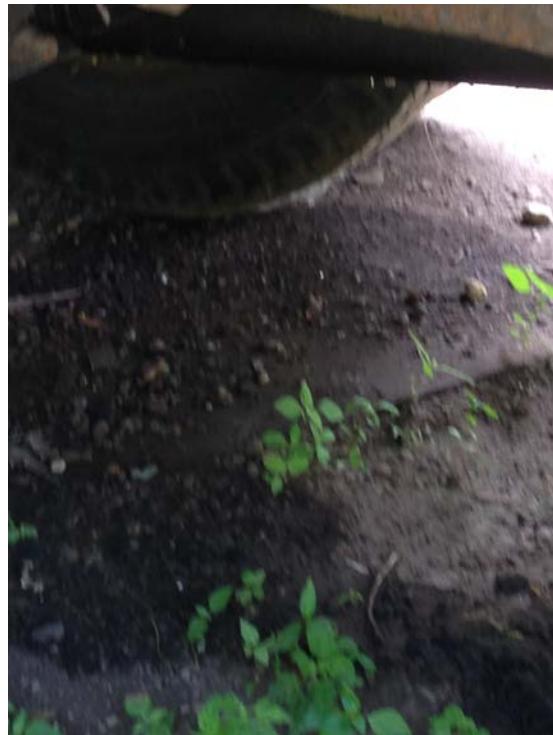


Photo 13 – View of staining under equipment located on the grounds of the west side property.



Photo 14 – View of sled full of unknown 55 gallon drums located on the grounds of the west side property.

Photographs

Blum Junk Yard Property
Dubuque, Iowa

Photographed:

07-22-2015

HRG
HRGreen



Photo 15 – View of diesel fuel tanks located on the northeast side of the grounds of the west side property.



Photo 16 – View of leaking used motors located on the north side of the grounds of the west side property.

Photographs

Blum Junk Yard Property
Dubuque, Iowa

Photographed:

07-22-2015

HRG
HRGreen



Photo 17 – View of inside the crusher control building located on the grounds of the west side property.



Photo 18 – View of staining under equipment located inside the control building on the grounds of the west side

Photographs

Blum Junk Yard Property
Dubuque, Iowa

Photographed:

07-22-2015





Photo 19 – View of two ASTs and staining located outside the control building on the grounds of the west side property.



Photo 20 – View of the general physical state of the grounds of the west side property.

Photographs

Blum Junk Yard Property
Dubuque, Iowa

Photographed:

07-22-2015

HRG
HRGreen



Photo 21 – View of staining under large battery located in the building on the east side property.



Photo 22 – View of pallet of batteries located in the building on the east side property.

Photographs

Blum Junk Yard Property
Dubuque, Iowa

Photographed:

07-22-2015





Photo 23 – View of 55-gallon drums labeled “contaminated Thermolyne” in the building on the east side property. Mr. Blum explained this as an industry term, rather than being indicative of environmental contamination



Photo 24 – View looking east-southeast at the west side property.

Photographs

Blum Junk Yard Property
Dubuque, Iowa

Photographed:

07-22-2015

HRG
HRGreen



Photo 25 –View looking east-southeast at the west side property.



Photo 26 – View of 55-gallon drums located on the second floor of the building on the west side property.

Photographs

Blum Junk Yard Property
Dubuque, Iowa

Photographed:

07-22-2015

HRG
HRGreen



Photo 27 – View of 55-gallon drums located on the second floor of the building on the west side property.



Photo 28 – View of the first floor of the building on the west side property.

Photographs

Blum Junk Yard Property
Dubuque, Iowa

Photographed:

07-22-2015





Photo 29 – View of staining located under a piece of equipment on the second floor of the building on the west side property.



Photo 30 – View of 5-gallon containers located in the building on the west side property (contents unknown).

Photographs

Blum Junk Yard Property
Dubuque, Iowa

Photographed:

07-22-2015





Photo 31 – View of colloidal silica located in several locations in the main office building on the subject property.



Photo 32 – View of steel slag located in several locations on the subject property.

Photographs

Blum Junk Yard Property
Dubuque, Iowa

Photographed:

07-22-2015





Photo 33 – Adjacent properties to the south of the subject property.



Photo 34 – Adjacent property to the west/southwest of the subject property.

Photographs

Blum Junk Yard Property
Dubuque, Iowa

Photographed:

07-22-2015



ASBESTOS INSPECTION REPORT

INSPECTION ADDRESS:

Commercial Building

501 East 15th St.

Dubuque, IA 52001

Project #: Y20715W



SUBMITTED TO:

HR Green

8710 Earhart Lane SW.

Cedar Rapids, IA 52404

Attn: Emily Smart

ASBESTOS INSPECTION

Prepared by:



Travis J. Haas, Inspector

7/30/2015
Date

15-39591
Inspector #

1/9/16
License Expiration date

Advanced Environmental Testing and Abatement
803 Ricker Street
Waterloo, Iowa 50703

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SECTION 1

INTRODUCTION

For each area of the building, the inspector performing the inspection did the following:

1. Visually inspected the area(s) to identify the locations of all suspect Asbestos Containing Building Materials.
2. Identify all homogeneous areas of friable and non-friable suspected asbestos.
3. Assume, if necessary, that some or all of the homogeneous area(s) are Asbestos Containing Material (ACM), and for each homogeneous area that is not assumed to be ACM, collect and submit bulk samples for analysis.

SECTION 2

DEFINITIONS:

HOMOGENEOUS AREA

An area which appears similar throughout in terms of color, texture, and date of material application.

SURFACING MATERIAL

Material in a building that is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

THERMAL SYSTEM INSULATION

Means material applied to pipes, fittings, boilers breeching, tanks ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or other purposes.

MISCELLANEOUS MATERIAL

Interior building material on structural components, structural members or fixtures, such as floor and ceiling tiles, and does not include surfacing material or thermal system insulation.

SAMPLING AND ANALYSIS

All samples to be analyzed by Polarized Light Microscopy (PLM). Analysis was performed in accordance with EPA 40 CFR, Part 763, Appendix A to Subpart F.

A homogeneous area was considered not to contain Asbestos Containing Material (ACM) only if the results of all samples collected from the area showed asbestos in the amounts of one (1) percent (%) or less (<1%). A homogeneous area contains ACM when one or more samples collected from that area shows greater than one (1) percent (%) asbestos (>1%).

FRIABLE

Any material containing more than one (1) percent (%) asbestos that, when dry can be crumbled, pulverized, or reduced to a powder by hand pressure.

NON-FRIABLE (CATEGORY I)

Asbestos containing packings, gaskets, resilient floor covering, and asphalt roofing products, containing more than one (1) percent (%) asbestos.

NON-FRIABLE (CATEGORY II)

Any excluding Non-Friable (Category I) Asbestos Containing Material, containing more than one (1) percent (%) asbestos.

SECTION 3

General Building Inspection Observations

The building inspection is conducted by a qualified and State of Iowa licensed Asbestos Inspector. The purpose of a building inspection is to identify existing building materials that are asbestos containing materials (ACM). If the inspection is conducted in an occupied building, the Inspector is sometimes denied accessibility to building areas and materials; i.e., the Inspector may not be allowed to cut through floor coverings or walls, remove quarry tiles, etc. There are many situations where ACM are concealed in wall cavities and other non-accessible areas, such as tunnels, crawl spaces, above ceilings, pipe chases, behind wall coverings, beneath debris piles, under various floor coverings, etc. When these situations occur in construction, renovation, and/or demolition, etc., materials in these areas shall be treated as ACM and handled as such by qualified and licensed asbestos personnel. If suspect asbestos containing material is discovered or damaged during the course of any activities, the material shall be considered and treated as ACM to diminish further fiber release. In addition, the Inspector uses an independent laboratory that analyzes the bulk building material samples using Polarized Light Microscopy (PLM). PLM analysis technique may not be as accurate as more expensive analysis techniques for certain building materials. It remains the Building Owner and/or Representative(s)' responsibility to address this issue and consider analyzing suspect building material using different analysis techniques prior to disturbing the material(s). The following are areas that may not be inspected.

1. **Tunnels and Crawl Spaces:** During the inspection process, the Inspector attempts to check tunnels and crawl spaces for ACM and the degree of damage to the materials. In most cases, quantification of ACM in these areas is impossible due to the inaccessibility to these areas. In addition, these areas may fall under: "Confined Space Regulations". Due to the congestion in tunnels and crawl spaces, obtaining an accurate quantification for mudded joints, pipe wrap, etc. is almost impossible. The Inspector will quantify ACM only in accessible tunnels and crawl spaces, and estimate the quantities in the inaccessible areas. Some reasons for inaccessibility are as follows: flooded areas, pipe congestion, asbestos and other debris, electrical hazards, confined spaces, unknown gas emissions, low ceilings, etc.
2. **Boilers and Thermal System Insulation:** Interior portions of boilers, heaters, storage tanks, etc. are not always accessible. Materials in these areas will be treated as ACM. Areas of concern are packing inside boiler doors and liners. Use extreme care and properly trained personnel when handling these types of materials. Some boilers have insulated metal jackets over fiberglass or ACM. Thermal system insulation can be found in many different forms; i.e., air cell, preformed magnesium block, millboard, etc. All fiberglass materials are excluded as suspect ACM.

3. **Debris:** In areas where damaged ACM may be found there may and usually will be ACM debris in the general area of the damaged material. These areas shall be treated with the utmost care even during the inspection and quantification process. The Inspector considers any exposure to this type of material as a health threat.
4. **State of Quantification:** As a general rule, individual rooms or areas of estimation contain inherently more probability of an error than those groups of rooms or areas or an entire building. In other words, the aggregate tends to be more accurate than the sums of the individual parts. Therefore, when designing response actions (measurements, air samples, etc.), the project designer and the asbestos abatement contractor's attention shall be given to ensure that quantification of materials and proper methods are followed through careful analysis of the site. If materials are quantified, the asbestos abatement contractor or owner, owner representatives or third parties are responsible for verifying the quantities.
5. **The Inspector** may take some latitude in the presentation of the Inspection Report. When the Inspector has found floor tiles, linoleum, and/or carpeting listed he/she may or may not have adhesives listed. Adhesives have been known to contain asbestos and therefore, although not mentioned, it may be presumed to be ACM, listed or not. Testing of the adhesive prior to disturbing is recommended. The same is true for adhesives or mastics used to adhere linoleum to floors or counter tops. All towed-on and/or sprayed-on surfacing materials; i.e., floor mastics, wall and ceiling surfacings, etc. are either suspected or presumed ACM unless sampled and analyzed to indicate that they are not ACM.
6. **In the Inspection Report**, certain items such as mudded joints (MJ) or metal doors (MD), etc. are listed as units or number of units; i.e. 10 MJ, 3 Damaged, which is an indication of count rather than square feet or linear feet. Most materials listed in the assessment are either listed as square feet or linear feet with these noted exceptions.
7. **In the Assessment Process**, there are additional codes such as ME and MG; ME representing miscellaneous electrical and MG representing miscellaneous gasket materials. Both of these codes are used to indicate materials that are unusual to the normal course of an assessment of the building. Miscellaneous electrical materials include old electrical wiring, switchboards, transite panels, etc. Miscellaneous gasket materials can be found between (thermal) valves, on boiler doors, between fittings, between molds, etc. These codes give the Inspector the ability to qualify materials, which sometimes may not be considered as ACM.
8. **An Asbestos Code Sheet** is included with the Inspector's inspection report, which informs the client as to the Homogeneous Codes used during the inspection process.
9. **Caution-** Regarding Inspection results- Floor tiles, adhesives, and drywall (mud) found to not contain asbestos should be re-analyzed under the "Chatfield Method" of TEM analysis. Many times the results from having these materials analyzed under PLM results in false positives or false negatives. After reviewing your report, please notify the inspector if you want these samples analyzed under the "Chatfield Method".

10. Any sample less than 10% asbestos may be Point Counted. Point counting is a more accurate method of analyzing of bulk samples. The results of the point counting are the results that will determine if the material will be treated as asbestos.
11. Asbestos inspections are performed based on current understanding of the regulations. As new interpretations of the regulations are made aware of by the EPA, IDNR or IOSHA, Advanced Environmental Testing and Abatement Inc. will adapt their inspections to comply with these new procedures. If additional sampling is required by the different agencies, Advanced Environmental will do the additional sampling. The owner is responsible for the additional cost for these samples as well as labor.
12. Advanced Environmental shall not be responsible for any cost of abating any additional asbestos discovered in any renovation or demolition activities. Any additional items discovered shall be tested when they become accessible. For example, old adhesive may be under new floor tiles and adhesive. Additional materials may be concealed in walls, under multi layers of flooring, etc.
13. All amounts listed are estimates. It is up to other contractors to field verify any amounts that are listed within this report.
14. All material that looks similar should be treated as asbestos containing materials.
15. Asbestos Material containing <1%. Some material tested for asbestos may contain trace amounts of asbestos and be below the threshold for asbestos contain material according to both the Iowa Department of Natural Resources and the Iowa Division of Labor. However, both the State of Iowa Division of Labor (Occupational Safety and Health Administration) and the Federal Occupational Safety and Health Administration still have some regulations that contractors must follow under 29 CFR 1926.1101. Contractors working with asbestos material with <1% asbestos must still produce a negative and initial exposure assessment, completed by a "competent person". Contractors must follow 29 CFR 1926. 1101 (g)(1)(ii) and (iii) and 29 CFR 1926. 1101(g)(3)(i), (ii), and (iv). Please contact Advanced Environmental Testing and Abatement, Inc for consultation on how to handle material with <1% asbestos.
16. Flat roofs: If any layer of a flat roof tests positive for asbestos, all layers should be considered asbestos and removed as such. Advanced Environmental makes every effort to core roof samples through all layers.

ASBESTOS CODES

A = Assumed	MJ = Muddled Joint
ADH = Adhesive	NC = Nose Cap
APW = Air Cell Pipe Wrap	NF = Non Friable
BP = Boiler Plaster	NSM = Not Suspect Material
C = Ceiling	P or PH = Previous History
CAPS = Stair Treads	PP = Patched Plaster/Drywall
CQ = Can't Quantify	PSA = Sand Plaster
CT = Ceiling Tiles	PSM = Smooth Plaster
CT/12 = 12" Ceiling Tiles	S = Sample/Samples/Sampled
DAM. = Damaged	SCT = Suspended Ceiling Tile
DEB = Debris	SR = Sample Result
DW = Drywall	ST = Storage Tank
F = Friable	SUR = Surfacing
FE = Furnace Exhaust	T = Thermal
FT = Floor Tiles	Thermal Pipe Measurement = Linear Feet
GASK = Gaskets	TR = Transite
GYM = Gypsum	TSI = Thermal System Insulation
HOMO = Homogeneous	VC = Vibration Cloth
LINO = Linoleum	VDW = Vinyl Covered Drywall
MISC = Miscellaneous Non Friable	W = Walls
MAC = Metal Asbestos Chimney	WD = Wood Door
MATL DESC = Material Description	N = North
MD = Metal Door	S = South
ME = Miscellaneous Electrical	E = East
MF = Miscellaneous Friable	W = West

1. All Metal Doors are listed by quantities, example 3 = 3 metal doors.
2. All Muddled Joints are listed by quantities of MJ, not sizes.
3. All Pipe Wrap materials are listed in linear feet.
4. All other measurements are square feet unless stated elsewhere.
5. Sample Results:
 - N = Not Considered Asbestos Containing Material
 - Y = Considered Asbestos Containing Material

P or PH = Previous History
N/A = Not Analyzed
<1% = Contains less than 1% Asbestos Containing Material
>1% = Contains more than 1% Asbestos Containing Material

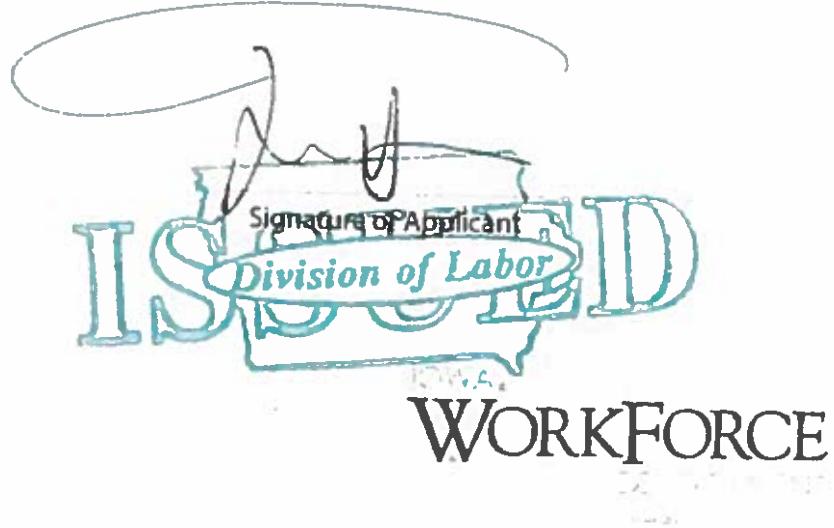
6. All Adhesives are considered Asbestos Containing Material (ACM) which can't be quantified - Non Friable ACM.
7. All Seals and Gaskets are considered Asbestos Containing Material (ACM) which can't be quantified – Non Friable ACM.

ASBESTOS LICENSE NO.: 15-39591



EXPIRATION DATE: 1/9/2016

NAME: TRAVIS HAAS
ADDRESS: 205 GENEVA CT
CITY STATE ZIP: FARLEY IA 52046



2015



OCCUPATIONAL TRAINING & SUPPLY, INC.

7233 S. Adams Street • Willowbrook, IL 60527 • (630) 655-3900

Asbestos Building Inspector Refresher

Occupational Training & Supply, Inc. certifies that

Travis Haas

has successfully completed the Asbestos Building Inspector Refresher course and has passed the competency exam with a minimum score of 70%. The course is accredited by the Wisconsin Department of Health Services for purposes of accreditation in accordance with requirements listed under CH.DHS159, Wisconsin Administrative Code; EPA 40 CFR 763, Asbestos Hazard Emergency response Act (AHERA) and TSCA Title II.

Location: 12304 75th Street Kenosha, WI 53142

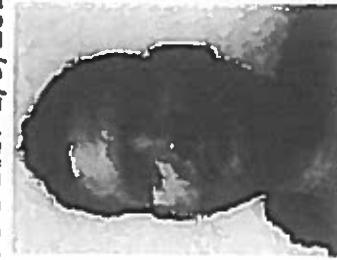
Certificate Number: BIRWI1501090066

Course Date: 1/9/2015

Exam Date: 1/9/2015

Expiration Date: 1/9/2016

Issue Date: 1/9/2015



A handwritten signature in black ink that reads 'Kathy DeSalvo'.

Kathy DeSalvo, Director

REPORT DATA

SECTION 6

BUILDING NAME: Commercial Building

INSPECTION AREAS: Interior and exterior

CLIENT CONTRACT: Judd Taylor: 319-464-2514

METHOD:

All samples are sent to EMC LABS, INC in Phoenix, Arizona. EMC LABS is accredited by the National Institute for Standards and Technology for Polarized Light Microscopy analysis under their NVLAP accreditation (NVLAP #: 101926-0). Sampling was completed by a State of Iowa licensed asbestos inspector, licensed with the Iowa Division of Labor. Sampling methods were based on National Emission Standards for Hazardous Air Pollutants (NESHAPS) protocols. Bulk samples of suspect asbestos containing material were analyzed by Polarized Light Microscopy (PLM).

OVERVIEW:

An asbestos inspection was conducted on July 23, 2015 at the property located at the above address. The area of inspection was multiple commercial buildings. Building one is a converted residential house that had the second floor gutted. The second building was a metal warehouse. Building three was a house converted into a storage building with a second floor. Complete sampling was completed on the interior and exterior of the building. Any material that will be disturbed that was not tested should be tested prior to disturbing it. A total of nineteen samples were collected and twenty-eight samples were analyzed including layered material. Samples can be categorized by miscellaneous, surfacing, and thermal. The following samples were taken of each:

Miscellaneous samples tested include:

- Roofing
- Window glazing
- Transite
- Brick mortar
- Caulking

Surfacing samples included:

- Plaster

Thermal samples include:

- No samples tested

SECTION 7

PROJECT SUMMARY

POSITIVE SAMPLE RESULTS:

The following samples tested positive (>1%) for asbestos:

- D-3: Transite on building one and three: 4,500 Sq. Ft.
- D-10: Tar on vent, green building #2: 10 Sq. Ft.
- D-13: Window glazing, building 3: 20 Each
- D-17: Tar on flashing, by lean to by building 1 and 3: 50 Sq. Ft.

The purpose of this inspection was to identify asbestos containing materials prior to renovation. The inspection entailed a visual assessment of the property for suspect asbestos containing materials, collection, and submittal of bulk samples for analysis.

In Iowa, asbestos activities are controlled by the Iowa Department of Natural Resources and Iowa Workforce Development Division of Labor.

Questions about testing and removal can be answered by:

Tom Wuehr: Iowa Department of Natural Resources, Air Quality Division: 515-281-8212:

Jeff Ellis: Iowa Workforce Development Division of labor at 515-281-5557

NOTES:

#1: Transite is on both building one and three under metal. Appears to be only on the top half of the building.

This report is a summary of the materials assumed to contain asbestos & samples confirmed to contain 1% asbestos or greater, their quantities, and locations.

SEE NEXT PAGE

Advanced Environmental Testing and Abatement Inc.
803 Ricker St

Facility Name/Site Location				Inspected By:
				Travis Haas
Sample No	Material	Color	Location	Results
Building 1 (West building)				
D-1	Shingle	Black	Shingle on roof covered by tin.	0%, 0%
D-2	Glazing	White	Window glazing taken on rear of building, up high.	0%
D-3	Transite	Grey	Transite, exterior of building on upper half, under metal.	15%
D-4	Asphalt siding	Brown	Behind metal, siding on lower half of building.	0%, 0%
D-5	Plaster	Interior	Plaster interior building 1 interior	0%, 0%
D-6	Plaster	Interior	Plaster interior building 1 interior	0%, 0%
D-7	Mortar	Grey	Brick mortar on chimney interior of shop.	0%
D-8	Liner	Black	Liner inside chimney.	0%
Green Building (North Building)				
D-9	Caulking	White	Caulking on West side roof seam.	0%
D-10	Tar	Black	Tar on vent, East side	2%
D-11	Caulking	Red	Caulking on front door on concrete.	0%
Building 3 (East building)				
D-12	Roofing	Black	Roofing under metal.	0%, 0%
D-13	Glazing	White	Window glazing, white taken from 1st floor.	3%
D-14	Plaster	Grey	Plaster interior.	0%, 0%, 0%
D-15	Plaster	Grey	Plaster interior.	0%, 0%
D-16	Plaster	Grey	Plaster interior, 2nd floor.	0%, 0%
Lean to between buildings				
D-17	Tar	Black	Tar on South lean to, flashing where building it meets building 1 and 3.	10%
D-18	Caulking	Clear	Caulking on aluminum melt vent on lean to, roof between building 3 and Green building.	0%
D-19	Tar	Black	Tar on lean to, roof between building 3 and green building ice stops.	0%

EMC LABS, INC.

9830 S. 51st Street, Suite B109, Phoenix, AZ 85044
Phone: 800-362-3373 or 480-940-5294 - Fax: (480) 893-1726

Laboratory Report
0158446

Bulk Asbestos Analysis by Polarized Light Microscopy

NVLAP#101926-0

Client: ADVANCED ENVIRONMENTAL Job# / P.O. #: Y20715W
Address: 803 RICKER ST Date Received: 07/28/2015
WATERLOO IA 50703 Date Analyzed: 07/29/2015
Collected: 07/27/2015 Date Reported: 07/29/2015
Project Name: HR GREEN PROPERTY EPA Method: EPA 600/R-93/116
Address: Submitted By: TRAVIS HAAS
Collected By:

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents	
0158446-001 D-1	BLDG 1 (W. BLDG)- ON ROOF COVERED BY TIN	LAYER 1 Shingle, Black	No	None Detected	Cellulose Fiber Synthetic Fiber Gypsum Quartz Binder/Filler	15% 5% 80%
		LAYER 2 Shingle, Red/ Black	No	None Detected	Cellulose Fiber Synthetic Fiber Gypsum Carbonates Quartz Binder/Filler	15% 5% 80%
0158446-002 D-2	BLDG 1 (W. BLDG)- ON REAR OF BLDG, UP HIGH	Glazing, White	No	None Detected	Carbonates Quartz Binder/Filler	100%
0158446-003 D-3	BLDG 1 (W. BLDG)- EXT. OF BLDG ON UPPER HALF, UNDER METAL	Transite, Gray	Yes	Chrysotile 15%	Carbonates Gypsum Quartz Binder/Filler	85%
0158446-004 D-4	BLDG 1 (W. BLDG)- BEHIND METAL, SIDING ON LOWER HALF OF BLDG	LAYER 1 Asphalt Siding, Red/ Black	No	None Detected	Cellulose Fiber Gypsum Carbonates Quartz Binder/Filler	15% 85%
		LAYER 2 Asphalt Siding, Brown/ Black	No	None Detected	Cellulose Fiber Gypsum Binder/Filler	80% 20%

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Collected By:

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents	
0158446-005 D-5	BLDG 1 (W. BLDG)- INT. BLDG, 1 INTERIOR	LAYER 1 Plaster-Scratch Coat, Beige	No	None Detected	Hair	<1%
					Gypsum Quartz Mica Carbonates Binder/Filler	99%
		LAYER 2 Plaster-Finish Coat, White	No	None Detected	Carbonates Gypsum Mica Quartz Binder/Filler	100%
0158446-006 D-6	BLDG 1 (W. BLDG)- INT. BLDG, 1 INTERIOR	LAYER 1 Plaster-Scratch Coat, Beige	No	None Detected	Hair	<1%
					Gypsum Quartz Mica Carbonates Binder/Filler	99%
		LAYER 2 Plaster-Finish Coat, White	No	None Detected	Cellulose Fiber	<1%
					Carbonates Gypsum Quartz Mica Binder/Filler	99%
0158446-007 D-7	BLDG 1 (W. BLDG)- ON CHIMNEY INTERIOR OF SHOP	Mortar, Gray	No	None Detected	Carbonates Quartz Gypsum Mica Binder/Filler	100%

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Address: Submitted By: TRAVIS HAAS
Collected By:

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents	
0158446-008 D-8	BLDG 1 (W. BLDG)- INSIDE CHIMNEY	Liner, Black/ Brown	No	None Detected	Quartz Carbonates Gypsum Mica Binder/Filler	100%
0158446-009 D-9	GREEN BLDG (N. BLDG)-W. SIDE ROOF SEAM	Caulking, White	No	None Detected	Silicone Carbonates Binder/Filler	100%
0158446-010 D-10	GREEN BLDG (N. BLDG)-E. SIDE	Tar, Black	Yes	Chrysotile 2%	Cellulose Fiber Carbonates Gypsum Quartz Binder/Filler	10% 88%
0158446-011 D-11	GREEN BLDG (N. BLDG)-FRONT DOOR ON CONCRETE	Caulking, Red/ White	No	None Detected	Carbonates Quartz Binder/Filler	100%
0158446-012 D-12	BLDG 3 (E. BLDG)- UNDER METAL	LAYER 1 Roofing, Black	No	None Detected	Cellulose Fiber Synthetic Fiber Carbonates Quartz Binder/Filler	15% 5%
		LAYER 2 Roofing, Black	No	None Detected	Cellulose Fiber Synthetic Fiber Carbonates Gypsum Quartz Binder/Filler	40% 5%
						55%

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Collected By:

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents	
0158446-013 D-13	BLDG 3 (E. BLDG)- FROM 1ST FL	Glazing, White	Yes	Chrysotile 3%	Carbonates Quartz Binder/Filler	97%
0158446-014 D-14	BLDG 3 (E. BLDG)- INTERIOR	LAYER 1 Plaster-Scratch Coat, Gray	No	None Detected	Hair Gypsum Quartz Mica Carbonates Binder/Filler	<1% 99%
		LAYER 2 Plaster-Finish Coat, White	No	None Detected	Carbonates Gypsum Quartz Mica Binder/Filler	100%
		LAYER 3 Wall Covering, White / Tan	No	None Detected	Cellulose Fiber Carbonates Binder/Filler	80% 20%
0158446-015 D-15	BLDG 3 (E. BLDG)- INTERIOR	LAYER 1 Plaster-Scratch Coat, Gray	No	None Detected	Hair Carbonates Quartz Gypsum Mica Binder/Filler	<1% 99%
		LAYER 2 Plaster-Finish Coat, White	No	None Detected	Cellulose Fiber Carbonates Gypsum Quartz Mica Binder/Filler	<1% 99%

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Collected By:

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents	
0158446-016 D-16	BLDG 3 (E. BLDG)- INTERIOR-2ND FL	LAYER 1 Plaster-Scratch Coat, Gray	No	None Detected	Hair Carbonates Quartz Gypsum Mica Binder/Filler	<1% 99%
		LAYER 2 Plaster-Finish Coat, White	No	None Detected	Cellulose Fiber Carbonates Gypsum Mica Quartz Binder/Filler	<1% 99%
0158446-017 D-17	LEAN TO BTWN BLDG-S. LEAN TO, FLASHING WHERE BLDG IT MEETS BLDG 1 & 3	Tar, Black	Yes	Chrysotile 10%	Carbonates Binder/Filler	90%
0158446-018 D-18	ON ALUM. MELT VENT ON LEAN TO, ROOF BTWN BLDG 3 & GREEN BLDG	Caulking, Clear	No	None Detected	Silicone Binder/Filler	100%
0158446-019 D-19	ON LEANT TO, ROOF BTWN BLDG 3 & GREEN BLDG ICE STOPS	Tar, Black	No	None Detected	Carbonates Quartz Binder/Filler	100%

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Project Name:	HR GREEN PROPERTY	EPA Method:	EPA 600/R-93/116
Address:		Submitted By:	TRAVIS HAAS
		Collected By:	

Lab ID Client ID	Sample Location	Layer Name / Sample Description	Asbestos Detected	Asbestos Type (%)	Non-Asbestos Constituents
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K - S

Analyst - Kenneth Scheske

Kurt Kettler

Signatory - Lab Director - Kurt Kettler

Distinctly stratified, easily separable layers of samples are analyzed as subsamples of the whole and are reported separately for each discernible layer. All analyses are derived from calibrated visual estimate and measured in area percent unless otherwise noted. The report applies to the standards or procedures identified and to the sample(s) tested. The test results are not necessarily indicative or representative of the qualities of the lot from which the sample was taken or of apparently identical or similar products, nor do they represent an ongoing quality assurance program unless so noted. These reports are for the exclusive use of the addressed client and that they will not be reproduced wholly or in part for advertising or other purposes over our signature or in connection with our name without special written permission. The report shall not be reproduced except in full, without written approval by our laboratory. The samples not destroyed in testing are retained a maximum of thirty days. The laboratory measurement of uncertainty for the test method is approximately less than 1 by area percent. Accredited by the National Institute of Standards and Technology, Voluntary Laboratory Accreditation Program for selected test method for asbestos. The accreditation or any reports generated by this laboratory in no way constitutes or implies product certification, approval, or endorsement by the National Institute of Standards and Technology. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. Polarized Light Microscopy may not be consistently reliable in detecting asbestos in floor coverings and similar non-fibrous organically bound materials.

SECTION 8

JOB#:

Y20715W

NAME:

HR Green: Commercial Property



D-3: Transite siding under metal, top half of buildings.



D-13: Window glazing, building 3 (towards river)



D-17: Tar on lean to flashing to building one and three.



D-17: Tar on lean to flashing to building 3, on metal and transite