

December 21, 2018

Ms. Roxanne Case Grant Manager Ingham County Land Bank 3024 Turner Street Lansing, Ingham County, Michigan 48906

Re: Pre-Renovation Regulated Materials Survey

1130 Farrand St., Lansing, Ingham County, MI

Dear Ms. Case:

The Mannik & Smith Group, Inc. (MSG) is pleased to present Ingham County with the results of the limited prerenovation regulated materials survey (RMS) performed at 1130 Farrand St., Lansing, Ingham County, Michigan (hereinafter referred to as the "Site") by Kory McKay (Accreditation Number A47903).

SUMMARY

Building Information			
Property Address	1130 Farrand St., Lansing MI		
Parcel #	33-01-01-10-328-051		
No. Stories	2		
Square Footage (approx.)	900 SF		
Siding	Wood		
Basement	Yes		
Garage	Yes		



Asbestos Containing Material							
Location Material Group Friable/Non Friable Asbestos Quanti							
RM-1, RM-2, Basement	Vent Wrap	Non Friable	60% Chrysotile	50 SF			
Basement Window Glaze		Non Friable	2% Chrysotile	50 SF			

Universal Waste Inventory							
Location Material Description Quantity							
Garage, Exterior, Basement	Tire	22					
RM-2, RM-7, RM-5, Basement	Computer	5					
RM-7, RM-1, RM-3	Tv	5					
RM-2	Thermostat	1					
Basement	Large Speaker	2					
RM-6, Basement	Smoke Detector	2					

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Other Regulated Materials Inventory						
Location	Location Material Description					
RM-7,Basement	Space heater	2				

Hazardous Materials					
Location Material Description Quantity					
RM-5	14.1oz Propane Tank	1			
RM-3, Basement	1 Gallon Paint Can	10			
Basement	1 Gallon Paint Thinner	3			

PURPOSE AND SCOPE OF WORK

The purpose of the RMS was to identify, quantify and document the location of regulated materials that may be encountered during renovation of the on-site structure. To accomplish this purpose, MSG performed the following scope of work:

- 1) Pre-renovation asbestos-containing material (ACM) survey.
- 2) Universal wastes, hazardous materials, and other regulated wastes survey.

METHODOLOGIES

The RMS was conducted on December 10, 2018. Methodologies employed during the completion of each task of the RMS are detailed below.

ACM Survey Procedures

The ACM survey was performed in general accordance with guidelines set forth in the Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) 763. The National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations govern demolition and renovation activities in which asbestos is present. The NESHAP rule distinguishes between Regulated Asbestos-Containing Materials (RACM) that would readily release asbestos fibers when damaged or disturbed and those materials that are unlikely to result in significant fiber release during renovation activities. The purpose of this survey is to determine if ACM within the Site building are RACM and thus, subject to the NESHAP, and to comply with the Michigan Occupational Safety and Health Administration (MIOSHA) and guidelines set forth in the Occupational Safety and Health Administration (OSHA) Regulations Standards 29 CFR 1910.1101.

RACM, as defined by NESHAP, is classified into four parts, (1) friable asbestos material, (2) Category I non-friable ACM (packing, gaskets, floor tile and roofing products) that has become friable, (3) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (4) Category II non-friable ACM (all other ACM products) that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

The suspect ACM identified during this survey was grouped into homogeneous materials (i.e. similar materials which are uniform in color and texture) and:

- Described and quantified it in linear feet (LF) or square feet (SF);
- Identified and classified as friable or non-friable;
- Assessed as being in good, fair or poor condition;
- Assigned an EPA classification type (surfacing material, thermal system insulation or miscellaneous);
- Classified as RACM or non-RACM; and
- Sampled, or identified as presumed ACM (PACM).

MSG performed services associated with the ACM survey in conformance with the care and skill ordinarily used by other reputable environmental consulting firms practicing under similar conditions, at the same time, and in the same or similar locality. The ACM survey included a systematic visual inspection of readily accessible areas of the Site building. Destructive sampling methods were used and suspect ACM samples were collected by State of Michigan Accredited Asbestos Inspector, Kory McKay (Accreditation Number A47903). Based on the quantity of each classification of material, MSG collected samples of each suspect ACM in accordance with EPA guidelines.

Universal Wastes and Hazardous Material Survey Procedures

MSG identified and inventoried universal wastes and hazardous materials by a visual reconnaissance of the Site. Materials were identified, described, and quantified to the extent possible; however, no equipment or containers were opened and/or sampled as part of this survey.

A hazardous material, as defined in OSHA 29 CFR 1910.1200, is any item or chemical which is a "health hazard" or "physical hazard", including the following:

- Chemicals that are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, hepatotoxins, nephrotoxins, neurotoxins, agents that act on the hematopoietic system, and agents that damage the lungs, skin, eyes, or mucous membranes;
- Chemicals that are combustible liquids, compressed gases, explosives, flammable liquids, flammable solids, organic peroxides, oxidizers, pyrophorics, unstable (reactive) or water-reactive;
- Chemicals that, in the course of normal handling, use or storage, may produce or release dusts, gases, fumes, vapors, mists or smoke which have any of the above characteristics; and
- Any item or chemical which, when being transported or moved, is a risk to public safety or an
 environmental hazard, and is regulated as such by one or more of the following:
 - o DOT Department of Transportation; Hazardous Materials Regulations (49 CFR 100-180);
 - IMO International Maritime Organization; International Maritime Dangerous Goods (IMDG)
 Code;
 - o IATA International Air Transport Association; Dangerous Goods Regulations;
 - o ICAO International Civil Aviation Organization; Technical Instructions; and
 - AF Air Force "INTERSERVICE" Manual, Preparing Hazmat for Military Air Shipments (AFMAN 24-204).

Hazardous materials may also include:

- Any item or chemical listed in the United States Environmental Protection Agency (USEPA) *List of Hazardous Substances and Reportable Quantities*, dated September 1992.
- Noticeable as inventory under the reporting requirements of the Hazardous Chemical Reporting (40 CFR Part 302).
- An environmental release under the reporting requirements of the Toxic Chemical Release Reporting: Community Right To Know (40 CFR Part 372) or under Part 201, Environmental Remediation of the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 201) and Part 213, Leaking Underground Storage Tanks (Part 213).

These would include chemicals with special characteristics which, in the opinion of the manufacturer, can cause harm to people, plants, or animals when released by spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other receptacles).

Universal wastes are waste that comes primarily from consumer products containing mercury, lead, cadmium or other substances that are hazardous to human health and the environment. These items cannot be discarded in household trash nor disposed of in landfills but have less stringent handling and disposal requirements than hazardous waste streams. In Michigan, universal wastes are regulated by the MDEQ Office of Waste Management and Radiological Protection under Part 111 of Act 451 and the federal

Resource Conservation and Recovery Act (RCRA) of 1976 under 40 CFR Part 273. Universal waste is also regulated by the US Department of Transportation (US DOT) under 49 CFR Parts 171 through 180. Most of the universal waste requirements overseen by the DEQ are addressed by R 299.9228 of Part 111 of 1994 P.A. 451, as amended and 40 CFR Part 273. These regulations are designed to encourage proper collection, recycling, treatment, or disposal of these wastes.

Examples of universal waste are mercury-containing equipment (e.g. thermostats, barometers, manometers, temperature and pressure gauges, and mercury switches), nickel-cadmium and spent lead-acid batteries, lamps (e.g. incandescent, fluorescent, high intensity discharge, neon, mercury vapor, and high pressure sodium and metal halide), pesticides, polychlorinated biphenyl (PCB) containing transformers and light ballasts, stored chemical and/or petroleum products, etc. In Michigan, Part 111 also includes pharmaceutical and consumer electronics as additional types of universal wastes.

Other Regulated Materials

This RMS also included identifying and inventorying other regulated materials which may pose physical or chemical concerns during renovation of the Site building(s) including chlorofluorocarbon (CFC) containing devices, tanks, vessels, equipment, and building materials that may contain or become contaminated with hazardous materials.

Specifically, CFC containing devices are regulated Under Title VI of the Clean Air Act (CAA). The Stratospheric Protection Division of the EPA manages programs protecting the stratospheric ozone layer. Title 40, Part 82 of the Code of Federal Regulations contains the EPA regulations protecting the ozone layer. The RMS survey of the premises identified and quantified any CFC containers and CFC containing equipment, which could include the following:

- Drinking fountains, air conditioners, refrigerators
- Air conditioners in control panels and other process equipment
- Water and air chillers
- Roof top and stand-alone air conditioners
- Cafeteria equipment: freezers, walk-in coolers/freezers
- CFC canisters and cylinders

In Michigan, underground storage tanks are regulated under the authority of Part 211, Underground Storage Tank Regulations, of Act 451 of 1994, as amended, and the Michigan Underground Storage Tank Rules (MUSTR). Therefore, this survey included whether any evidence of underground storage tanks and related piping and dispensers were present at the Site.

MSG also surveyed for the presence of equipment, other storage tanks, and materials that may contain or be contaminated by regulated chemicals. These include, but may not be comprehensive of:

- Above ground storage tanks
- Oil-containing equipment (hydraulic equipment, blowers, fans, motors, elevators, compressors, etc.)
- Fire brick
- Contaminated building materials (concrete, block walls, wood, plaster, etc.) with staining, odor or other signs of a hazardous chemical release

SURVEY RESULTS

The following subsections include a discussion of the RMS results. Photographs of the residence are located in the *Attachment A, Photo Log.* The results of this report are valid as of the report date, subject to the limitations presented in *Attachment B. Limitations*.

ACM Survey Results

MSG identified eleven (11) homogenous materials that were suspect as asbestos containing during the ACM survey. Twenty seven (27) bulk samples were collected from these suspect homogeneous materials and were submitted to Mannik & Smith Group Analytical Laboratories (MSGAL) for laboratory analysis of Bulk Materials by Polarized Light Microscopy using USEPA Method 600/R-93/116. MSGAL is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) to analyzed bulk samples for asbestos content. Of the aforementioned suspect homogenous materials identified during this ACM survey, laboratory analysis found two (2) homogenous materials (samples 5-1 and 9-1) contained greater than 1% asbestos.

A point-count quantification procedure (PCQM) allows for lower detection limits than calibrated visual estimation (CVES), which is the quantification method widely used in asbestos analysis via Polarized Light Microscopy (PLM). If the asbestos content is found to contain less than 10% asbestos as determined by a method other than point counting by PLM, it can only be treated as non-ACM if verified to contain less than 1% by the PCQM. If not point-counted, the sample must be assumed to be greater than 1% and thus considered and treated as ACM. It is MSG's experience that point counting samples with an estimated PLM asbestos content of more than 3% does not yield significantly different analytical results. One sample (9-1) was point count confirmed.

Suspect ACM sample locations are depicted on the attached figure. See *Table 1, Asbestos Sampling Results* for a listing of homogeneous materials identified by MSG during this survey. A copy of the analytical reports including chains of custody is attached in *Attachment C, Analytical Reports and Chains of Custody*.

Universal Wastes, Hazardous Materials, and Other Regulated Materials Survey Results

Universal wastes, hazardous materials, and/or other regulated materials wastes were identified within the Site building. Quantities identified are provided in *Table 2, Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory.*

CONCLUSIONS AND RECOMMENDATIONS

Asbestos Containing Materials

Of the eleven (11) homogenous materials collected as part of the ACM survey, two (2) homogenous materials contained asbestos greater than 1% (samples 5-1 and 9-1) with these two (2) homogenous materials being classified as RACM. All materials containing ACM must be disposed of in a licensed landfill.

Prior to renovation, a notification of intent to demolish shall be made to the Michigan Department of Environmental Quality Air Quality Division (MDEQ-AQD) and Licensing and Regulatory Affairs (LARA), Asbestos Program. Notification, according to the procedure described by the NESHAP, Title 40 of the Code of Federal Regulations, Part 61, Subpart M, Notification, for renovation and demolition projects should be followed. A copy of this notification form is provided in *Attachment D, Notification of Intent to Renovate/Demolish*. This form shall be completed by the contractor who completes the renovation.

If additional suspect ACMs are discovered during renovation activities in areas that were determined during this survey to be structurally unsound and unsafe, inaccessible, concealed and/or in buried areas, shall be surveyed, tested, and abated if warranted. If suspect ACMs are determined to be RACM that would be disturbed during renovation activities, the RACM must be properly removed by a licensed asbestos abatement contractor.

Category I and Category II Non-Friable ACM may often be left in place during renovation activities if the ACM is not subjected to sanding, grinding, cutting, or abrading or has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material during the course of renovation.

Universal Wastes, Hazardous Materials, and Other Regulated Materials

The universal waste, hazardous materials, and other regulated materials (see Table 2) must be properly characterized (as necessary) and properly removed from the Site building for recycling and/or disposed of in accordance with Parts 111, 115, or 147 of Michigan Public Act 451 of 1994, as amended. If additional universal wastes, hazardous materials, and other regulated materials are discovered during renovation activities in areas that were determined during this survey to be structurally unsound and unsafe, inaccessible, concealed and/or in buried areas, these materials shall be characterized (as necessary) and properly removed in accordance with the above-mentioned regulations.

If you have any questions or concerns regarding the above information please contact us at 517-316-9232.

Sincerely,

Kory McKay

Environmental Scientist

Accreditation Number A47903

Charlie Bush

Senior Project Manager

Accreditation Number A34293

Attachments

FIGURE



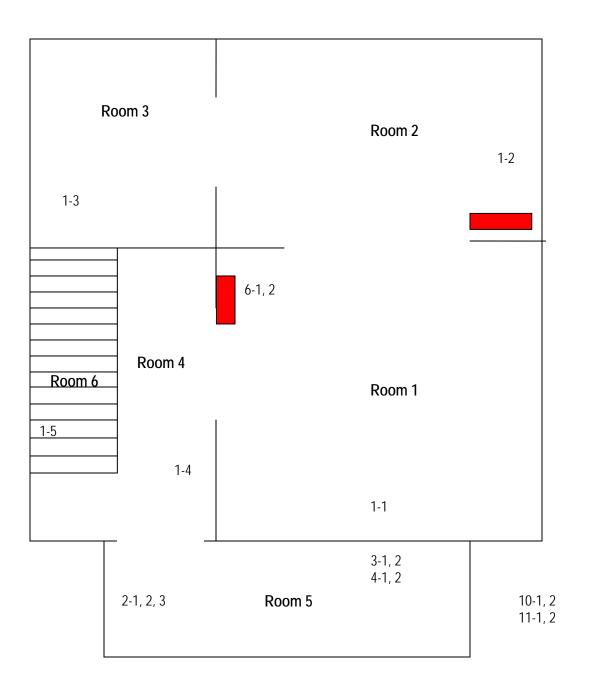
TECHNICAL SKILL.

721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com

Address: 1130 Farrand Street Date: December 10, 2018

Drawing not to scale

1st Floor



Vent Wrap (50 SF total)



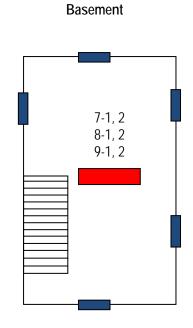
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Address: 1130 Farrand Street Date: December 10, 2018

Drawing not to scale

2nd Floor Room 9 Room 8 6-1, 2



TABLES

TABLE 1
Asbestos Sampling Results

Client Ingham County Land Bank Authority										
Survey Loc	ation	1130 Farrand St								
Survey Da Functional Area	ate Floor	December 10	, 2018 HM #	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
RM-1	1	AS 1-1	HA-1	Plaster	Non-Friable	Good	Miscellaneous	No	No	2300 SF
RM-2	1	AS 1-2	HA-1	Plaster	Non-Friable	Good	Miscellaneous	No	No	2300 SF
RM-3	1	AS 1-3	HA-1	Plaster	Non-Friable	Good	Miscellaneous	No	No	2300 SF
RM-4	1	AS 1-4	HA-1	Plaster	Non-Friable	Good	Miscellaneous	No	No	2300 SF
RM-6	1	AS 1-5	HA-1	Plaster	Non-Friable	Good	Miscellaneous	No	No	2300 SF
RM-5	1	AS 2-1	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	450 SF
RM-5	1	AS 2-2	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	450 SF
RM-5	1	AS 2-3	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	450 SF
RM-5	1	AS 3-1	HA-3	Window Glaze	Non-Friable	Good	Miscellaneous	No	No	215 SF
RM-5	1	AS 3-2	HA-3	Window Glaze	Non-Friable	Good	Miscellaneous	No	No	215 SF
RM-3	1	AS 4-1	HA-4	White 12x12	Non-Friable	Good	Miscellaneous	No	No	90 SF
RM-3	1	AS 4-2	HA-4	White 12x12	Non-Friable	Good	Miscellaneous	No	No	90 SF
RM-1	1	AS 5-1	HA-5	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	60% Chrysotile	50 SF
RM-1	1	AS 5-2	HA-5	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	NA	50 SF
Basement	В	AS 5-3	HA-5	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	NA	50 SF
RM-8	2	AS 6-1	HA-6	Blue 12x12	Non-Friable	Good	Miscellaneous	No	No	50 SF
RM-8	2	AS 6-2	HA-6	Blue 12x12	Non-Friable	Good	Miscellaneous	No	No	50 SF
Basement	В	AS 7-1	HA-7	Stack Cement	Non-Friable	Good	Miscellaneous	No	No	5 SF

TABLE 1
Asbestos Sampling Results

Client										
Survey Location 1130 Farrand St										
Survey Da	ate	December 10,	2018							
Functional Area	Floor	Sample ID	HM#	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
Basement	В	AS 7-2	HA-7	Stack Cement	Non-Friable	Good	Miscellaneous	No	No	5 SF
Basement	В	AS 8-1	HA-8	Basement Concrete floor	Non-Friable	Good	Miscellaneous	No	No	350 SF
Basement	В	AS 8-2	HA-8	Basement Concrete floor	Non-Friable	Good	Miscellaneous	No	No	350 SF
Basement	В	AS 9-1	HA-9	Basement Window Glaze	Non-Friable	Good	Miscellaneous	Yes	2% Chrysotile	50 SF
Basement	В	AS 9-2	HA-9	Basement Window Glaze	Non-Friable	Good	Miscellaneous	Yes	NA	50 SF
Exterior	Е	AS 10-1	HA-10	Siding underlayment	Non-Friable	Good	Miscellaneous	No	No	2500 SF
Exterior	Е	AS 10-2	HA-10	Siding underlayment	Non-Friable	Good	Miscellaneous	No	No	2500 SF
Roof	E	AS 11-1	HA-11	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	2700 SF
Roof	Е	AS 11-2	HA-11	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	2700 SF

Table 2 Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory 1130 Farrand St.

Lansing, Ingham County, Michigan

	Universal Waste Inventory						
Location	Type of Waste	Approximate Quantity					
Garage, Exterior, Basement	Tire	22					
RM-2, RM-7, RM-5, Basement	Computer	5					
RM-7, RM-1, RM-3	Tv	5					
RM-2	Thermostat	1					
Basement	Large Speaker	2					
RM-6, Basement	Smoke Detector	2					
Ha	azardous Materials Inventory						
Location	Type of Waste	Approximate Quantity					
RM-5	14.1oz Propane Tank	1					
RM-3, Basement	1 Gallon Paint Can	10					
Basement	1 Gallon Paint Thinner	3					
Other Regulated Materials Inventory							
Location	Type of Waste	Approximate Quantity					
RM-7,Basement	Space heater	2					

ATTACHMENT A PHOTO LOG

Ingham County Land Bank 1130 Farrand St, Lansing, MI Photographs taken by: Kory McKay on 12/10/2018

Property Photos



1130 Farrand St, Front of House



Back of House



Side of House



Side of House

Ingham County Land Bank 1130 Farrand St, Lansing, MI Photographs taken by: Kory McKay on 12/10/2018

Samples



Sample ID: AS 1-1 Location: RM-1 Notes: Plaster



Sample ID: AS 5-3 Location: Basement Notes: Vent Wrap



Sample ID: AS 2-1 Location: RM-5 Notes: Drywall



Sample ID: AS 9-1 Location: Basement Notes: Basement Window Glaze



Sample ID: AS 5-1 Location: RM-1 Notes: Vent Wrap



Sample ID: AS 3-1 Location: RM-5 Notes: Window Glaze

Ingham County Land Bank 1130 Farrand St, Lansing, MI Photographs taken by: Kory McKay on 12/10/2018

Samples



Sample ID: AS 4-1 Location: RM-3 Notes: White 12x12 Tile



Sample ID: AS 8-1 Location: Basement Notes: Basement Floor



Sample ID: AS 6-1 Location: RM-8 Notes: Blue 12x12 Tile



Sample ID: AS 10-1 Location: Exterior Notes: Siding Underlayment



Sample ID: AS 7-1 Location: Basement Notes: Stack Cement



Sample ID: AS 11-1 Location: Roof Notes: Roof Shingle

ATTACHMENT B LIMITATIONS



REGULATED MATERIALS SURVEY LIMITATIONS

The Mannik & Smith Group, Inc. (MSG) performed its services associated with this Regulated Materials Survey (RMS) in general accordance with guidelines set forth in the Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) 763, Occupational Safety and Health Administration (OHSA) 29 CFR 1926.62, and in conformance with the care and skill ordinarily used by other reputable environmental consulting firms practicing under similar conditions, at the same time, and in the same or similar locality. This RMS and related documentation are site-specific, which means they pertain to the conditions of the site surveyed.

Unless otherwise noted, MSG's RMS is limited to accessible areas. Areas determined to be not structurally sound, safely reached, limited by excessive accumulated obstructions, require specialized equipment to access, in operable windows, etc., are not included in this survey. There may be areas where regulated materials, such as suspected asbestos-containing materials (SACM) and lead containing paint cannot be viewed and/or tested. MSG shall not be responsible for identifying all SACM, lead containing paint, or other hazardous materials located in inaccessible locations, including by not limited to, above a plaster ceiling, behind a wall, embedded in concrete, buried, confined spaces, unsafe areas, or otherwise not readily identifiable.

Destructive sampling will only be conducted when permission has been granted by the owner. Destructive survey locations are limited to areas where hidden SACM, lead containing paint, or other hazardous materials is reasonably thought to be present and sampling can be conducted in a safe manner. If regulated materials are found during the course of demolition and/or renovation activities that are not listed in this report, the material should be assumed as asbestos-containing, lead containing, or hazardous until it can be sampled and analyzed at an accredited laboratory and safe work practices should always be used if those areas are to be disturbed.

MSG has prepared a logical assessment program to reduce the client's risk of discovering unknown regulated materials and/or hazardous substances. The presence of subsurface regulated materials and/or hazardous substances is based solely on surface observations and/or information provided by others. Descriptions of subsurface conditions provided in this report are not warranted to be complete or accurate. This risk may be reduced by more extensive exploration on the site, but even with additional exploration, it is not possible to completely eliminate the risk of discovering regulated materials and/or hazardous conditions. It cannot and should not be assumed that samples collected and conditions observed at the time of the RMS are representative of an area that has not been sampled and/or tested.

In preparing this report, MSG may have relied on information obtained from or provided by others. MSG makes no representation or warranty regarding the accuracy or completeness of this information gathered through outside sources or subcontracted services. No warranty, guarantee, or certification of any kind, expressed or implied, at common law or created by statute, is extended, made, or intended by rendering these environmental consulting services or by furnishing this written report. Environmental conditions and regulations are subject to constant change and reinterpretation. One should not assume that any on-site conditions and/or regulatory statutes or rules will remain constant after MSG has completed the scope of work for this project. Furthermore, because the facts stated in this report are subject to professional interpretation, differing conclusions could be reached by other environmental professionals.

The report is intended to offer support to a building owner, construction manager, general contractor, abatement contractor, architect, and/or other parties authorized by the owner in generally locating asbestos-containing materials (ACM), lead containing paint, universal and hazardous wastes, and/or other regulated materials. This report does not have the required components to serve as an Asbestos Project Design document, Asbestos and/or Lead Containing Paint Abatement Work Plan, and/or a Health and Safety Plan. Therefore, this report should not be utilized as a project specification document. The results, findings, conclusions, and recommendations expressed in

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this report are based only on conditions that were noted during this survey. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated. Quantities have been conservatively estimated and sampling locations have been described representatively; however, current site conditions should be field-verified by contractors bidding on and/or prior to abatement work.

ATTACHMENT C

ANALYTICAL REPORTS AND CHAINS OF CUSTODY



00012

Client	The Mannik & Smith Group, Inc. 2193 Association Dr., Suite 200 Okemos, MI, 48864	Received 12/11/18 Analyzed 12/14/18 Reported 12/14/18	Project 1130 Farrand St Order # 00012 Project # 11440003
		BULK SAMPLE ANALYSIS SUMM	1ARY
	Client ID AS 1-1 Layer 1 Plaster Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID 00012-1	Location RM-1
	Client ID AS 1-2 Layer 1 Plaster Non Detect 0.00% , homogenous, fibrous. 100% non-asbestos	Lab ID 00012-2	Location RM-2
	Client ID AS 1-3 Layer 1 Plaster Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID 00012-3	Location RM-3
	Client ID AS 1-4 Layer 1 Plaster Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID 00012-4	Location RM-4
	Client ID AS 1-5 Layer 1 Plaster Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID 00012-5	Location RM-6
Analytica Analyst: Reviewe	Christopher A Claes	16 by Polarized Light Microscopy Laboratory Director Quality Manager	Accreditations NIST-NVLAP No. 600212-0

00012

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864	200	Analyzed	12/11/18 12/14/18 12/14/18	Project Order # Project #	1130 Farrand St O0012 I1440003				
	BULK SAMPLE ANALYSIS SUMMARY									
	Client ID AS 2-1 Layer 1 Drywall Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Joint Compound Type Non Detect White, homogenous, fi 100% non-asbesto	0.00% ibrous.	O0012-6	L	ocation RM-5				
	Client ID AS 2-2 Layer 1 Drywall Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Joint Compound Type Non Detect White, homogenous, fi 100% non-asbesto	0.00% ibrous.	O0012-7	L	ocation RM-5.				
	Client ID AS 2-3 Layer 1 Drywall Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Joint Compound Type Non Detect White, homogenous, fi 100% non-asbesto	0.00% ibrous.	O0012-8	L	ocation RM-5				
	Client ID AS 3-1 Layer 1 Window Glaze Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos		Lab ID	O0012-9	L	ocation RM-5				
Type Cream,	Client ID AS 3-2 Layer 1 Window Glaze Non Detect 0.00% homogenous, fibrous. 00% non-asbestos		Lab ID	O0012-10	L	ocation RM-5				
Analytica Analyst: Reviewer	Christophe	0/R-93/116 by Polarized I er A Claes Laboratory Dir ucchesi Quality Manag	ector	roscopy		Accreditations NIST-NVLAP No. 600212-0				

00012

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864		12/14/18	Project 1130 Farrand St Order # 00012 Project # 11440003
		BULK SAMPLE AN	ALYSIS SUMMARY	
Type White	Client ID AS 4-1 Layer 1 White 12x12 Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Lab ID	O0012-11	Location RM-3
	Client ID AS 4-2 Layer 1 White 12x12 Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Lab ID	O0012-12	Location RM-3
	Client ID AS 5-1 Layer 1 Vent Wrap Chrysotile 60.00% homogenous, fibrous. 40% non-asbestos	Lab ID	O0012-13	Location RM-1
Type Gray	Client ID AS 5-2 Layer 1 Vent Wrap Not Analyzed - r, homogenous, fibrous.	Lab ID	O0012-14	Location RM-1
	Client ID AS 6-1 Layer 1 Blue 12x12 Non Detect 0.00% , homogenous, fibrous. 100% non-asbestos	Lab ID	O0012-15	Location RM-8
Analytic Analyst: Reviewe	Christophe	D/R-93/116 by Polarized Light Mico er A Claes Laboratory Director ucchesi Quality Manager	roscopy	Accreditations NIST-NVLAP No. 600212-0

00012

Client	The Mannik & Smith Group, I 2193 Association Dr., Suite 20 Okemos, MI, 48864		12/14/18	Project Order # Project #	1130 Farrand St 00012 I1440003
		BULK SAMPLE AN	ALYSIS SUMMAI	RY	
	Client ID AS 6-2 Layer 1 Blue 12x12 Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID	O0012-16	L	ocation RM-8
	Client ID AS 7-1 Layer 1 Stack Cement Non Detect 0.00% A, homogenous, fibrous. 100% non-asbestos	Lab ID	O0012-17	L	ocation Basement
	Client ID AS 7-2 Layer 1 Stack Cement Non Detect 0.00% A, homogenous, fibrous. 100% non-asbestos	Lab ID	O0012-18	L	ocation Basement
Type Gray	Client ID AS 5-3 Layer 1 Vent Wrap Not Analyzed - v, homogenous, fibrous.	Lab ID	O0012-19	L	ocation Basement
Type Gray	Client ID AS 8-1 Layer 1 sement Concrete Floor Non Detect 0.00% or, homogenous, fibrous. 100% non-asbestos	Lab ID	O0012-20	L	ocation Basement
Analytic Analyst: Reviewe	Christopher	R-93/116 by Polarized Light Mico A Claes Laboratory Director Inchesi Quality Manager	roscopy		Accreditations NIST-NVLAP No. 600212-0

00012

Client	The Mannik & Smith Group, Inc. 2193 Association Dr., Suite 200 Okemos, MI, 48864	Received 12/11/18 Analyzed 12/14/18 Reported 12/14/18	Project Order # Project #	1130 Farrand St O0012 I1440003
		BULK SAMPLE ANALYSIS S	SUMMARY	
Type Gray,	Client ID AS 8-2 Layer 1 ement Concrete Floor Non Detect 0.00% , homogenous, fibrous. 100% non-asbestos	Lab ID 00012-	21 l	ocation Basement
Type Cream	Client ID AS 9-1 Layer 1 ement Window Glaze Chrysotile 2.00% n, homogenous, fibrous. 98% non-asbestos int count performed.	Lab ID 00012-	22 ι	ocation Basement
Base Type	Client ID AS 9-2 Layer 1 ement Window Glaze Not Analyzed n, homogenous, fibrous.	Lab ID 00012-	23	ocation Basement
Type Tan,	Client ID AS 10-1 Layer 1 iding Underlayment Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID 00012-	24	ocation Exterior
Type Tan,	Client ID AS 10-2 Layer 1 iding Underlayment Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID 00012-	25 l	Location Exterior
Analytica Analyst: Reviewe	Christopher A Claes	.6 by Polarized Light Microscopy Laboratory Director Quality Manager		Accreditations NIST-NVLAP No. 600212-0

Black, homogenous, fibrous. 100% non-asbestos

00012

Client	The Mannik & Smith Group, Inc.	Received 12/11/18	Project 1130 Farrand St	
	2193 Association Dr., Suite 200	Analyzed 12/14/18	Order # 00012	
	Okemos, MI, 48864	Reported 12/14/18	Project # 11440003	
	В	ULK SAMPLE ANALYSIS SUMMAF	RY	
	Client ID AS 11-1 Layer 1	Lab ID 00012-26	Location Roof	
	Non Detect 0.00% s, homogenous, fibrous. 100% non-asbestos			
	Client ID AS 11-2 Layer 1	Lab ID 00012-27	Location Roof	
	Roof Shingle			
Type	Non Detect 0.00%			

Analytical Method:	US EPA 600/R-93/116 by Polarized Light Microscopy	Accreditations
Analyst:	Christopher A Claes Laboratory Director	NIST-NVLAP
Reviewer:	Joshua P Lucchesi Quality Manager	No. 600212-0

Client Comments: Address Turn Around Project 2193 Association Drive, Suite 200 1130 Farrand St The Mannik & Smith Group, Inc. 4 Hour AS 1-1 AS 8-1 AS 5-3 AS 7-2 AS 7-1 AS 6-2 AS 6-1 AS 5-2 AS 5-1 AS 4-2 AS 4-1 AS 3-2 AS 3-1 AS 2-3 AS 2-2 AS 1-5 AS 1-4 AS 1-3 AS 1-2 AS 2-1 The Mannik & Smith Group **Analytical Laboratories** 24 Hour Project# 48 Hour **Basement Concrete floor** 11440003 Window Glaze Window Glaze Stack Cement Stack Cement White 12x12 White 12x12 Vent wrap Blue 12x12 Blue 12x12 Vent wrap Vent wrap Drywall Drywall Drywall Plaster Plaster Plaster Plaster Plaster Email City, State Lansing, MI Contact ✓ 72 Hour cbush@manniksmithgroup.com Charlie Bush Order Number: ☐ 1 Week Chain of Custody Fax Phone Report to Zip Code Basement Basement Basement Basement RM-8 RM-8 RM-1 RM-1 RM-3 RM-5 RM-5 RM-5 RM-5 RM-5 RM-6 RM-4 RM-3 RM-2 RM-1 0 (517) 316-9232 ✓ Email 00012 Fax Date Sampled: ✓ TTP Point Count *Bulk Samples Only* 12/10/2018

Relinquished by

Date and Time

Date and Time Received by

Order Number:	Chain of Custod
	ıstody

Comments:														Lab ID	Turn Around	Project 1	Address 2	Client
							AS 11-2	AS 11-1	AS 10-2	AS 10-1	AS 9-2	AS 9-1	AS 8-2	Customer ID	4 Hour 2	1130 Farrand St	2193 Association Drive, Suite 200	The Mannik & Smith Group, Inc.
						8	Roof Shingle	Roof Shingle	Siding underlayment	Siding underlayment	Basement Window Glaze	Basement Window Glaze	Basement Concrete floor	Material Type	24 Hour	Project# 11440003 Email	Contact	oup, Inc. City, State Lansing, MI
							Roof	Roof	Exterior	Exterior	Basement	Basement	Basement	Material Location	Report to	cbush@manniksmithgroup சூந்ளவ் i Fax	Phone (517) 316-9232	Zip Code ☑ TTP ☐ Point Count
														Notes	12/10/2018	Date Sampled:		*Bulk Samples Only*

Relinquished by

Date and Time

Date and Time

Received by

ATTACHMENT D

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY (MDEQ) AIR QUALITY DIVISION NESHAP, 40 CFR Part 61, Subpart M

	•	5		,		
LICENSING	AND	REGI	RAI	on	AFI	AIRS
CHETTOWALE	DOM	No. 100	PDM.	ree	101	over

MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS (LARA), ASBESTOS PROGRAM, P.A. 135 OF 1986, AS AMENDED, Section 220 (1-4) or (8)

·	
DEQ/LARA USE ONLY	3. ABATEMENT CONTRACTOR: Internal Project #:
Postmark Date/ Rec'd Date/	Name:
Emergency Date/ Valid No	Mailing Address.
☐ OK ☐ Send Def Ltr. Date of Def Ltr//	
	Contact: Phone:
FOLLOW UP/ Spoke w/ Comments:	4. DEMOLITION CONTRACTOR: Internal Project #:
	Name:
	_ Mailing Address:
	City/State/Zip:
Notification NoTrans No	
Calculate LARA Asbestos Project Fee: (1% Project Fee	Contact: Phone:
Total Project Cost: x 0.01 =	5. FACILITY OWNER: ("Facility" includes Bridges)
Type of Contractor: License No.:	Name:
Licensing Authority:	Mailing Address:
1. NOTIFICATION:	City/State/Zip:
Date of Notification:	E-mail:
Date of Revision(s):	
Notification Type: ☐ Original ☐ Revised ☐ Canceled ☐ Annual	6. FACILITY DESCRIPTION: Facility Name:
Mark appropriate boxes: (both DEQ and LARA may apply):	Location Address/Description:
DEQ (NESHAP) [260 In. ft./160 sq. ft. or more is threshold]	If Apt. # of units:
☐ Planned Renovation – 10 working days notice☐ Emergency Renovation	City/Twp State: Zip Code:
☐ Scheduled Demolition – 10 working days notice	County: Nearest Crossroad:
 ☐ Intentional Burn – 10 working days notice ☐ Ordered Demolition 	Size: (sq. ft.) No. of Floors: Floor No.:
LARA (MIOSHA) [Will not accept annual notifications]	Age: Present Use: Prior Use:
 □ Demo, Reno, Encap. (>10 ln. ft./15 sq. ft.) 10 <u>calendar</u> days notice □ Emergency Renovation/Encapsulation 	Specific Location(s) in Facility:
2. PROJECT SCHEDULE:	7. DISPOSAL SITE:
START DATE END DATE	Name:
* Renovation	Location Address:
+Asb. Removal	City/State/Zip:
+Demolition:	
Encapsulation:	
Work Schedule: Please indicate the anticipated days of the week and	Name: Address:
work hours for the purpose of scheduling a compliance inspection.	Address: City/State/Zip:
Days of the Week Work Hours	Phone:
Asb. Removal:	ORDERED DEMOLITIONS: (See NESHAP regulations for definition of
Demolition:	"Ordered Demolition.") A copy of the official Order must accompany this
Encapsulation:	notification.
* Includes setup, build enclosure, asbestos removal, demobilizing, etc. +Include only those dates you are conducting asbestos removal/demo.	Gov't Agency Ordering Demo:
	Name/Title of Person Signing Order:
Check here if this is a multi-phased project, attach a schedule showing the start/end date of each phase.	
the startona date of each phase.	Date of Order: Date Ordered to Begin:
10. IS ASBESTOS PRESENT? ☐ Yes ☐ No ☐ To be remo	oved prior to demolition
Estimate the amount of asbestos: Include RACM RACM to be	Non-friable ACM <u>not</u> e RACM to be removed prior to demo.
(Regulated Asbestos Containing Material) to be Removed	
removed, encapsulated, etc. Also include the amount and type (floor tile, roofing, etc.) of non-friable Category	□ Ln. Ft. □ Ln. M.
I and/or Category II ACM that will not be removed prior	□ Sq. Ft. □ Sq. M.
to demolition. (NOTE: In a demolition, cementatious ACM cannot remain in a structure, as it is likely to	☐ Cu. Ft.* ☐ Cu.M.*
become regulated in the demolition/handling process. *\/olume (cub)	ic ft./meters) should be used only if unable to measure by linear/square measure
It must be removed prior to demolition.)	postos has fallen off of surface)

(example: asbestos has fallen off of surface).

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH (continued)

11.	PROJECT DESCRIPTION: Complete A) for Renovation (asbestos remo	oval/encapsulation) and/or B) for Demolition:
	carefully lower, etc.):	
	B) DEMOLITION: Describe the method of demolition of facility, bridge, et bridge, etc., will be demolished:	tc., and indicate if complete or partial. If partial, describe which part of facility
12.	ENGINEERING CONTROLS: Describe work practices and engineering until proper disposal:	controls used to prevent visible emissions before, during, and after removal, and
13.		n the event that unexpected RACM is found or previously non-friable asbestos efore regulated:
14.		S: A) Indicate how you determined whether or not asbestos is in the facility. If ination of the presence or absence of asbestos must be made prior to submitting
		survey:
	C) Name, accreditation number of inspector, and date of inspection:	
15.	EMERGENCY RENOVATIONS: Date/time of emergency:	Describe the sudden, unexpected event:
	Explain how the event caused unsafe conditions, and/or would cause equ	ipment damage and/or an unreasonable financial burden:
16.	inspection at the renovation or demolition site.	Subpart M, will be on-site during the renovation and during demolition involving ence that this person has completed the required training will be available for
	Signature of Owner or Abatement Contractor Date	Signature of Owner or Demolition Contractor Date
17.	Signature of Building Owner or Lessee Date	ssure Enclosures: (required by LARA) ir monitoring is required for any asbestos abatement project involving 10 med within a negative pressure enclosure. I (the building owner or lessee) 135 to have clearance air monitoring performed on this project. Signature of Asbestos Abatement Contractor Representative Date sted. For affected projects, this section of the notification form must be completed, signed,
18.	I certify that the above information is correct:	
	Printed Name of Owner/Operator Date	Signature of Owner/Operator Date
MA	ILING ADDRESSES/PHONE NUMBERS: (See Item 1 to determine v	which agency requirements/regulations are applicable to your project.)
mai	Public Act 135 of 1986, as amended, Section 220 (1-4) or (8), I to address below. For more info visit: ://www.michigan.gov/asbestos	For NESHAP Demolitions/Renovations , 40 CFR , Part 61 , Subpart M , please use the e-submittal process. For more information visit http://www.michigan.gov/air , under Air Links click on Asbestos NESHAP Program.
LAF P.C	DSHA Asbestos Program RA, CSHD D. Box 30671 Ising, MI 48909-8171	NESHAP Asbestos Program DEQ, AQD P.O. Box 30260 Lansing, MI 48909-7760 517.284.6777 (Office)
517	7.636.4551 (office), 517.322.1713 (fax)	017.204.0777 (OIII06)

EQP5661 (rev. 03/14) MIOSHA-CSH 142 (rev. 08/14)



January 7, 2019

Ms. Roxanne Case Grant Manager Ingham County Land Bank 3024 Turner Street Lansing, Ingham County, Michigan 48906

Re: Pre-Renovation Regulated Materials Survey

1025 E. Oakland Ave., Lansing, Ingham County, MI

Dear Ms. Case:

The Mannik & Smith Group, Inc. (MSG) is pleased to present Ingham County with the results of the limited prerenovation regulated materials survey (RMS) performed at 1025 E. Oakland Ave., Lansing, Ingham County, Michigan (hereinafter referred to as the "Site") by Kory McKay (Accreditation Number A47903).

SUMMARY

Building Information					
Property Address	1025 E Oakland Ave., Lansing MI				
Parcel #	33-01-01-10-329-231				
No. Stories	2				
Square Footage (approx.)	1,000 SF				
Siding	Wood				
Basement	Yes				
Garage	Yes				



Asbestos Containing Material							
Location Material Group		Friable/Non Friable	Asbestos	Quantity			
RM-3, 4, 5, 8, 9, Basement	Vent Wrap	Friable	70% Chrysotile	150 SF			
RM-4	Orange Linoleum	Non Friable	15% Chrysotile	175 SF			
RM-4	Tan Linoleum	Non Friable	15% Chrysotile	175 SF			
All exterior walls and ceiling	Vermiculite Insulation	Friable	Assumed Asbestos	1800 CF			

Universal Waste Inventory						
Location	Material Description	Quantity				
RM-2,RM-3,Basement	Smoke detector	3				
RM-4	Fire Extinguisher	1				
RM-2	Thermostat	1				

Other Regulated Materials Inventory							
Location Material Description Quantity							
No other regulated materials found on site							

Hazardous Materials		
Location	Material Description	Quantity
No hazardous materials found on site		

PURPOSE AND SCOPE OF WORK

The purpose of the RMS was to identify, quantify and document the location of regulated materials that may be encountered during renovation of the on-site structure. To accomplish this purpose, MSG performed the following scope of work:

- 1) Pre-renovation asbestos-containing material (ACM) survey.
- 2) Universal wastes, hazardous materials, and other regulated wastes survey.

METHODOLOGIES

The RMS was conducted on January 3, 2019. Methodologies employed during the completion of each task of the RMS are detailed below.

ACM Survey Procedures

The ACM survey was performed in general accordance with guidelines set forth in the Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) 763. The National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations govern demolition and renovation activities in which asbestos is present. The NESHAP rule distinguishes between Regulated Asbestos-Containing Materials (RACM) that would readily release asbestos fibers when damaged or disturbed and those materials that are unlikely to result in significant fiber release during renovation activities. The purpose of this survey is to determine if ACM within the Site building are RACM and thus, subject to the NESHAP, and to comply with the Michigan Occupational Safety and Health Administration (MIOSHA) and guidelines set forth in the Occupational Safety and Health Administration (OSHA) Regulations Standards 29 CFR 1910.1101.

RACM, as defined by NESHAP, is classified into four parts, (1) friable asbestos material, (2) Category I non-friable ACM (packing, gaskets, floor tile and roofing products) that has become friable, (3) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (4) Category II non-friable ACM (all other ACM products) that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

The suspect ACM identified during this survey was grouped into homogeneous materials (i.e. similar materials which are uniform in color and texture) and:

- Described and quantified it in linear feet (LF) or square feet (SF);
- Identified and classified as friable or non-friable;
- Assessed as being in good, fair or poor condition;
- Assigned an EPA classification type (surfacing material, thermal system insulation or miscellaneous);
- Classified as RACM or non-RACM; and
- Sampled, or identified as presumed ACM (PACM).

MSG performed services associated with the ACM survey in conformance with the care and skill ordinarily used by other reputable environmental consulting firms practicing under similar conditions, at the same time, and in the same or similar locality. The ACM survey included a systematic visual inspection of readily accessible areas of the Site building. Destructive sampling methods were used and suspect ACM samples were collected by State of Michigan Accredited Asbestos Inspector, Kory McKay (Accreditation Number A47903). Based on the quantity of each classification of material, MSG collected samples of each suspect ACM in accordance with EPA guidelines.

Universal Wastes and Hazardous Material Survey Procedures

MSG identified and inventoried universal wastes and hazardous materials by a visual reconnaissance of the Site. Materials were identified, described, and quantified to the extent possible; however, no equipment or containers were opened and/or sampled as part of this survey.

A hazardous material, as defined in OSHA 29 CFR 1910.1200, is any item or chemical which is a "health hazard" or "physical hazard", including the following:

- Chemicals that are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, hepatotoxins, nephrotoxins, neurotoxins, agents that act on the hematopoietic system, and agents that damage the lungs, skin, eyes, or mucous membranes;
- Chemicals that are combustible liquids, compressed gases, explosives, flammable liquids, flammable solids, organic peroxides, oxidizers, pyrophorics, unstable (reactive) or water-reactive;
- Chemicals that, in the course of normal handling, use or storage, may produce or release dusts, gases, fumes, vapors, mists or smoke which have any of the above characteristics; and
- Any item or chemical which, when being transported or moved, is a risk to public safety or an
 environmental hazard, and is regulated as such by one or more of the following:
 - o DOT Department of Transportation; Hazardous Materials Regulations (49 CFR 100-180);
 - o IMO International Maritime Organization; International Maritime Dangerous Goods (IMDG) Code;
 - o IATA International Air Transport Association; Dangerous Goods Regulations;
 - o ICAO International Civil Aviation Organization; Technical Instructions; and
 - o AF Air Force "INTERSERVICE" Manual, Preparing Hazmat for Military Air Shipments (AFMAN 24-204).

Hazardous materials may also include:

- Any item or chemical listed in the United States Environmental Protection Agency (USEPA) *List of Hazardous Substances and Reportable Quantities*, dated September 1992.
- Noticeable as inventory under the reporting requirements of the Hazardous Chemical Reporting (40 CFR Part 302).
- An environmental release under the reporting requirements of the Toxic Chemical Release Reporting: Community Right To Know (40 CFR Part 372) or under Part 201, Environmental Remediation of the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 201) and Part 213, Leaking Underground Storage Tanks (Part 213).

These would include chemicals with special characteristics which, in the opinion of the manufacturer, can cause harm to people, plants, or animals when released by spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other receptacles).

Universal wastes are waste that comes primarily from consumer products containing mercury, lead, cadmium or other substances that are hazardous to human health and the environment. These items cannot be discarded in household trash nor disposed of in landfills but have less stringent handling and disposal requirements than hazardous waste streams. In Michigan, universal wastes are regulated by the MDEQ Office of Waste Management and Radiological Protection under Part 111 of Act 451 and the federal

Resource Conservation and Recovery Act (RCRA) of 1976 under 40 CFR Part 273. Universal waste is also regulated by the US Department of Transportation (US DOT) under 49 CFR Parts 171 through 180. Most of the universal waste requirements overseen by the DEQ are addressed by R 299.9228 of Part 111 of 1994 P.A. 451, as amended and 40 CFR Part 273. These regulations are designed to encourage proper collection, recycling, treatment, or disposal of these wastes.

Examples of universal waste are mercury-containing equipment (e.g. thermostats, barometers, manometers, temperature and pressure gauges, and mercury switches), nickel-cadmium and spent lead-acid batteries, lamps (e.g. incandescent, fluorescent, high intensity discharge, neon, mercury vapor, and high pressure sodium and metal halide), pesticides, polychlorinated biphenyl (PCB) containing transformers and light ballasts, stored chemical and/or petroleum products, etc. In Michigan, Part 111 also includes pharmaceutical and consumer electronics as additional types of universal wastes.

Other Regulated Materials

This RMS also included identifying and inventorying other regulated materials which may pose physical or chemical concerns during renovation of the Site building(s) including chlorofluorocarbon (CFC) containing devices, tanks, vessels, equipment, and building materials that may contain or become contaminated with hazardous materials.

Specifically, CFC containing devices are regulated Under Title VI of the Clean Air Act (CAA). The Stratospheric Protection Division of the EPA manages programs protecting the stratospheric ozone layer. Title 40, Part 82 of the Code of Federal Regulations contains the EPA regulations protecting the ozone layer. The RMS survey of the premises identified and quantified any CFC containers and CFC containing equipment, which could include the following:

- Drinking fountains, air conditioners, refrigerators
- Air conditioners in control panels and other process equipment
- Water and air chillers
- Roof top and stand-alone air conditioners
- Cafeteria equipment: freezers, walk-in coolers/freezers
- CFC canisters and cylinders

In Michigan, underground storage tanks are regulated under the authority of Part 211, Underground Storage Tank Regulations, of Act 451 of 1994, as amended, and the Michigan Underground Storage Tank Rules (MUSTR). Therefore, this survey included whether any evidence of underground storage tanks and related piping and dispensers were present at the Site.

MSG also surveyed for the presence of equipment, other storage tanks, and materials that may contain or be contaminated by regulated chemicals. These include, but may not be comprehensive of:

- Above ground storage tanks
- Oil-containing equipment (hydraulic equipment, blowers, fans, motors, elevators, compressors, etc.)
- Fire brick
- Contaminated building materials (concrete, block walls, wood, plaster, etc.) with staining, odor or other signs of a hazardous chemical release

SURVEY RESULTS

The following subsections include a discussion of the RMS results. Photographs of the residence are located in the *Attachment A, Photo Log.* The results of this report are valid as of the report date, subject to the limitations presented in *Attachment B, Limitations*.

ACM Survey Results

MSG identified twenty one (21) homogenous materials that were suspect as asbestos containing during the ACM survey. Forty six (46) bulk samples were collected from these suspect homogeneous materials and were submitted to Mannik & Smith Group Analytical Laboratories (MSGAL) for laboratory analysis of Bulk Materials by Polarized Light Microscopy using USEPA Method 600/R-93/116. MSGAL is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) to analyzed bulk samples for asbestos content. Of the aforementioned suspect homogenous materials identified during this ACM survey, laboratory analysis found three (3) homogenous materials (samples 4-1, 8-1 and 9-1) contained greater than 1% asbestos. The EPA defines ACM as materials containing greater than 1% asbestos. MSG identified vermiculite insulation in all exterior walls and the ceiling on the first and second floors. This material was not sampled but is presumed to be an ACM.

A point-count quantification procedure (PCQM) allows for lower detection limits than calibrated visual estimation (CVES), which is the quantification method widely used in asbestos analysis via Polarized Light Microscopy (PLM). If the asbestos content is found to contain less than 10% asbestos as determined by a method other than point counting by PLM, it can only be treated as non-ACM if verified to contain less than 1% by the PCQM. If not point-counted, the sample must be assumed to be greater than 1% and thus considered and treated as ACM. It is MSG's experience that point counting samples with an estimated PLM asbestos content of more than 3% does not yield significantly different analytical results. No samples were point counted.

Suspect ACM sample locations are depicted on the attached figure. See *Table 1, Asbestos Sampling Results* for a listing of homogeneous materials identified by MSG during this survey. A copy of the analytical reports including chains of custody is attached in *Attachment C, Analytical Reports and Chains of Custody*.

Universal Wastes, Hazardous Materials, and Other Regulated Materials Survey Results

Universal wastes, hazardous materials, and/or other regulated materials wastes were identified within the Site building. Quantities identified are provided in *Table 2, Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory.*

CONCLUSIONS AND RECOMMENDATIONS

Asbestos Containing Materials

Of the twenty one (21) homogenous materials identified as part of the ACM survey, four (4) homogenous materials contained asbestos greater than 1% (samples 4-1, 8-1, 9-1 and PACM vermiculite insulation) with these four (4) homogenous materials, vent wrap, orange linoleum, tan linoleum and vermiculite insulation, being classified as RACM. All materials containing ACM must be disposed of in a licensed landfill.

Prior to renovation, a notification of intent to demolish shall be made to the Michigan Department of Environmental Quality Air Quality Division (MDEQ-AQD) and Licensing and Regulatory Affairs (LARA), Asbestos Program. Notification, according to the procedure described by the NESHAP, Title 40 of the Code of Federal Regulations, Part 61, Subpart M, Notification, for renovation and demolition projects should be followed. A copy of this notification form is provided in *Attachment D, Notification of Intent to Renovate/Demolish*. This form shall be completed by the contractor who completes the renovation.

If additional suspect ACMs are discovered during renovation activities in areas that were determined during this survey to be structurally unsound and unsafe, inaccessible, concealed and/or in buried areas, shall be surveyed, tested, and abated if warranted. If suspect ACMs are determined to be RACM that would be disturbed during renovation activities, the RACM must be properly removed by a licensed asbestos abatement contractor.

Category I and Category II Non-Friable ACM may often be left in place during renovation activities if the ACM is not subjected to sanding, grinding, cutting, or abrading or has a high probability of becoming or has

become crumbled, pulverized, or reduced to powder by the forces expected to act on the material during the course of renovation.

Universal Wastes, Hazardous Materials, and Other Regulated Materials

The universal waste, hazardous materials, and other regulated materials (see Table 2) must be properly characterized (as necessary) and properly removed from the Site building for recycling and/or disposed of in accordance with Parts 111, 115, or 147 of Michigan Public Act 451 of 1994, as amended. If additional universal wastes, hazardous materials, and other regulated materials are discovered during renovation activities in areas that were determined during this survey to be structurally unsound and unsafe, inaccessible, concealed and/or in buried areas, these materials shall be characterized (as necessary) and properly removed in accordance with the above-mentioned regulations.

If you have any questions or concerns regarding the above information please contact us at 517-316-9232.

Sincerely,

Kory McKay

Environmental Scientist Accreditation Number A47903 Charlie Bush

Senior Project Manager Accreditation Number A34293

Attachments

FIGURE



721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com

Address: 1025 East Oakland Avenue Date: January 3, 2019

Drawing not to scale

1st Floor Room 1 Room 12 1-1 16-1, 2 17-1, 2 18-1, 2 19-1, 2 20-1, 2 21-1, 2 Room 2 3-1, 2 Room 6 1-2 4-1 4-2 5-1, 2 Room 3 8-1, 2 9-1, 2 Room 4 1-3 2-1 Room 5 10-1, 2 Vent Wrap (150 SF) Orange Linoleum and Tan Linoleum (175 SF Each)

Additional Vents (No wrap)



TECHNICAL SKILL. CREATIVE SPIRIT.

721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com

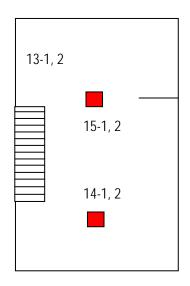
Address: 1025 East Oakland Avenue Date: January 3, 2019

Drawing not to scale

2nd Floor Room 11 Room 10 1-4 1-5 Room 7 Room 9 2-2 Room 8 2-3 11-1, 2 6-1, 2 4-3 12-1, 2 7-1, 2 Vent Wrap (150 SF)

Additional Vents (No wrap)

Basement



TABLES

TABLE 1
Asbestos Sampling Results

Client		Ingham Count	,	ank Authority							
Survey Loc			1025 E Oakland Ave January 3, 2019								
Survey D Functional Area	Floor	Sample ID	HM #	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity	
RM-1	1	AS 1-1	HA-1	Plaster	Non-Friable	Good	Miscellaneous	No	No	2750 SF	
RM-2	1	AS 1-2	HA-1	Plaster	Non-Friable	Good	Miscellaneous	No	No	2750 SF	
RM-3	1	AS 1-3	HA-1	Plaster	Non-Friable	Good	Miscellaneous	No	No	2750 SF	
RM-7	2	AS 1-4	HA-1	Plaster	Non-Friable	Good	Miscellaneous	No	No	2750 SF	
RM-10	2	AS 1-5	HA-1	Plaster	Non-Friable	Good	Miscellaneous	No	No	2750 SF	
RM-4	1	AS 2-1	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	1200 SF	
RM-9	2	AS 2-2	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	1200 SF	
RM-8	2	AS 2-3	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	1200 SF	
RM-2	1	AS 3-1	HA-3	Window Glaze	Non-Friable	Good	Miscellaneous	No	No	240 SF	
RM-2	1	AS 3-2	HA-3	Window Glaze	Non-Friable	Good	Miscellaneous	No	No	240 SF	
RM-3	1	AS 4-1	HA-4	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	70% Chrysotile	150 SF	
RM-4	1	AS 4-2	HA-4	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	NA	150 SF	
RM-9	2	AS 4-3	HA-4	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	NA	150 SF	
RM-4	1	AS 5-1	HA-5	Yellow linoleum	Non-Friable	Good	Miscellaneous	No	No	350 SF	
RM-4	1	AS 5-2	HA-5	Yellow linoleum	Non-Friable	Good	Miscellaneous	No	No	350 SF	
RM-8	2	AS 6-1	HA-6	White Linoleum	Non-Friable	Good	Miscellaneous	No	No	70 SF	
RM-8	2	AS 6-2	HA-6	White Linoleum	Non-Friable	Good	Miscellaneous	No	No	70 SF	

TABLE 1
Asbestos Sampling Results

Client	Client Ingham County Land Bank Authority										
Survey Loca		1025 E Oakland Ave									
Survey Da		January 3, 20									
Functional Area	Floor	Sample ID	HM#	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity	
RM-8	2	AS 7-1	HA-7	Brown Linoleum	Non-Friable	Good	Miscellaneous	No	No	70 SF	
RM-8	2	AS 7-2	HA-7	Brown Linoleum	Non-Friable	Good	Miscellaneous	No	No	70 SF	
RM-4	1	AS 8-1	HA-8	Orange linoleum	Non-Friable	Good	Miscellaneous	Yes	15% Chrysotile	175 SF	
RM-4	1	AS 8-2	HA-8	Orange linoleum	Non-Friable	Good	Miscellaneous	Yes	NA	175 SF	
RM-4	1	AS 9-1	HA-9	Tan Linoleum	Non-Friable	Good	Miscellaneous	Yes	15% Chrysotile	175 SF	
RM-4	1	AS 9-2	HA-9	Tan Linoleum	Non-Friable	Good	Miscellaneous	Yes	NA	175 SF	
RM-5	1	AS 10-1	HA-10	Floor Underlayment	Non-Friable	Good	Miscellaneous	No	No	50 SF	
RM-5	1	AS 10-2	HA-10	Floor Underlayment	Non-Friable	Good	Miscellaneous	No	No	50 SF	
RM-8	2	AS 11-1	HA-11	Wall mastic	Non-Friable	Good	Miscellaneous	No	No	275 SF	
RM-8	2	AS 11-2	HA-11	Wall mastic	Non-Friable	Good	Miscellaneous	No	No	275 SF	
RM-8	2	AS 12-1	HA-12	Wall underlayment	Non-Friable	Good	Miscellaneous	No	No	275 SF	
RM-8	2	AS 12-2	HA-12	Wall underlayment	Non-Friable	Good	Miscellaneous	No	No	275 SF	
Basement	В	AS 13-1	HA-13	Basement Window Glaze	Non-Friable	Good	Miscellaneous	No	No	30 SF	
Basement	В	AS 13-2	HA-13	Basement Window Glaze	Non-Friable	Good	Miscellaneous	No	No	30 SF	
Basement	В	AS 14-1	HA-14	Stack Cement	Non-Friable	Good	Miscellaneous	No	No	5 SF	
Basement	В	AS 14-2	HA-14	Stack Cement	Non-Friable	Good	Miscellaneous	No	No	5 SF	

TABLE 1
Asbestos Sampling Results

Client	Client Ingham County Land Bank Authority Survey Location 1025 E Oakland Ave									
Survey Da										
Functional Area	Floor	Sample ID	HM #	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
Basement	В	AS 15-1	HA-15	Basement Concrete floor	Non-Friable	Good	Miscellaneous	No	No	300 SF
Basement	В	AS 15-2	HA-15	Basement Concrete floor	Non-Friable	Good	Miscellaneous	No	No	300 SF
Exterior	Е	AS 16-1	HA-16	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	300 LF
Exterior	Е	AS 16-2	HA-16	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	300 LF
Exterior	E	AS 17-1	HA-17	Siding underlayment	Non-Friable	Good	Miscellaneous	No	No	2300 SF
Exterior	Е	AS 17-2	HA-17	Siding underlayment	Non-Friable	Good	Miscellaneous	No	No	2300 SF
Exterior	Е	AS 18-1	HA-18	Driveway Sealant	Non-Friable	Good	Miscellaneous	No	No	1200 SF
Exterior	Е	AS 18-2	HA-18	Driveway Sealant	Non-Friable	Good	Miscellaneous	No	No	1200 SF
Garage	Е	AS 19-1	HA-19	Garage Siding Underlayment	Non-Friable	Good	Miscellaneous	No	No	900 SF
Garage	E	AS 19-2	HA-19	Garage Siding Underlayment	Non-Friable	Good	Miscellaneous	No	No	900 SF
Garage	E	AS 20-1	HA-20	Garage window glaze	Non-Friable	Good	Miscellaneous	No	No	1 SF
Garage	Е	AS 20-2	HA-20	Garage window glaze	Non-Friable	Good	Miscellaneous	No	No	1 SF
Roof	Е	AS 21-1	HA-21	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	600 SF
Roof	Е	AS 21-2	HA-21	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	600 SF

Table 2 Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory 1025 E. Oakland Avenue

1025 E. Oakland Avenue Lansing, Ingham County, Michigan

Universal Waste Inventory								
Location	Type of Waste	Approximate Quantity						
RM-2,RM-3,Basement	Smoke detector	3						
RM-4	Fire Extinguisher	1						
RM-2	Thermostat	1						
Hazardous Materials Inventory								
Location	Type of Waste	Approximate Quantity						
-	-	-						
Oth	Other Regulated Materials Inventory							
Location	Type of Waste	Approximate Quantity						

ATTACHMENT A PHOTO LOG

Ingham County Land Bank 1025 E Oakland Ave, Lansing, MI Photographs taken by: Kory McKay on 01/03/2019

Property Photos



1025 E Oakland Ave, Front of House



Back of House



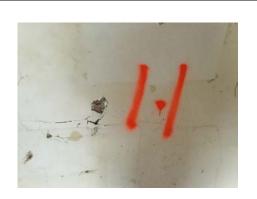
Side of House



Side of House

Ingham County Land Bank 1025 E Oakland Ave, Lansing, MI Photographs taken by: Kory McKay on 01/03/2019

Samples



Sample ID: AS 1-1 Location: RM-1 Notes: Plaster



Sample ID: AS 8-1 Location: RM-4 Notes: Orange Linoleum



Sample ID: AS 2-2 Location: RM-9 Notes: Drywall



Sample ID: AS 9-1 Location: RM-4 Notes: Tan Linoleum



Sample ID: AS 4-1 Location: RM-3 Notes: Vent Wrap



Sample ID: AS 3-1 Location: RM-2 Notes: Window Glaze

Ingham County Land Bank 1025 E Oakland Ave, Lansing, MI Photographs taken by: Kory McKay on 01/03/2019

Samples



Sample ID: AS 11-1 Location: RM-8 Notes: Wall Mastic



Sample ID: AS 16-1 Location: Exterior Notes: Exterior Caulk



Sample ID: AS 13-1 Location: Basement Notes: Basement Window Glaze





Sample ID: AS 14-1 Location: Basement Notes: Stack Cement



Sample ID: AS 20-1 Location: Garage Notes: Garage Window Glaze

ATTACHMENT B LIMITATIONS



REGULATED MATERIALS SURVEY LIMITATIONS

The Mannik & Smith Group, Inc. (MSG) performed its services associated with this Regulated Materials Survey (RMS) in general accordance with guidelines set forth in the Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) 763, Occupational Safety and Health Administration (OHSA) 29 CFR 1926.62, and in conformance with the care and skill ordinarily used by other reputable environmental consulting firms practicing under similar conditions, at the same time, and in the same or similar locality. This RMS and related documentation are site-specific, which means they pertain to the conditions of the site surveyed.

Unless otherwise noted, MSG's RMS is limited to accessible areas. Areas determined to be not structurally sound, safely reached, limited by excessive accumulated obstructions, require specialized equipment to access, in operable windows, etc., are not included in this survey. There may be areas where regulated materials, such as suspected asbestos-containing materials (SACM) and lead containing paint cannot be viewed and/or tested. MSG shall not be responsible for identifying all SACM, lead containing paint, or other hazardous materials located in inaccessible locations, including by not limited to, above a plaster ceiling, behind a wall, embedded in concrete, buried, confined spaces, unsafe areas, or otherwise not readily identifiable.

Destructive sampling will only be conducted when permission has been granted by the owner. Destructive survey locations are limited to areas where hidden SACM, lead containing paint, or other hazardous materials is reasonably thought to be present and sampling can be conducted in a safe manner. If regulated materials are found during the course of demolition and/or renovation activities that are not listed in this report, the material should be assumed as asbestos-containing, lead containing, or hazardous until it can be sampled and analyzed at an accredited laboratory and safe work practices should always be used if those areas are to be disturbed.

MSG has prepared a logical assessment program to reduce the client's risk of discovering unknown regulated materials and/or hazardous substances. The presence of subsurface regulated materials and/or hazardous substances is based solely on surface observations and/or information provided by others. Descriptions of subsurface conditions provided in this report are not warranted to be complete or accurate. This risk may be reduced by more extensive exploration on the site, but even with additional exploration, it is not possible to completely eliminate the risk of discovering regulated materials and/or hazardous conditions. It cannot and should not be assumed that samples collected and conditions observed at the time of the RMS are representative of an area that has not been sampled and/or tested.

In preparing this report, MSG may have relied on information obtained from or provided by others. MSG makes no representation or warranty regarding the accuracy or completeness of this information gathered through outside sources or subcontracted services. No warranty, guarantee, or certification of any kind, expressed or implied, at common law or created by statute, is extended, made, or intended by rendering these environmental consulting services or by furnishing this written report. Environmental conditions and regulations are subject to constant change and reinterpretation. One should not assume that any on-site conditions and/or regulatory statutes or rules will remain constant after MSG has completed the scope of work for this project. Furthermore, because the facts stated in this report are subject to professional interpretation, differing conclusions could be reached by other environmental professionals.

The report is intended to offer support to a building owner, construction manager, general contractor, abatement contractor, architect, and/or other parties authorized by the owner in generally locating asbestos-containing materials (ACM), lead containing paint, universal and hazardous wastes, and/or other regulated materials. This report does not have the required components to serve as an Asbestos Project Design document, Asbestos and/or Lead Containing Paint Abatement Work Plan, and/or a Health and Safety Plan. Therefore, this report should not be utilized as a project specification document. The results, findings, conclusions, and recommendations expressed in

TECHNICAL SKILL. CREATIVE SPIRIT.

this report are based only on conditions that were noted during this survey. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated. Quantities have been conservatively estimated and sampling locations have been described representatively; however, current site conditions should be field-verified by contractors bidding on and/or prior to abatement work.

ATTACHMENT C

ANALYTICAL REPORTS AND CHAINS OF CUSTODY



00017

Client	The Mannik & Smith Group 2193 Association Drive, Sui Okemos, MI, 48864		Received Analyzed Reported	01/04/19	Project Order # Project #	1025 E Oakland Ave 00017 I1440003
		BULK SAN	1PLE AN	IALYSIS SUMM	1ARY	
	Client ID AS 1-1 Layer 1 Plaster Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Skim Coat Type Non Detect White, homogenous, 100% non-asbes	0.00% fibrous.	O0017-1	l	ocation RM-1
	Client ID AS 1-2 Layer 1 Plaster Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Skim Coat Type Non Detect White, homogenous, 100% non-asbes	0.00% fibrous.	O0017-2	[ocation RM-2
Gray,	Client ID AS 1-3 Layer 1 Plaster Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Skim Coat Type Non Detect White, homogenous, 100% non-asbes	0.00% fibrous.	O0017-3	l	ocation RM-3
Gray,	Client ID AS 1-4 Layer 1 Plaster Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Skim Coat Type Non Detect White, homogenous, 100% non-asbes	0.00% fibrous.	O0017-4	L	ocation RM-7
	Client ID AS 1-5 Layer 1 Plaster Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Skim Coat Type Non Detect White, homogenous, 100% non-asbes	0.00% fibrous.	O0017-5	l	ocation RM-10
Analytica Analyst: Reviewer	Joshua P L	0/R-93/116 by Polarized ucchesi Quality Mana er A Claes Laboratory D	ger	roscopy		Accreditations NIST-NVLAP No. 600212-0

00017

Client	The Mannik & S 2193 Association Okemos, MI, 48	n Drive, Suite 200	Received 01/03/19 Analyzed 01/04/19 Reported 01/04/19	Project 1025 E Oakland Ave Order # 00017 Project # 11440003
		BULK SAI	MPLE ANALYSIS SUMMARY	,
	Client ID Layer 1 Drywall Non Detect homogenous, f	0.00% ibrous.	Lab ID 00017-6	Location RM-9
	Client ID Layer 1 Drywall Non Detect homogenous, f 00% non-asbest	0.00% ibrous.	Lab ID 00017-7	Location RM-8
	Client ID Layer 1 Drywall Non Detect homogenous, f	0.00% ibrous.	Lab ID 00017-8	Location RM-4
Type Cream,	Client ID Layer 1 Window Glaze Non Detect homogenous, 1 00% non-asbest	0.00% fibrous.	Lab ID 00017-9	Location RM-2
Type Cream,	Client ID Layer 1 Window Glaze Non Detect homogenous, 1 00% non-asbest	0.00% fibrous.	Lab ID 00017-10	Location RM-2
Analytical Analyst: Reviewer		US EPA 600/R-93/116 by Polarize Joshua P Lucchesi Quality Man Christopher A Claes Laboratory D	ager	Accreditations NIST-NVLAP No. 600212-0

00017

Client	The Mannik & Smith Group 2193 Association Drive, Sui Okemos, MI, 48864	•	01/04/19	Project Order # Project #	1025 E Oakland Ave 00017 I1440003
		BULK SAMPLE AN	ALYSIS SUMM	IARY	
	Client ID AS 4-1 Layer 1 Vent Wrap Chrysotile 70.00% , homogenous, fibrous. 30% non-asbestos	Lab ID	O0017-11	L	ocation RM-3
Type Gray,	Client ID AS 4-2 Layer 1 Vent Wrap Not Analyzed - homogenous, fibrous.	Lab ID	O0017-12	L	ocation RM-4
Type Gray,	Client ID AS 4-3 Layer 1 Vent Wrap Not Analyzed - , homogenous, fibrous.	Lab ID	O0017-13	L	ocation RM-9
	Client ID AS 6-1 Layer 1 White Linoleum Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Lab ID Layer 2 Mastic Type Non Detect 0.00% Tan, homogenous, fibrous. 100% non-asbestos	O0017-14	L	ocation RM-8
	Client ID AS 6-2 Layer 1 White Linoleum Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Lab ID Layer 2 Mastic Type Non Detect 0.00% Tan, homogenous, fibrous. 100% non-asbestos	O0017-15	L	ocation RM-8
Analytica Analyst: Reviewe	Joshua P L	0/R-93/116 by Polarized Light Mic ucchesi Quality Manager er A Claes Laboratory Director	roscopy		Accreditations NIST-NVLAP No. 600212-0

00017

Client	The Mannik & Smith Group 2193 Association Drive, Sui Okemos, MI, 48864	•	Received Analyzed Reported	01/04/19	Project Order # Project #	1025 E Oakland Ave 00017 I1440003
		BULK SAM	1PLE AN	IALYSIS SUMM	IARY	
Type Brown	Client ID AS 7-1 Layer 1 Brown Linoleum Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos	Layer 2 Mastic Type Non Detect Brown, homogenous, 100% non-asbest	0.00% fibrous.	O0017-16	L	ocation RM-8
Type Brown	Client ID AS 7-2 Layer 1 Brown Linoleum Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos	Layer 2 Mastic Type Non Detect Brown, homogenous, 100% non-asbest	0.00% fibrous.	O0017-17	L	ocation RM-8
Type Yellow	Client ID AS 5-1 Layer 1 Yellow Linoleum Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos	Layer 2 Mastic Type Non Detect Brown, homogenous, 100% non-asbest	0.00% fibrous.	O0017-18	L	ocation RM-4
Type Yellow	Client ID AS 5-2 Layer 1 Yellow Linoleum Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos	Layer 2 Mastic Type Non Detect Brown, homogenous, 100% non-asbest	0.00% fibrous.	O0017-19	L	ocation RM-4
Type Orange	Client ID AS 8-1 Layer 1 Orange Linoleum Chrysotile 15.00% c, homogenous, fibrous. 85% non-asbestos	Layer 2 Mastic Type Chrysotile Brown, homogenous, 98% non-asbest Point count perfore	2.00% fibrous.	O0017-20	L	ocation RM-4
Analytica Analyst: Reviewer	Joshua P L	0/R-93/116 by Polarized ucchesi Quality Mana er A Claes Laboratory Di	ger	roscopy		Accreditations NIST-NVLAP No. 600212-0

00017

Client	The Mannik & Smith Group 2193 Association Drive, Sui Okemos, MI, 48864		Received Analyzed Reported	01/04/19	Project Order # Project #	1025 E Oakland Ave 00017 I1440003
		BULK SAN	1PLE AN	ALYSIS SUMM	IARY	
Туре	Client ID AS 8-2 Layer 1 Orange Linoleum Not Analyzed - e, homogenous, fibrous.	Layer 2 Mastic Type Not Analyzed Brown, homogenous,	-	O0017-21	L	ocation RM-4
	Client ID AS 9-1 Layer 1 Tan Linoleum Chrysotile 15.00% homogenous, fibrous. 85% non-asbestos	Layer 2 Mastic Type Chrysotile Brown, homogenous, 97.5% non-asbes Point count perfor	2.50% fibrous.	O0017-22	L	ocation RM-4
Type Tan,	Client ID AS 9-2 Layer 1 Tan Linoleum Not Analyzed - homogenous, fibrous.	Layer 2 Mastic Type Not Analyzed Brown, homogenous,	-	O0017-23	l	ocation RM-4
Type Brown	Client ID AS 10-1 Layer 1 oor Underlayment Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos		Lab ID	O0017-24	L	ocation RM-5
Type Brown	Client ID AS 10-2 Layer 1 oor Underlayment Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos		Lab ID	O0017-25	L	ocation RM-5
Analytica Analyst: Reviewer	Joshua P L	0/R-93/116 by Polarized ucchesi Quality Mana er A Claes Laboratory Di	ger	roscopy		Accreditations NIST-NVLAP No. 600212-0

00017

Client	The Mannik & Smith Group, 2193 Association Drive, Suit Okemos, MI, 48864		01/04/19 Orde	ect 1025 E Oakland Ave er # 00017 ect # 11440003
		BULK SAMPLE AN	ALYSIS SUMMARY	
	Client ID AS 11-1 Layer 1 Wall Mastic Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0017-26	Location RM-8
	Client ID AS 11-2 Layer 1 Wall Mastic Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0017-27	Location RM-8
Type Tan,	Client ID AS 12-1 Layer 1 Vall Underlayment Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0017-28	Location RM-8
Type Tan,	Client ID AS 12-2 Layer 1 Vall Underlayment Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0017-29	Location RM-8
Type Tan,	Client ID AS 13-1 Layer 1 ement Window Glaze Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0017-30	Location Basement
Analytica Analyst: Reviewe	Joshua P Lu	0/R-93/116 by Polarized Light Mic acchesi Quality Manager r A Claes Laboratory Director	roscopy	Accreditations NIST-NVLAP No. 600212-0

00017

Client	The Mannik & Smith Group, Inc. 2193 Association Drive, Suite 200 Okemos, MI, 48864	Received Analyzed Reported	01/04/19	Project Order # Project #	1025 E Oakland Ave 00017 I1440003
		BULK SAMPLE AN	ALYSIS SUMMAI	RY	
Type Tan,	Client ID AS 13-2 Layer 1 ement Window Glaze Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID	00017-31	l	ocation Basement
	Client ID AS 14-1 Layer 1 Stack Cement Non Detect 0.00% , homogenous, fibrous. 100% non-asbestos	Lab ID	O0017-32	L	ocation Basement
	Client ID AS 14-2 Layer 1 Stack Cement Non Detect 0.00% , homogenous, fibrous. 100% non-asbestos	Lab ID	O0017-33	Į.	ocation Basement
Type Gray, h	Client ID AS 15-1 Layer 1 ement Concrete Floor Non Detect 0.00% comogenous, nonfibrous. 100% non-asbestos	Lab ID	O0017-34	<u>[</u>	ocation Basement
Type Gray, h	Client ID AS 15-2 Layer 1 ement Concrete Floor Non Detect 0.00% nomogenous, nonfibrous. 1.00% non-asbestos	Lab ID	O0017-35	L	Location Basement
Analytica Analyst: Reviewe	Joshua P Lucchesi	116 by Polarized Light Mico Quality Manager s Laboratory Director	roscopy		Accreditations NIST-NVLAP No. 600212-0

00017

Client	The Mannik & Smith Group, Inc. 2193 Association Drive, Suite 200 Okemos, MI, 48864	Received 01/03/19 Analyzed 01/04/19 Reported 01/04/19	Project 1025 E Oakland Ave Order # 00017 Project # 11440003
		BULK SAMPLE ANALYSIS SUM	MARY
	Client ID AS 16-1 Layer 1 Exterior Caulk Non Detect 0.00% , homogenous, fibrous. 100% non-asbestos	Lab ID 00017-36	Location Exterior
	Client ID AS 16-2 Layer 1 Exterior Caulk Non Detect 0.00% , homogenous, fibrous. 100% non-asbestos	Lab ID 00017-37	Location Exterior
Type Black	Client ID AS 17-1 Layer 1 iding Underlayment Non Detect 0.00% s, homogenous, fibrous. 100% non-asbestos	Lab ID 00017-38	Location Exterior
Type Black	Client ID AS 17-1 Layer 1 iding Underlayment Non Detect 0.00% s, homogenous, fibrous. 100% non-asbestos	Lab ID 00017-39	Location Exterior
Type Black	Client ID AS 18-1 Layer 1 Driveway Sealant Non Detect 0.00% c, homogenous, fibrous. 100% non-asbestos	Lab ID 00017-40	Location Exterior
Analytic Analyst: Reviewe	Joshua P Lucchesi C	by Polarized Light Microscopy Quality Manager aboratory Director	Accreditations NIST-NVLAP No. 600212-0

00017

Client The Mannik & Smith Gr	oup, Inc. Received	01/03/19 Project	1025 E Oakland Ave
2193 Association Drive,	Suite 200 Analyzed	01/04/19 Order #	00017
Okemos, MI, 48864	Reported	01/04/19 Project	# 11440003
	BULK SAMPLE AN	ALYSIS SUMMARY	
Client ID AS 18 Layer 1	Lab ID	00017-41	Location Exterior
Driveway Sealant			
Type Non Detect 0.009 Black, homogenous, fibrous. 100% non-asbestos			
Client ID AS 19 Layer 1	Lab ID	O0017-42	Location Garage
Garage Siding Underlayment			
Type Non Detect 0.009 Black, homogenous, fibrous. 100% non-asbestos			
Client ID AS 19 Layer 1	Lab ID	O0017-43	Location Garage
Garage Siding Underlayment			
Type Non Detect 0.009 Black, homogenous, fibrous. 100% non-asbestos			
Client ID AS 20 Layer 1	Lab ID	O0017-44	Location Garage
Garage Window Glaze			
Type Non Detect 0.00%	6		
Cream, homogenous, fibrous 100% non-asbestos			
Client ID AS 20 Layer 1	Lab ID	O0017-45	Location Garage
Garage Window Glaze			
Type Non Detect 0.00% Cream, homogenous, fibrous 100% non-asbestos			
Analytical Method: US EPA	. 600/R-93/116 by Polarized Light Mici	roscopy	Accreditations
Analyst: Joshua	P Lucchesi Quality Manager		NIST-NVLAP
Reviewer: Christo	pher A Claes Laboratory Director		No. 600212-0

00017

Client The Mannik & Smith	Group, Inc.	Received 01/03/19	Project	1025 E Oakland Ave
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 2193 Association Drive, Suite 200
 Analyzed 01/04/19
 Order # 00017

 Okemos, MI, 48864
 Reported 01/04/19
 Project # 11440003

	BULK SAMPLE ANALYSIS SUMMARY	
Client ID AS 21-1 Layer 1	Lab ID 00017-46	Location Roof
Roof Shingle		
Type Non Detect 0.00% Black, homogenous, fibrous. 100% non-asbestos		
Client ID AS 21-2 Layer 1	Lab ID 00017-47	Location Roof
Roof Shingle		
Type Non Detect 0.00% Black, homogenous, fibrous. 100% non-asbestos		

Analytical Method:	US EPA 600/R-93/116 by Polarized Light Microscopy	Accreditations
Analyst:	Joshua P Lucchesi Quality Manager	NIST-NVLAP
Reviewer:	Christopher A Claes Laboratory Director	No. 600212-0

Client The Mannik & Smith Group, Inc. The Mannik & Smith Group **Analytical Laboratories** City, State Lansing, MI Order Number: Chain of Custody Zip Code 00017 *Bulk Samples Only*

Turn Around Project Address

1025 E Oakland Ave

4 Hour

24 Hour

48 Hour

✓ 72 Hour

Project#

11440003

Email

cbush@manniksmithgroup.com

Fax Phone

(517) 316-9232

Report to

✓ Email

Fax

1/3/2019

Date Sampled:

✓ TTP ☐ Point Count

☐ 1 Week

Contact

Charlie Bush

2193 Association Drive, Suite 200

Customer ID	Material Type	Material Location
AS 1-1	Plaster	
AS 1-2	Plaster	
AS 1-3	Plaster	
AS 1-4	Plaster	
AS 1-5	Plaster	
AS 2-2	Drywall	
AS 2-3	Drywall	
AS 2-1	Drywall	
AS 3-1	Window Glaze	
AS 3-2	Window Glaze	
AS 4-1	Vent wrap	
AS 4-2	Vent wrap	
AS 4-3	Vent wrap	
AS 6-1	White Linoleum	
AS 6-2	White Linoleum	
AS 7-1	Brown Linoleum	
AS 7-2	Brown Linoleum	
AS 5-1	Yellow linoleum	
AS 5-2	Yellow linoleum	
AS 8-1		

2365 S. Haggerty Road, Suite 100, Canton, MI 48188 Phone: (734) 397-3100 Fax: (734) 397-3131

Relinquished by M

Date and Time 1-3-18

1600

Email: cclaes@manniksmithgroup.com

Date and Time 1-3-19

Received by

1 of 1

The Mann	ik & Smith (aroup		Cha	in of Ci	ustody	
Analytic	al Laborato	ries		Order Number:			
Mannik & Smith Group	, Inc.		City,		Zip Code		*Bulk Samples Only*
3 Association Drive, Sui	te 200		Cont		Phone	(517) 316-9232	✓ TTP ☐ Point Count
25 E Oakland Ave					Fax		Date Sampled:
4 Hour	24 Hour	48 Hour	R	72 H	Report to	✓ Email ☐ Fax	1/3/2019
Customer ID		Ma	iterial Type		Material	Location	Notes
AS 8-2		Oran	ige linoleum	n	RN	1-4	
AS 9-1		Tar	1 Linoleum		RN	1-4	
AS 9-2		Tar	า Linoleum		RN	1-4	
AS 10-1		Floor	Jnderlayme	ent	RN	1-5	
AS 10-2		Floor	Jnderlayme	ent	RN	1-5	
AS 11-1		W	'all mastic		RN	1-8	
AS 11-2		W	'all mastic		RN	1-8	
AS 12-1		Wall u	ınderlaymeı	ent	RN	1-8	
AS 12-2		Wall u	ınderlaymeı	int	RN	1-8	
AS 13-1		Basemer	it Window (Glaze	Basei	ment	
AS 13-2		Basemer	it Window (Glaze	Basei	ment	
AS 14-1		Sta	ck Cement		Basei	ment	
AS 14-2		Sta	ck Cement		Base	ment	
AS 15-1		Basemer	nt Concrete	floor	Basei	ment	
AS 15-2		Basemer	nt Concrete	floor	Base	ment	
AS 16-1		Ext	erior Caulk		Exte	rior	
AS 16-2		Ext	erior Caulk		Exte	rior	
AS 17-1		Siding	underlayme	ent	Exte	rior	
AS 18-1		Drive	eway Sealan	nt	Exte	rior	
AS 18-2		Drive	way Sealan	# 	Exte	rior	
	The Mann Analytic Analytic Inthe Mannik & Smith Group 2193 Association Drive, Sui 1025 E Oakland Ave Customer ID AS 8-2 AS 10-1 AS 10-2 AS 11-1 AS 11-2 AS 11-2 AS 12-1 AS 13-2 AS 13-1 AS 13-1 AS 14-2 AS 14-1 AS 15-1 AS 15-1 AS 15-1 AS 16-1 AS 16-1 AS 16-1 AS 18-1	Analytical Laborato Analytical Laborato Analytical Laborato Analytical Laborato Ine Mannik & Smith Group, Inc. 2193 Association Drive, Suite 200 I025 E Oakland Ave	ytical Laboratories sroup, Inc. e, Suite 200 Project #	ytical Laboratories ytical Laboratories iroup, Inc. e, Suite 200 Project #	ATTILITY OF OUR Project # I1440003 Email Charlie Bush Project # I1440003 Email Charlie Bush Industrial Type Indus	APRILIT Group ytical Laboratories Troup, Inc. City, State Lansing, MI	Chain of Custody Chain of Custody Tipe Chain of Custody Tipe Chain of Custody Tipe Chain of Custody Tipe Content Content Chain Chain

Relinquished by Date and Time 1-3-[8] 1600 Date and Time Received by

Client Turn Around Address Comments: Project 1025 E Oakland Ave 2193 Association Drive, Suite 200 The Mannik & Smith Group, Inc. Customer ID 4 Hour AS 21-2 AS 21-1 AS 20-2 AS 20-1 AS 19-2 AS 19-1 The Mannik & Smith Group **Analytical Laboratories** Relinquished by 24 Hour Project # Garage Siding Underlayment Garage Siding Underlayment 48 Hour Garage window glaze Garage window glaze 11440003 Material Type **Roof Shingle Roof Shingle** Email City, State Lansing, MI Contact ✓ 72 Hour cbush@manniksmithgroup.com Charlie Bush Order Number: 1 Week Received by Chain of Custody Zip Code Phone Report to Fax Garage Garage Garage Garage Roof Roof (517) 316-9232 ✓ Email Fax Date Sampled: ✓ TTP ☐ Point Count *Bulk Samples Only* 1/3/2019 Notes

Date and Time

1-3-19

1600

Date and Time

ATTACHMENT D

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY (MDEQ) AIR QUALITY DIVISION NESHAP, 40 CFR Part 61, Subpart M

	•	5		,		
LICENSING	AND	REGI	RAI	on	AFI	AIRS
CHETTOWALE	DOM	No. 100	PDM	ree	101	over

MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS (LARA), ASBESTOS PROGRAM, P.A. 135 OF 1986, AS AMENDED, Section 220 (1-4) or (8)

·	
DEQ/LARA USE ONLY	3. ABATEMENT CONTRACTOR: Internal Project #:
Postmark Date/ Rec'd Date/	Name:
Emergency Date/ Valid No	Mailing Address.
☐ OK ☐ Send Def Ltr. Date of Def Ltr//	
	Contact: Phone:
FOLLOW UP/ Spoke w/ Comments:	4. DEMOLITION CONTRACTOR: Internal Project #:
	Name:
	_ Mailing Address:
	City/State/Zip:
Notification NoTrans No	
Calculate LARA Asbestos Project Fee: (1% Project Fee	Contact: Phone:
Total Project Cost: x 0.01 =	5. FACILITY OWNER: ("Facility" includes Bridges)
Type of Contractor: License No.:	Name:
Licensing Authority:	Mailing Address:
1. NOTIFICATION:	City/State/Zip:
Date of Notification:	E-mail:
Date of Revision(s):	
Notification Type: ☐ Original ☐ Revised ☐ Canceled ☐ Annual	6. FACILITY DESCRIPTION: Facility Name:
Mark appropriate boxes: (both DEQ and LARA may apply):	Location Address/Description:
DEQ (NESHAP) [260 In. ft./160 sq. ft. or more is threshold]	If Apt. # of units:
☐ Planned Renovation – 10 working days notice☐ Emergency Renovation	City/Twp State: Zip Code:
☐ Scheduled Demolition – 10 working days notice	County: Nearest Crossroad:
 ☐ Intentional Burn – 10 working days notice ☐ Ordered Demolition 	Size: (sq. ft.) No. of Floors: Floor No.:
LARA (MIOSHA) [Will not accept annual notifications]	Age: Present Use: Prior Use:
 □ Demo, Reno, Encap. (>10 ln. ft./15 sq. ft.) 10 <u>calendar</u> days notice □ Emergency Renovation/Encapsulation 	Specific Location(s) in Facility:
2. PROJECT SCHEDULE:	7. DISPOSAL SITE:
START DATE END DATE	Name:
* Renovation	Location Address:
+Asb. Removal	City/State/Zip:
+Demolition:	
Encapsulation:	
Work Schedule: Please indicate the anticipated days of the week and	Name: Address:
work hours for the purpose of scheduling a compliance inspection.	Address: City/State/Zip:
Days of the Week Work Hours	Phone:
Asb. Removal:	ORDERED DEMOLITIONS: (See NESHAP regulations for definition of
Demolition:	"Ordered Demolition.") A copy of the official Order must accompany this
Encapsulation:	notification.
* Includes setup, build enclosure, asbestos removal, demobilizing, etc. +Include only those dates you are conducting asbestos removal/demo.	Gov't Agency Ordering Demo:
	Name/Title of Person Signing Order:
Check here if this is a multi-phased project, attach a schedule showing the start/end date of each phase.	
the startona date of each phase.	Date of Order: Date Ordered to Begin:
10. IS ASBESTOS PRESENT? ☐ Yes ☐ No ☐ To be remo	oved prior to demolition
Estimate the amount of asbestos: Include RACM RACM to be	Non-friable ACM <u>not</u> e RACM to be removed prior to demo.
(Regulated Asbestos Containing Material) to be Removed	
removed, encapsulated, etc. Also include the amount and type (floor tile, roofing, etc.) of non-friable Category	□ Ln. Ft. □ Ln. M.
I and/or Category II ACM that will not be removed prior	□ Sq. Ft. □ Sq. M.
to demolition. (NOTE: In a demolition, cementatious ACM cannot remain in a structure, as it is likely to	☐ Cu. Ft.* ☐ Cu.M.*
become regulated in the demolition/handling process. *\/olume (cub)	ic ft./meters) should be used only if unable to measure by linear/square measure
It must be removed prior to demolition.)	postos has fallen off of surface)

(example: asbestos has fallen off of surface).

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH (continued)

11.	PROJECT DESCRIPTION: Complete A) for Renovation (asbestos remo	oval/encapsulation) and/or B) for Demolition:
	carefully lower, etc.):	
	B) DEMOLITION: Describe the method of demolition of facility, bridge, et bridge, etc., will be demolished:	tc., and indicate if complete or partial. If partial, describe which part of facility
12.	ENGINEERING CONTROLS: Describe work practices and engineering until proper disposal:	controls used to prevent visible emissions before, during, and after removal, and
13.		n the event that unexpected RACM is found or previously non-friable asbestos efore regulated:
14.		S: A) Indicate how you determined whether or not asbestos is in the facility. If ination of the presence or absence of asbestos must be made prior to submitting
		survey:
	C) Name, accreditation number of inspector, and date of inspection:	
15.	EMERGENCY RENOVATIONS: Date/time of emergency:	Describe the sudden, unexpected event:
	Explain how the event caused unsafe conditions, and/or would cause equ	ipment damage and/or an unreasonable financial burden:
16.	inspection at the renovation or demolition site.	Subpart M, will be on-site during the renovation and during demolition involving ence that this person has completed the required training will be available for
	Signature of Owner or Abatement Contractor Date	Signature of Owner or Demolition Contractor Date
17.	Signature of Building Owner or Lessee Date	ssure Enclosures: (required by LARA) ir monitoring is required for any asbestos abatement project involving 10 med within a negative pressure enclosure. I (the building owner or lessee) 135 to have clearance air monitoring performed on this project. Signature of Asbestos Abatement Contractor Representative Date sted. For affected projects, this section of the notification form must be completed, signed,
18.	I certify that the above information is correct:	
	Printed Name of Owner/Operator Date	Signature of Owner/Operator Date
MA	ILING ADDRESSES/PHONE NUMBERS: (See Item 1 to determine v	which agency requirements/regulations are applicable to your project.)
mai	Public Act 135 of 1986, as amended, Section 220 (1-4) or (8), I to address below. For more info visit: ://www.michigan.gov/asbestos	For NESHAP Demolitions/Renovations , 40 CFR , Part 61 , Subpart M , please use the e-submittal process. For more information visit http://www.michigan.gov/air , under Air Links click on Asbestos NESHAP Program.
LAF P.C	DSHA Asbestos Program RA, CSHD D. Box 30671 Ising, MI 48909-8171	NESHAP Asbestos Program DEQ, AQD P.O. Box 30260 Lansing, MI 48909-7760 517.284.6777 (Office)
517	7.636.4551 (office), 517.322.1713 (fax)	017.204.0777 (OIII06)

EQP5661 (rev. 03/14) MIOSHA-CSH 142 (rev. 08/14)



December 20, 2018

Ms. Roxanne Case Grant Manager Ingham County Land Bank 3024 Turner Street Lansing, Ingham County, Michigan 48906

Re: Pre-Renovation Regulated Materials Survey

330 North Francis, Lansing, Ingham County, MI

Dear Ms. Case:

The Mannik & Smith Group, Inc. (MSG) is pleased to present Ingham County with the results of the limited prerenovation regulated materials survey (RMS) performed at 330 North Francis, Lansing, Ingham County, Michigan (hereinafter referred to as the "Site") by Kory McKay (Accreditation Number A47903).

SUMMARY

Build	ling Information
Duamanto Adduaga	220 N Francia Lancina MI
Property Address	330 N Francis, Lansing MI
Parcel #	33-01-01-14-137-111
No. Stories	2
Square Footage (approx.)	800 SF
Siding	Wood
Basement	Yes
Garage	No



	As	sbestos Containing Materi	al	
Location	Material Group	Friable/Non Friable	Asbestos	Quantity
RM-1, RM-2, RM-6	Tan 9x9	Non Friable	4% Chrysotile	175 SF
RM-3, RM-4	White 12x12 Mastic	Non Friable	1.75% Chrysotile	125 SF
Basement	Chimney Lining	Non Friable	3% Chrysotile	100 SF
Basement	Stack Cement	Non Friable	2% Chrysotile	5 SF

	Universal Waste Inventory	
Location	Material Description	Quantity
RM-1	Thermostat	1
RM-5	Fire Extinguisher	2
Basement	Fluorescent Bulb	4
RM-3, Basement	CFL Bulb	2

Other Regulated Materials Inventory			
Location	Material Description	Quantity	
RM-2, RM-3	Refrigerator	2	
Basement	Dryer	1	

Hazardous Materials			
Location	Material Description	Quantity	
No Hazardous Materials were found onsite			

PURPOSE AND SCOPE OF WORK

The purpose of the RMS was to identify, quantify and document the location of regulated materials that may be encountered during renovation of the on-site structure. To accomplish this purpose, MSG performed the following scope of work:

- 1) Pre-renovation asbestos-containing material (ACM) survey.
- 2) Universal wastes, hazardous materials, and other regulated wastes survey.

METHODOLOGIES

The RMS was conducted on December 7, 2018. During the time of the survey the bathroom and second story was unsafe to enter and the second story was blocked off from entry. Due to the inaccessible nature of these areas, the bathroom and second story was not included in this survey. Methodologies employed during the completion of each task of the RMS are detailed below.

ACM Survey Procedures

The ACM survey was performed in general accordance with guidelines set forth in the Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) 763. The National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations govern demolition and renovation activities in which asbestos is present. The NESHAP rule distinguishes between Regulated Asbestos-Containing Materials (RACM) that would readily release asbestos fibers when damaged or disturbed and those materials that are unlikely to result in significant fiber release during renovation activities. The purpose of this survey is to determine if ACM within the Site building are RACM and thus, subject to the NESHAP, and to comply with the Michigan Occupational Safety and Health Administration (MIOSHA) and guidelines set forth in the Occupational Safety and Health Administration (OSHA) Regulations Standards 29 CFR 1910.1101.

RACM, as defined by NESHAP, is classified into four parts, (1) friable asbestos material, (2) Category I non-friable ACM (packing, gaskets, floor tile and roofing products) that has become friable, (3) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (4) Category II non-friable ACM (all other ACM products) that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

The suspect ACM identified during this survey was grouped into homogeneous materials (i.e. similar materials which are uniform in color and texture) and:

- Described and quantified it in linear feet (LF) or square feet (SF);
- Identified and classified as friable or non-friable:
- Assessed as being in good, fair or poor condition;

- Assigned an EPA classification type (surfacing material, thermal system insulation or miscellaneous);
- Classified as RACM or non-RACM; and
- Sampled, or identified as presumed ACM (PACM).

MSG performed services associated with the ACM survey in conformance with the care and skill ordinarily used by other reputable environmental consulting firms practicing under similar conditions, at the same time, and in the same or similar locality. The ACM survey included a systematic visual inspection of readily accessible areas of the Site building. Destructive sampling methods were used and suspect ACM samples were collected by State of Michigan Accredited Asbestos Inspector, Kory McKay (Accreditation Number A47903). Based on the quantity of each classification of material, MSG collected samples of each suspect ACM in accordance with EPA quidelines.

Universal Wastes and Hazardous Material Survey Procedures

MSG identified and inventoried universal wastes and hazardous materials by a visual reconnaissance of the Site. Materials were identified, described, and quantified to the extent possible; however, no equipment or containers were opened and/or sampled as part of this survey.

A hazardous material, as defined in OSHA 29 CFR 1910.1200, is any item or chemical which is a "health hazard" or "physical hazard", including the following:

- Chemicals that are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, hepatotoxins, nephrotoxins, neurotoxins, agents that act on the hematopoietic system, and agents that damage the lungs, skin, eyes, or mucous membranes;
- Chemicals that are combustible liquids, compressed gases, explosives, flammable liquids, flammable solids, organic peroxides, oxidizers, pyrophorics, unstable (reactive) or water-reactive;
- Chemicals that, in the course of normal handling, use or storage, may produce or release dusts, gases, fumes, vapors, mists or smoke which have any of the above characteristics; and
- Any item or chemical which, when being transported or moved, is a risk to public safety or an environmental hazard, and is regulated as such by one or more of the following:
 - o DOT Department of Transportation; Hazardous Materials Regulations (49 CFR 100-180);
 - IMO International Maritime Organization; International Maritime Dangerous Goods (IMDG)
 Code:
 - o IATA International Air Transport Association; Dangerous Goods Regulations;
 - o ICAO International Civil Aviation Organization; Technical Instructions; and
 - AF Air Force "INTERSERVICE" Manual, Preparing Hazmat for Military Air Shipments (AFMAN 24-204).

Hazardous materials may also include:

- Any item or chemical listed in the United States Environmental Protection Agency (USEPA) *List of Hazardous Substances and Reportable Quantities*, dated September 1992.
- Noticeable as inventory under the reporting requirements of the Hazardous Chemical Reporting (40 CFR Part 302).
- An environmental release under the reporting requirements of the Toxic Chemical Release Reporting: Community Right To Know (40 CFR Part 372) or under Part 201, Environmental Remediation of the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 201) and Part 213, Leaking Underground Storage Tanks (Part 213).

These would include chemicals with special characteristics which, in the opinion of the manufacturer, can cause harm to people, plants, or animals when released by spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other receptacles).

Universal wastes are waste that comes primarily from consumer products containing mercury, lead, cadmium or other substances that are hazardous to human health and the environment. These items cannot be discarded in household trash nor disposed of in landfills but have less stringent handling and disposal requirements than hazardous waste streams. In Michigan, universal wastes are regulated by the MDEQ Office of Waste Management and Radiological Protection under Part 111 of Act 451 and the federal Resource Conservation and Recovery Act (RCRA) of 1976 under 40 CFR Part 273. Universal waste is also regulated by the US Department of Transportation (US DOT) under 49 CFR Parts 171 through 180. Most of the universal waste requirements overseen by the DEQ are addressed by R 299.9228 of Part 111 of 1994 P.A. 451, as amended and 40 CFR Part 273. These regulations are designed to encourage proper collection, recycling, treatment, or disposal of these wastes.

Examples of universal waste are mercury-containing equipment (e.g. thermostats, barometers, manometers, temperature and pressure gauges, and mercury switches), nickel-cadmium and spent lead-acid batteries, lamps (e.g. incandescent, fluorescent, high intensity discharge, neon, mercury vapor, and high pressure sodium and metal halide), pesticides, polychlorinated biphenyl (PCB) containing transformers and light ballasts, stored chemical and/or petroleum products, etc. In Michigan, Part 111 also includes pharmaceutical and consumer electronics as additional types of universal wastes.

Other Regulated Materials

This RMS also included identifying and inventorying other regulated materials which may pose physical or chemical concerns during renovation of the Site building(s) including chlorofluorocarbon (CFC) containing devices, tanks, vessels, equipment, and building materials that may contain or become contaminated with hazardous materials.

Specifically, CFC containing devices are regulated Under Title VI of the Clean Air Act (CAA). The Stratospheric Protection Division of the EPA manages programs protecting the stratospheric ozone layer. Title 40, Part 82 of the Code of Federal Regulations contains the EPA regulations protecting the ozone layer. The RMS survey of the premises identified and quantified any CFC containers and CFC containing equipment, which could include the following:

- Drinking fountains, air conditioners, refrigerators
- Air conditioners in control panels and other process equipment
- Water and air chillers
- Roof top and stand-alone air conditioners
- Cafeteria equipment: freezers, walk-in coolers/freezers
- CFC canisters and cylinders

In Michigan, underground storage tanks are regulated under the authority of Part 211, Underground Storage Tank Regulations, of Act 451 of 1994, as amended, and the Michigan Underground Storage Tank Rules (MUSTR). Therefore, this survey included whether any evidence of underground storage tanks and related piping and dispensers were present at the Site.

MSG also surveyed for the presence of equipment, other storage tanks, and materials that may contain or be contaminated by regulated chemicals. These include, but may not be comprehensive of:

- Above ground storage tanks
- Oil-containing equipment (hydraulic equipment, blowers, fans, motors, elevators, compressors, etc.)
- Fire brick
- Contaminated building materials (concrete, block walls, wood, plaster, etc.) with staining, odor or other signs of a hazardous chemical release

SURVEY RESULTS

The following subsections include a discussion of the RMS results. Photographs of the residence are located in the *Attachment A, Photo Log.* The results of this report are valid as of the report date, subject to the limitations presented in *Attachment B, Limitations*.

ACM Survey Results

MSG identified thirteen (13) homogenous materials that were suspect as asbestos containing during the ACM survey. Twenty nine (29) bulk samples were collected from these suspect homogeneous materials and were submitted to Mannik & Smith Group Analytical Laboratories (MSGAL) for laboratory analysis of Bulk Materials by Polarized Light Microscopy using USEPA Method 600/R-93/116. MSGAL is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) to analyzed bulk samples for asbestos content. Of the aforementioned suspect homogenous materials identified during this ACM survey, laboratory analysis found four (4) homogenous materials (samples 4-1, 6-1, 7-1 and 9-1) contained greater than 1% asbestos. The EPA defines ACM as materials containing greater than 1% asbestos.

A point-count quantification procedure (PCQM) allows for lower detection limits than calibrated visual estimation (CVES), which is the quantification method widely used in asbestos analysis via Polarized Light Microscopy (PLM). If the asbestos content is found to contain less than 10% asbestos as determined by a method other than point counting by PLM, it can only be treated as non-ACM if verified to contain less than 1% by the PCQM. If not point-counted, the sample must be assumed to be greater than 1% and thus considered and treated as ACM. It is MSG's experience that point counting samples with an estimated PLM asbestos content of more than 3% does not yield significantly different analytical results. Three samples (6-1, 7-1 and 9-1) were point count confirmed.

Suspect ACM sample locations are depicted on the attached figure. See *Table 1*, *Asbestos Sampling Results* for a listing of homogeneous materials identified by MSG during this survey. A copy of the analytical reports including chains of custody is attached in *Attachment C, Analytical Reports and Chains of Custody*.

Universal Wastes, Hazardous Materials, and Other Regulated Materials Survey Results

Universal wastes, hazardous materials, and/or other regulated materials wastes were identified within the Site building. Quantities identified are provided in *Table 2, Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory.*

CONCLUSIONS AND RECOMMENDATIONS

Asbestos Containing Materials

Of the thirteen (13) homogenous materials collected as part of the ACM survey, four (4) homogenous materials contained asbestos greater than 1% (samples 4-1, 6-1, 7-1 and 9-1) with these four (4) homogenous materials being classified as RACM. All materials containing ACM must be disposed of in a licensed landfill.

Prior to renovation, a notification of intent to demolish shall be made to the Michigan Department of Environmental Quality Air Quality Division (MDEQ-AQD) and Licensing and Regulatory Affairs (LARA), Asbestos Program. Notification, according to the procedure described by the NESHAP, Title 40 of the Code of Federal Regulations, Part 61, Subpart M, Notification, for renovation and demolition projects should be followed. A copy of this notification form is provided in *Attachment D, Notification of Intent to Renovate/Demolish*. This form shall be completed by the contractor who completes the renovation.

If additional suspect ACMs are discovered during renovation activities in areas that were determined during this survey to be structurally unsound and unsafe, inaccessible, concealed and/or in buried areas, shall be surveyed, tested, and abated if warranted. If suspect ACMs are determined to be RACM that would be disturbed during renovation activities, the RACM must be properly removed by a licensed asbestos abatement contractor.

Category I and Category II Non-Friable ACM may often be left in place during renovation activities if the ACM is not subjected to sanding, grinding, cutting, or abrading or has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material during the course of renovation.

Universal Wastes, Hazardous Materials, and Other Regulated Materials

The universal waste, hazardous materials, and other regulated materials (see Table 2) must be properly characterized (as necessary) and properly removed from the Site building for recycling and/or disposed of in accordance with Parts 111, 115, or 147 of Michigan Public Act 451 of 1994, as amended. If additional universal wastes, hazardous materials, and other regulated materials are discovered during renovation activities in areas that were determined during this survey to be structurally unsound and unsafe, inaccessible, concealed and/or in buried areas, these materials shall be characterized (as necessary) and properly removed in accordance with the above-mentioned regulations.

If you have any questions or concerns regarding the above information please contact us at 517-316-9232.

Sincerely,

Kory McKay

Environmental Scientist

Accreditation Number A47903

Charlie Bush

Senior Project Manager

Accreditation Number A34293

Attachments

FIGURE



TECHNICAL SKILL. CREATIVE SPIRIT.

721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com Address: 330 North Francis Date: December 7, 2018 Drawing not to scale 1st Floor 3-1, 2 1-3 Room 4 Room 5 Room 3 1-4 6-1, 2 1-5 Room 2 Room 6 1-2 5-1, 2 4-1, 2 2-1, 2 Room 1 11-1, 2 12-1, 2 1-1 13-1, 2 Tan 9x9 (175 SF total)

White 12x12 Mastic (125 SF total)



TECHNICAL SKILL. CREATIVE SPIRIT.

721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com

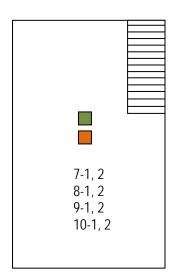
Address: 330 North Francis Date: December 7, 2018

Drawing not to scale

2nd Floor Inaccessible

Basement

- Stack Cement (5 SF total)
- Chimney Lining (100 SF total)



TABLES

TABLE 1
Asbestos Sampling Results

Client Survey Loca	ntion	Ingham Count 330 N Francis		ank Authority						
Survey Da		December 7, 2								
Functional Area	Floor	Sample ID	HM#	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
RM-1	1	AS 1-1	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
RM-2	1	AS 1-2	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
RM-3	1	AS 1-3	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
RM-5	1	AS 1-4	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
RM-6	1	AS 1-5	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
RM-1	1	AS 2-1	HA-2	Window Glaze	Non-Friable	Good	Miscellaneous	No	No	250 SF
RM-1	1	AS 2-2	HA-2	Window Glaze	Non-Friable	Good	Miscellaneous	No	No	250 SF
RM-3	1	AS 3-1	HA-3	Sink undercoating	Non-Friable	Good	Miscellaneous	No	No	5 SF
RM-3	1	AS 3-2	HA-3	Sink undercoating	Non-Friable	Good	Miscellaneous	No	No	5 SF
RM-1	1	AS 4-1	HA-4	Tan 9x9	Non-Friable	Good	Miscellaneous	Yes	4% Chrysotile	175 SF
RM-1	1	AS 4-2	HA-4	Tan 9x9	Non-Friable	Good	Miscellaneous	Yes	NA	175 SF
RM-2	1	AS 5-1	HA-5	Black Floor Underlayment	Non-Friable	Good	Miscellaneous	No	No	375 SF
RM-2	1	AS 5-2	HA-5	Black Floor Underlayment	Non-Friable	Good	Miscellaneous	No	No	375 SF
RM-3	1	AS 6-1	HA-6	White 12x12	Non-Friable	Good	Miscellaneous	Yes	Mastic 1.75% Chrysotile	125 SF
RM-3	1	AS 6-2	HA-6	White 12x12	Non-Friable	Good	Miscellaneous	Yes	NA	125 SF
Basement	В	AS 7-1	HA-7	Inner Chimney liner	Non-Friable	Good	Miscellaneous	Yes	3% Chrysotile	100 SF
Basement	В	AS 7-2	HA-7	Inner Chimney liner	Non-Friable	Good	Miscellaneous	Yes	NA	100 SF

TABLE 1
Asbestos Sampling Results

Client		Ingham Count		ank Authority						
Survey Loca		330 N Francis								
Survey Da Functional Area	Floor	December 7, 2 Sample ID	HM #	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
Basement	В	AS 8-1	HA-8	Basement Concrete floor	Non-Friable	Good	Miscellaneous	No	No	500 SF
Basement	В	AS 8-2	HA-8	Basement Concrete floor	Non-Friable	Good	Miscellaneous	No	No	500 SF
Basement	В	AS 9-1	HA-9	Stack Cement	Non-Friable	Good	Miscellaneous	Yes	2% Chrysotile	5 SF
Basement	В	AS 9-2	HA-9	Stack Cement	Non-Friable	Good	Miscellaneous	Yes	NA	5 SF
Basement	В	AS 10-1	HA-10	Basement Window Glaze	Non-Friable	Good	Miscellaneous	No	No	15 SF
Basement	В	AS 10-2	HA-10	Basement Window Glaze	Non-Friable	Good	Miscellaneous	No	No	15 SF
Exterior	Е	AS 11-1	HA-11	Siding underlayment	Non-Friable	Good	Miscellaneous	No	No	1700 SF
Exterior	Е	AS 11-2	HA-11	Siding underlayment	Non-Friable	Good	Miscellaneous	No	No	1700 SF
Exterior	Е	AS 12-1	HA-12	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	200 LF
Exterior	Е	AS 12-2	HA-12	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	200 LF
Roof	Е	AS 13-1	HA-13	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	750 SF
Roof	E	AS 13-2	HA-13	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	750 SF

Table 2 Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory 330 North Francis

Lansing, Ingham County, Michigan

	Universal Waste Inventory	
Location	Type of Waste	Approximate Quantity
RM-5	Fire Extinguisher	2
Basement	Fluorescent Bulb	4
RM-3, Basement	CFL Bulb	2
RM-1	Thermostat	1
	Hazardous Materials Inventory	
Location	Type of Waste	Approximate Quantity
-	-	-
Oth	ner Regulated Materials Inventory	
Location	Type of Waste	Approximate Quantity
RM-2, RM-3	Refrigerator	2
Basement	Dryer	1

ATTACHMENT A PHOTO LOG

Ingham County Land Bank 330 N Francis Ave, Lansing, MI Photographs taken by: Kory McKay on 12/07/2018

Property Photos



330 N Francis Ave, Front of House



Back of House



Side of House



Side of House

Ingham County Land Bank 330 N Francis Ave, Lansing, MI Photographs taken by: Kory McKay on 12/07/2018

Universal Waste and Hazardous Materials



Sample ID: AS 1-1 Location: RM-1 Notes: Drywall



Sample ID: AS 7-1 Location: Basement Notes: Inner Chimney



Sample ID: AS 4-1 Location: RM-1 Notes: Tan 9x9 Tile



Sample ID: AS 9-1 Location: Basement Notes: Stack Cement



Sample ID: AS 6-1 Location: RM-3 Notes: White 12x12 Tile



Sample ID: AS 2-1 Location: RM-1 Notes: Window Glaze

Ingham County Land Bank 330 N Francis Ave, Lansing, MI Photographs taken by: Kory McKay on 12/07/2018

Universal Waste and Hazardous Materials



Sample ID: AS 3-1 Location: RM-3

Notes: Sink Undercoating



Sample ID: AS 10-1 Location: Basement

Notes: Basement Window Glaze



Sample ID: AS 5-1 Location: RM-2

Notes: Black Floor Underlayment



Sample ID: AS 11-1 Location: Exterior Notes: Siding Underlayment



Sample ID: AS 8-1 Location: Basement Notes: Basement Floor



Sample ID: AS 12-1 Location: Exterior Notes: Exterior Caulk

Inaccessible Areas



Description: Second floor boarded off and unsafe, first floor bathroom sinking floor



Description: Bathroom

ATTACHMENT B LIMITATIONS



REGULATED MATERIALS SURVEY LIMITATIONS

The Mannik & Smith Group, Inc. (MSG) performed its services associated with this Regulated Materials Survey (RMS) in general accordance with guidelines set forth in the Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) 763, Occupational Safety and Health Administration (OHSA) 29 CFR 1926.62, and in conformance with the care and skill ordinarily used by other reputable environmental consulting firms practicing under similar conditions, at the same time, and in the same or similar locality. This RMS and related documentation are site-specific, which means they pertain to the conditions of the site surveyed.

Unless otherwise noted, MSG's RMS is limited to accessible areas. Areas determined to be not structurally sound, safely reached, limited by excessive accumulated obstructions, require specialized equipment to access, in operable windows, etc., are not included in this survey. There may be areas where regulated materials, such as suspected asbestos-containing materials (SACM) and lead containing paint cannot be viewed and/or tested. MSG shall not be responsible for identifying all SACM, lead containing paint, or other hazardous materials located in inaccessible locations, including by not limited to, above a plaster ceiling, behind a wall, embedded in concrete, buried, confined spaces, unsafe areas, or otherwise not readily identifiable.

Destructive sampling will only be conducted when permission has been granted by the owner. Destructive survey locations are limited to areas where hidden SACM, lead containing paint, or other hazardous materials is reasonably thought to be present and sampling can be conducted in a safe manner. If regulated materials are found during the course of demolition and/or renovation activities that are not listed in this report, the material should be assumed as asbestos-containing, lead containing, or hazardous until it can be sampled and analyzed at an accredited laboratory and safe work practices should always be used if those areas are to be disturbed.

MSG has prepared a logical assessment program to reduce the client's risk of discovering unknown regulated materials and/or hazardous substances. The presence of subsurface regulated materials and/or hazardous substances is based solely on surface observations and/or information provided by others. Descriptions of subsurface conditions provided in this report are not warranted to be complete or accurate. This risk may be reduced by more extensive exploration on the site, but even with additional exploration, it is not possible to completely eliminate the risk of discovering regulated materials and/or hazardous conditions. It cannot and should not be assumed that samples collected and conditions observed at the time of the RMS are representative of an area that has not been sampled and/or tested.

In preparing this report, MSG may have relied on information obtained from or provided by others. MSG makes no representation or warranty regarding the accuracy or completeness of this information gathered through outside sources or subcontracted services. No warranty, guarantee, or certification of any kind, expressed or implied, at common law or created by statute, is extended, made, or intended by rendering these environmental consulting services or by furnishing this written report. Environmental conditions and regulations are subject to constant change and reinterpretation. One should not assume that any on-site conditions and/or regulatory statutes or rules will remain constant after MSG has completed the scope of work for this project. Furthermore, because the facts stated in this report are subject to professional interpretation, differing conclusions could be reached by other environmental professionals.

The report is intended to offer support to a building owner, construction manager, general contractor, abatement contractor, architect, and/or other parties authorized by the owner in generally locating asbestos-containing materials (ACM), lead containing paint, universal and hazardous wastes, and/or other regulated materials. This report does not have the required components to serve as an Asbestos Project Design document, Asbestos and/or Lead Containing Paint Abatement Work Plan, and/or a Health and Safety Plan. Therefore, this report should not be utilized as a project specification document. The results, findings, conclusions, and recommendations expressed in

TECHNICAL SKILL. CREATIVE SPIRIT.

this report are based only on conditions that were noted during this survey. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated. Quantities have been conservatively estimated and sampling locations have been described representatively; however, current site conditions should be field-verified by contractors bidding on and/or prior to abatement work.

ATTACHMENT C

ANALYTICAL REPORTS AND CHAINS OF CUSTODY



00006

Client	The Mannik & Smith Group	, Inc. Rece	eived	12/11/18	Project	330 N Francis Ave
	2193 Association Dr., Suite	200 Anal	yzed	12/13/18	Order#	O0006
	Okemos, MI, 48864	Repo	orted	12/13/18	Project #	11440003
1						
		BULK SAMPLE	E ANA	ALYSIS SUMM	ARY	
	Client ID AS 1-1	Lak	b ID	O0006-1	L	ocation RM-1
	Layer 1	Layer 2				
	Drywall	Joint Compound				
	Non Detect 0.00%, homogenous, fibrous. 00% non-asbestos	Type Non Detect 0.0 White, homogenous, fibro 100% non-asbestos	00% ous.			
	Client ID AS 1-2	Lak	b ID	O0006-2	Ĺ	ocation RM-2
	Layer 1	Layer 2				
	Drywall	Joint Compound				
Туре	Non Detect 0.00%	, · ·	00%			
	, homogenous, fibrous. 00% non-asbestos	White, homogenous, fibro 100% non-asbestos	us.			
	ooyo non assestos	100/011011 03503103				
	Client ID AS 1-3		b ID .	O0006-3	L	ocation RM-3
	Layer 1	Layer 2				
	Drywall	Joint Compound				
Type White	Non Detect 0.00%, homogenous, fibrous.	Type Non Detect 0.0 White, homogenous, fibro				
	00% non-asbestos	100% non-asbestos	us.			
				00000		
	Client ID AS 1-4 Layer 1	Lak Layer 2	טוט ו	O0006-4	L	ocation RM-5
	Drywall	Joint Compound				
Туре	Non Detect 0.00%		00%			
	, homogenous, fibrous.	White, homogenous, fibro				
10	00% non-asbestos	100% non-asbestos				
	Client ID AS 1-5	Lat	b ID	00006-5		ocation RM-6
	Layer 1	Layer 2				
	Drywall	Joint Compound				
Туре	Non Detect 0.00%		00%			
	, homogenous, fibrous. 00% non-asbestos	White, homogenous, fibro 100% non-asbestos	us.			
	00/0 HUH-asuestus	100% HOH-92062(02				
		0/R-93/116 by Polarized Light	t Micr	oscopy		Accreditations
Analyst:	Joshua P L	, ,	~ ~			NIST-NVLAP
Reviewer	: Cnristophe	er A Claes Laboratory Directo	טר			No. 600212-0

00006

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864	200 AI	nalyzed	12/11/18 12/13/18 12/13/18	Project Order # Project #	330 N Francis Ave O0006 I1440003
		BULK SAMP	PLE AN	ALYSIS SUMM/	ARY	
	Client ID AS 2-1 Layer 1 Window Glaze Non Detect 0.00% m, homogenous, fibrous. 100% non-asbestos	L	∟ab ID	O0006-6	L	ocation RM-1
	Client ID AS 2-2 Layer 1 Window Glaze Non Detect 0.00% m, homogenous, fibrous. 100% non-asbestos	L	₋ab ID	O0006-7	L	ocation RM-1
Type Black	Client ID AS 3-1 Layer 1 Sink undercoating Non Detect 0.00% A, homogenous, fibrous. 100% non-asbestos	L	∟ab ID	O0006-8	L	ocation RM-3
Type Black	Client ID AS 3-2 Layer 1 Sink undercoating Non Detect 0.00% s, homogenous, fibrous. 100% non-asbestos	L	ab ID	O0006-9	L	ocation RM-3
	Client ID AS 4-1 Layer 1 Tan 9x9 Chrysotile 4.00% , homogenous, fibrous. 96% non-asbestos	Layer 2 Mastic	0.00% prous.	O0006-10	L	ocation RM-1
Analytic Analyst: Reviewe	: Joshua P L	10/R-93/116 by Polarized Li ucchesi Quality Manage er A Claes Laboratory Dire	er	roscopy		Accreditations NIST-NVLAP No. 600212-0

00006

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864	200 Analyze	d 12/11/18 d 12/13/18 d 12/13/18	Project Order # Project #	330 N Francis Ave O0006 I1440003
		BULK SAMPLE A	NALYSIS SUMM	ARY	
Type Tan, l	Client ID AS 4-2 Layer 1 Tan 9x9 Not Analyzed - homogenous, fibrous.	Lab II Layer 2 Mastic Type Non Detect 0.00% Black, homogenous, fibrous. 100% non-asbestos	0 00006-11	1	Location RM-1
Type Black,	Client ID AS 5-1 Layer 1 Floor Underlayment Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab II	O O0006-12	l	Location RM-2
Type Black,	Client ID AS 5-2 Layer 1 Floor Underlayment Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab II	0 00006-13	1	Location RM-2
	Client ID AS 6-1	Lab II	00006-14		ocation RM-3
	Layer 1	Layer 2	Laye		
	White 12x12	Mastic	Floor	Tile	
	Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Type Chrysotile 1.75% Black, homogenous, fibrous. 98.25% non-asbestos Point count performed.	Type Non D Black, homoge 100% non-	nous, fibrous.	
-	Client ID AS 6-2		00006-15		ocation RM-3
	Layer 1	Layer 2	Laye	er 3	
	White 12x12	Mastic	Floor	Tile	
	Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Type Not Analyzed - Black, homogenous, fibrous.	Type Non D Black, homoge 100% non-	nous, fibrous.	
Analytica Analyst: Reviewer	Joshua P L	0/R-93/116 by Polarized Light M ucchesi Quality Manager er A Claes Laboratory Director	icroscopy		Accreditations NIST-NVLAP No. 600212-0

00006

	k & Smith Group, Inc. ciation Dr., Suite 200 11, 48864	Received Analyzed Reported	12/13/18	Project Order # Project #	330 N Francis Ave 00006 I1440003
	Bl	JLK SAMPLE AN	ALYSIS SUMMAF	RY	
Client Layer 2 Inner Chimne Type Chrysot Black, homogene 97% non-asl Point count pe	ey liner ile 3.00% ous, fibrous. bestos	Lab ID	O0006-16	L	ocation Basement
	ID AS 7-2 1 ey liner rzed -	Lab ID	O0006-17	L	ocation Basement
Layer : Basement Conc	rete floor ect 0.00% i, nonfibrous.	Lab ID	O0006-18	L	ocation Basement
Client Layer: Basement Conc Type Non Det Gray, homogenous 100% non-as	rete floor ect 0.00% c, nonfibrous.	Lab ID	O0006-19	L	ocation Basement
Client Layer: Stack Cem Type Chrysot Gray, homogenous 98% non-asl Point count pe	ile 2.00% s, nonfibrous. bestos	Lab ID	O0006-20	L	ocation Basement
Analytical Method: Analyst: Reviewer:	US EPA 600/R-93/116 by Joshua P Lucchesi Qua Christopher A Claes Lab	ality Manager	roscopy		Accreditations NIST-NVLAP No. 600212-0

00006

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864		12/13/18		30 N Francis Ave 00006 1440003
		BULK SAMPLE AN	ALYSIS SUMMARY		
Type Gray, h	Client ID AS 9-2 Layer 1 Stack Cement Not Analyzed - nomogenous, nonfibrous.	Lab ID	O0006-21	Lo	cation Basement
Type Cream	Client ID AS 10-1 Layer 1 ement Window Glaze Non Detect 0.00% n, homogenous, fibrous. 100% non-asbestos	Lab ID	O0006-22	Lo	cation Basement
Type Cream	Client ID AS 10-2 Layer 1 ement Window Glaze Non Detect 0.00% n, homogenous, fibrous. 100% non-asbestos	Lab ID	O0006-23	Lo	cation Basement
Type Black	Client ID AS 11-1 Layer 1 iding underlayment Non Detect 0.00% t, homogenous, fibrous. 100% non-asbestos	Lab ID	O0006-24	Lo	cation Exterior
Type Black	Client ID AS 11-2 Layer 1 iding underlayment Non Detect 0.00% t, homogenous, fibrous. 1,00% non-asbestos	Lab ID	O0006-25	Lo	cation Exterior
Analytica Analyst: Reviewe	Joshua P L	D/R-93/116 by Polarized Light Mico ucchesi Quality Manager or A Claes Laboratory Director	roscopy		Accreditations NIST-NVLAP No. 600212-0

00006

Client	The Mannik & Smith Group, Inc 2193 Association Dr., Suite 200 Okemos, MI, 48864		12/13/18 Orde	
		BULK SAMPLE AN	ALYSIS SUMMARY	
	Client ID AS 12-1 Layer 1 Exterior Caulk Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Lab ID	O0006-26	Location Exterior
	Client ID AS 12-2 Layer 1 Exterior Caulk Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Lab ID	O0006-27	Location Exterior
	Client ID AS 13-1 Layer 1 Roof Shingle Non Detect 0.00% A, homogenous, fibrous. L00% non-asbestos	Lab ID	O0006-28	Location Roof
	Client ID AS 13-2 Layer 1 Roof Shingle Non Detect 0.00% A, homogenous, fibrous. 100% non-asbestos	Lab ID	O0006-29	Location Roof

Analytical Method:	US EPA 600/R-93/116 by Polarized Light Microscopy	Accreditations
Analyst:	Joshua P Lucchesi Quality Manager	NIST-NVLAP
Reviewer:	Christopher A Claes Laboratory Director	No. 600212-0

The Mannik & Analytical Lab

00000		
	Order Number:	poratories
of Custody	Chain of Custody	smith Group
4) }	C 10 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Address	2193 Association Drive, Suite 200	uite 200		Contact Charlie Bush	Phone (517) 316-9232	TP Point Count
Project	330 N Francis Ave		Project # 11440003	Email cbush@manniksmithgroup.com	Fax	Date Sampled:
Turn Around		24 Hour	48 Hour	✓ 72 Hour ☐ 1 Week	Report to Fmail Fax	12/7/2018
Lab ID	Customer ID		Material Type	Туре	Material Location	Notes
	AS 1-1		Drywall	all	RM-1	
	AS 1-2		Drywall	all	RM-2	
	AS 1-3		Drywall	all	RM-3	
	AS 1-4		Drywall	all	RM-5	
	AS 1-5		Drywall	all	RM-6	
	AS 2-1		Window Glaze	Glaze	RM-1	
	AS 2-2		Window Glaze	Glaze	RM-1	
	AS 3-1		Sink undercoating	coating	RM-3	
	AS 3-2		Sink undercoating	coating	RM-3	
	AS 4-1		Tan 9x9	x9	RM-1	
	AS 4-2		Tan 9x9	x9	RM-1	
	AS 5-1		Black Floor Underlayment	derlayment	RM-2	
	AS 5-2		Black Floor Underlayment	derlayment	RM-2	
	AS 6-1		White 12x12	2x12	RM-3	
	AS 6-2		White 12x12	2x12	RM-3	
	AS 7-1		Inner Chimney liner	ney liner	Basement	4
	AS 7-2		Inner Chimney liner	ney liner	Basement	
	AS 8-1		Basement Concrete floor	crete floor	Basement	
	AS 8-2		Basement Concrete floor	crete floor	Basement	
	AS 9-1		Stack Cement	ment	Basement	

Relinquished by

Date and Time __

Date and Time

Received by

040

_	
Order Number:	
nber:	Chain
	in of Custody
	dy

City, State	le	*Bulk Samples Only*
Project# 1440003 Email	Fax	Date Sampled:
✓ 72 H	eek Report to 🗸 Email 🗌 Fax	12/7/2018
Material Type	Material Location	Notes
Stack Cement	Basement	
Basement Window Glaze	Basement	
Basement Window Glaze	Basement	
Siding underlayment	Exterior	
Siding underlayment	Exterior	
Exterior Caulk	Exterior	
Exterior Caulk	Exterior	
Roof Shingle	Roof	
Roof Shingle	Roof	
	Gity, State O Project # 11440003 Email 24 Hour 48 Hour 72 H Material Type Stack Cement Basement Window Glaze Siding underlayment Siding underlayment Exterior Caulk Exterior Caulk Roof Shingle Roof Shingle	City, State Lansing, MI City Code Contact Charlie Bush Phone (517) 316-9232 Project# 11440003 Email obush@manniksmithgroup.com Fax Phone Call Phone (517) 316-9232 Phour 1 Neek Phone (517) 316-9232 Phour 1 Neek Phone (517) 316-9232 Phour Phone (517) 316-9232 Phone (517) 31

Relinquished by

Date and Time

Date and Time

Received by

ATTACHMENT D

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY (MDEQ) AIR QUALITY DIVISION NESHAP, 40 CFR Part 61, Subpart M

	•	5		,		
LICENSING	AND	REGI	RAI	on	AFI	AIRS
CHETTOWATER	DOM	No. 100	PDM	ree	101	over

MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS (LARA), ASBESTOS PROGRAM, P.A. 135 OF 1986, AS AMENDED, Section 220 (1-4) or (8)

·	
DEQ/LARA USE ONLY	3. ABATEMENT CONTRACTOR: Internal Project #:
Postmark Date/ Rec'd Date/	Name:
Emergency Date/ Valid No	Mailing Address:
☐ OK ☐ Send Def Ltr. Date of Def Ltr/	City/State/Zip:E-mail:
	Contact: Phone:
FOLLOW UP/ Spoke w/ Comments:	4. DEMOLITION CONTRACTOR: Internal Project #:
	Name:
	Mailing Address:
	City/State/Zip:
Notification NoTrans No	/ E-mail:
Calculate LARA Asbestos Project Fee: (1% Project Fee)	Contact: Phone:
Total Project Cost: x 0.01 =	5. FACILITY OWNER: ("Facility" includes Bridges)
Type of Contractor: License No.:	Name:
Licensing Authority:	Mailing Address:
1. NOTIFICATION:	City/State/Zip:
Date of Notification:	E-mail:
Date of Revision(s):	Contact: Phone:
Notification Type: ☐ Original ☐ Revised ☐ Canceled ☐ Annual	6. FACILITY DESCRIPTION:
Mark appropriate boxes: (both DEQ and LARA may apply):	Facility Name: Location Address/Description:
DEQ (NESHAP) [260 In. ft./160 sq. ft. or more is threshold]	If Apt. # of units:
☐ Planned Renovation – 10 working days notice	City/Twp State: Zip Code:
☐ Emergency Renovation☐ Scheduled Demolition – 10 working days notice	County: Nearest Crossroad:
☐ Intentional Burn – 10 working days notice	Size: (sq. ft.) No. of Floors: Floor No.:
☐ Ordered Demolition LARA (MIOSHA) [Will not accept annual notifications]	Age: Present Use: Prior Use:
☐ Demo, Reno, Encap. (>10 In. ft./15 sq. ft.) 10 calendar days notice	Specific Location(s) in Facility:
☐ Emergency Renovation/Encapsulation	T DIODOCAL OUT
2. PROJECT SCHEDULE:	7. DISPOSAL SITE:
START DATE END DATE	Name:
* Renovation	Location Address:
+Asb. Removal	City/State/Zip:
+Demolition:	8. WASTE TRANSPORTER 1: WASTE TRANSPORTER 2:
Encapsulation:	Name:
Work Schedule: Please indicate the anticipated days of the week and work hours for the purpose of scheduling a compliance inspection.	Address:
Days of the Week Work Hours	City/State/Zip:
Asb. Removal:	Phone:
Demolition:	 ORDERED DEMOLITIONS: (See NESHAP regulations for definition of "Ordered Demolition.") A copy of the official Order must accompany this
Encapsulation:	notification.
* Includes setup, build enclosure, asbestos removal, demobilizing, etc.	Gov't Agency Ordering Demo:
+Include only those dates you are conducting asbestos removal/demo.	Name/Title of Person Signing Order:
☐ Check here if this is a multi-phased project, attach a schedule showing	<u> </u>
the start/end date of each phase.	Date of Order: Date Ordered to Begin:
10. IS ASBESTOS PRESENT? ☐ Yes ☐ No ☐ To be remove	ed prior to demolition
The second secon	Non-friable ACM <u>not</u>
Estimate the amount of asbestos: Include RACM RACM to be (Regulated Asbestos Containing Material) to be Removed	RACM to be removed prior to demo. Encapsulated Category I Category II Units of Measure
removed, encapsulated, etc. Also include the amount	☐ Ln. Ft. ☐ Ln. M.
and type (floor tile, roofing, etc.) of non-friable Category I and/or Category II ACM that will not be removed prior	☐ Sq. Ft. ☐ Sq. M.
to demolition. (NOTE: In a demolition, cementatious	☐ Cu. Ft.* ☐ Cu.M.*
ACM <u>cannot</u> remain in a structure, as it is likely to become regulated in the demolition/handling process.	ft (matera) should be used only if unable to measure by linear/aguare
Volume (Cubic)	ft./meters) should be used only if unable to measure by linear/square measure

(example: asbestos has fallen off of surface).

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH (continued)

11.	PROJECT DESCRIPTION: Complete A) for Renovation (asbestos remo	oval/encapsulation) and/or B) for Demolition:
	carefully lower, etc.):	
	B) DEMOLITION: Describe the method of demolition of facility, bridge, et bridge, etc., will be demolished:	tc., and indicate if complete or partial. If partial, describe which part of facility
12.	ENGINEERING CONTROLS: Describe work practices and engineering until proper disposal:	controls used to prevent visible emissions before, during, and after removal, and
13.		n the event that unexpected RACM is found or previously non-friable asbestos efore regulated:
14.		S: A) Indicate how you determined whether or not asbestos is in the facility. If ination of the presence or absence of asbestos must be made prior to submitting
		survey:
	C) Name, accreditation number of inspector, and date of inspection:	
15.	EMERGENCY RENOVATIONS: Date/time of emergency:	Describe the sudden, unexpected event:
	Explain how the event caused unsafe conditions, and/or would cause equ	ipment damage and/or an unreasonable financial burden:
16.	inspection at the renovation or demolition site.	Subpart M, will be on-site during the renovation and during demolition involving ence that this person has completed the required training will be available for
	Signature of Owner or Abatement Contractor Date	Signature of Owner or Demolition Contractor Date
17.	Signature of Building Owner or Lessee Date	ssure Enclosures: (required by LARA) ir monitoring is required for any asbestos abatement project involving 10 med within a negative pressure enclosure. I (the building owner or lessee) 135 to have clearance air monitoring performed on this project. Signature of Asbestos Abatement Contractor Representative Date sted. For affected projects, this section of the notification form must be completed, signed,
18.	I certify that the above information is correct:	
	Printed Name of Owner/Operator Date	Signature of Owner/Operator Date
MA	ILING ADDRESSES/PHONE NUMBERS: (See Item 1 to determine v	which agency requirements/regulations are applicable to your project.)
mai	Public Act 135 of 1986, as amended, Section 220 (1-4) or (8), I to address below. For more info visit: ://www.michigan.gov/asbestos	For NESHAP Demolitions/Renovations , 40 CFR , Part 61 , Subpart M , please use the e-submittal process. For more information visit http://www.michigan.gov/air , under Air Links click on Asbestos NESHAP Program.
LAF P.C	DSHA Asbestos Program RA, CSHD D. Box 30671 asing, MI 48909-8171	NESHAP Asbestos Program DEQ, AQD P.O. Box 30260 Lansing, MI 48909-7760 517.284.6777 (Office)
517	7.636.4551 (office), 517.322.1713 (fax)	· · · · · · · · · · · · · · · · · · ·

EQP5661 (rev. 03/14) MIOSHA-CSH 142 (rev. 08/14)



December 21, 2018

Ms. Roxanne Case Grant Manager Ingham County Land Bank 3024 Turner Street Lansing, Ingham County, Michigan 48906

Re: Pre-Renovation Regulated Materials Survey

601 South Hayford St., Lansing, Ingham County, MI

Dear Ms. Case:

The Mannik & Smith Group, Inc. (MSG) is pleased to present Ingham County with the results of the limited prerenovation regulated materials survey (RMS) performed at 601 South Hayford St., Lansing, Ingham County, Michigan (hereinafter referred to as the "Site") by Kory McKay (Accreditation Number A47903).

SUMMARY

Building Information		
Property Address	601 S Hayford St., Lansing MI	
Parcel #	33-01-01-14-363-011	
No. Stories	1	
Square Footage (approx.)	1000 SF	
Siding	Vinyl	
Basement	Yes	
Garage	No	



Asbestos Containing Material				
Location	Material Group	Friable/Non Friable	Asbestos	Quantity
Basement	Vent Wrap	Non Friable	65% Chrysotile	15 SF

Universal Waste Inventory		
Location	Material Description	Quantity
RM-1	TV	1
RM-2	Thermostat	1
Basement	CFL Light Bulb	1

Other Regulated Materials Inventory		
Location	Material Description	Quantity
Basement	Washing Machine	1
RM-2, RM-3	Refrigerator	2
RM-1	Freezer	1

Hazardous Materials		
Location	Material Description	Quantity
Basement	1 Gallon Paint Can	8

PURPOSE AND SCOPE OF WORK

The purpose of the RMS was to identify, quantify and document the location of regulated materials that may be encountered during renovation of the on-site structure. To accomplish this purpose, MSG performed the following scope of work:

- 1) Pre-renovation asbestos-containing material (ACM) survey.
- 2) Universal wastes, hazardous materials, and other regulated wastes survey.

METHODOLOGIES

The RMS was conducted on December 10, 2018. Methodologies employed during the completion of each task of the RMS are detailed below.

ACM Survey Procedures

The ACM survey was performed in general accordance with guidelines set forth in the Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) 763. The National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations govern demolition and renovation activities in which asbestos is present. The NESHAP rule distinguishes between Regulated Asbestos-Containing Materials (RACM) that would readily release asbestos fibers when damaged or disturbed and those materials that are unlikely to result in significant fiber release during renovation activities. The purpose of this survey is to determine if ACM within the Site building are RACM and thus, subject to the NESHAP, and to comply with the Michigan Occupational Safety and Health Administration (MIOSHA) and guidelines set forth in the Occupational Safety and Health Administration (OSHA) Regulations Standards 29 CFR 1910.1101.

RACM, as defined by NESHAP, is classified into four parts, (1) friable asbestos material, (2) Category I non-friable ACM (packing, gaskets, floor tile and roofing products) that has become friable, (3) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (4) Category II non-friable ACM (all other ACM products) that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

The suspect ACM identified during this survey was grouped into homogeneous materials (i.e. similar materials which are uniform in color and texture) and:

- Described and quantified it in linear feet (LF) or square feet (SF);
- Identified and classified as friable or non-friable:
- Assessed as being in good, fair or poor condition;

- Assigned an EPA classification type (surfacing material, thermal system insulation or miscellaneous);
- Classified as RACM or non-RACM; and
- Sampled, or identified as presumed ACM (PACM).

MSG performed services associated with the ACM survey in conformance with the care and skill ordinarily used by other reputable environmental consulting firms practicing under similar conditions, at the same time, and in the same or similar locality. The ACM survey included a systematic visual inspection of readily accessible areas of the Site building. Destructive sampling methods were used and suspect ACM samples were collected by State of Michigan Accredited Asbestos Inspector, Kory McKay (Accreditation Number A47903). Based on the quantity of each classification of material, MSG collected samples of each suspect ACM in accordance with EPA guidelines.

Universal Wastes and Hazardous Material Survey Procedures

MSG identified and inventoried universal wastes and hazardous materials by a visual reconnaissance of the Site. Materials were identified, described, and quantified to the extent possible; however, no equipment or containers were opened and/or sampled as part of this survey.

A hazardous material, as defined in OSHA 29 CFR 1910.1200, is any item or chemical which is a "health hazard" or "physical hazard", including the following:

- Chemicals that are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, hepatotoxins, nephrotoxins, neurotoxins, agents that act on the hematopoietic system, and agents that damage the lungs, skin, eyes, or mucous membranes;
- Chemicals that are combustible liquids, compressed gases, explosives, flammable liquids, flammable solids, organic peroxides, oxidizers, pyrophorics, unstable (reactive) or water-reactive;
- Chemicals that, in the course of normal handling, use or storage, may produce or release dusts, gases, fumes, vapors, mists or smoke which have any of the above characteristics; and
- Any item or chemical which, when being transported or moved, is a risk to public safety or an environmental hazard, and is regulated as such by one or more of the following:
 - o DOT Department of Transportation; Hazardous Materials Regulations (49 CFR 100-180);
 - IMO International Maritime Organization; International Maritime Dangerous Goods (IMDG)
 Code:
 - o IATA International Air Transport Association; Dangerous Goods Regulations;
 - o ICAO International Civil Aviation Organization; Technical Instructions; and
 - AF Air Force "INTERSERVICE" Manual, Preparing Hazmat for Military Air Shipments (AFMAN 24-204).

Hazardous materials may also include:

- Any item or chemical listed in the United States Environmental Protection Agency (USEPA) *List of Hazardous Substances and Reportable Quantities*, dated September 1992.
- Noticeable as inventory under the reporting requirements of the Hazardous Chemical Reporting (40 CFR Part 302).
- An environmental release under the reporting requirements of the Toxic Chemical Release Reporting: Community Right To Know (40 CFR Part 372) or under Part 201, Environmental Remediation of the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 201) and Part 213, Leaking Underground Storage Tanks (Part 213).

These would include chemicals with special characteristics which, in the opinion of the manufacturer, can cause harm to people, plants, or animals when released by spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other receptacles).

Universal wastes are waste that comes primarily from consumer products containing mercury, lead, cadmium or other substances that are hazardous to human health and the environment. These items cannot be discarded in household trash nor disposed of in landfills but have less stringent handling and disposal requirements than hazardous waste streams. In Michigan, universal wastes are regulated by the MDEQ Office of Waste Management and Radiological Protection under Part 111 of Act 451 and the federal Resource Conservation and Recovery Act (RCRA) of 1976 under 40 CFR Part 273. Universal waste is also regulated by the US Department of Transportation (US DOT) under 49 CFR Parts 171 through 180. Most of the universal waste requirements overseen by the DEQ are addressed by R 299.9228 of Part 111 of 1994 P.A. 451, as amended and 40 CFR Part 273. These regulations are designed to encourage proper collection, recycling, treatment, or disposal of these wastes.

Examples of universal waste are mercury-containing equipment (e.g. thermostats, barometers, manometers, temperature and pressure gauges, and mercury switches), nickel-cadmium and spent lead-acid batteries, lamps (e.g. incandescent, fluorescent, high intensity discharge, neon, mercury vapor, and high pressure sodium and metal halide), pesticides, polychlorinated biphenyl (PCB) containing transformers and light ballasts, stored chemical and/or petroleum products, etc. In Michigan, Part 111 also includes pharmaceutical and consumer electronics as additional types of universal wastes.

Other Regulated Materials

This RMS also included identifying and inventorying other regulated materials which may pose physical or chemical concerns during renovation of the Site building(s) including chlorofluorocarbon (CFC) containing devices, tanks, vessels, equipment, and building materials that may contain or become contaminated with hazardous materials.

Specifically, CFC containing devices are regulated Under Title VI of the Clean Air Act (CAA). The Stratospheric Protection Division of the EPA manages programs protecting the stratospheric ozone layer. Title 40, Part 82 of the Code of Federal Regulations contains the EPA regulations protecting the ozone layer. The RMS survey of the premises identified and quantified any CFC containers and CFC containing equipment, which could include the following:

- Drinking fountains, air conditioners, refrigerators
- Air conditioners in control panels and other process equipment
- Water and air chillers
- Roof top and stand-alone air conditioners
- Cafeteria equipment: freezers, walk-in coolers/freezers
- CFC canisters and cylinders

In Michigan, underground storage tanks are regulated under the authority of Part 211, Underground Storage Tank Regulations, of Act 451 of 1994, as amended, and the Michigan Underground Storage Tank Rules (MUSTR). Therefore, this survey included whether any evidence of underground storage tanks and related piping and dispensers were present at the Site.

MSG also surveyed for the presence of equipment, other storage tanks, and materials that may contain or be contaminated by regulated chemicals. These include, but may not be comprehensive of:

- Above ground storage tanks
- Oil-containing equipment (hydraulic equipment, blowers, fans, motors, elevators, compressors, etc.)
- Fire brick
- Contaminated building materials (concrete, block walls, wood, plaster, etc.) with staining, odor or other signs of a hazardous chemical release

SURVEY RESULTS

The following subsections include a discussion of the RMS results. Photographs of the residence are located in the *Attachment A, Photo Log.* The results of this report are valid as of the report date, subject to the limitations presented in *Attachment B, Limitations*.

ACM Survey Results

MSG identified fifteen (15) homogenous materials that were suspect as asbestos containing during the ACM survey. Thirty three (33) bulk samples were collected from these suspect homogeneous materials and were submitted to Mannik & Smith Group Analytical Laboratories (MSGAL) for laboratory analysis of Bulk Materials by Polarized Light Microscopy using USEPA Method 600/R-93/116. MSGAL is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) to analyzed bulk samples for asbestos content. Of the aforementioned suspect homogenous materials identified during this ACM survey, laboratory analysis found one (1) homogenous material (sample 10-1) contained greater than 1% asbestos. The EPA defines ACM as materials containing greater than 1% asbestos.

A point-count quantification procedure (PCQM) allows for lower detection limits than calibrated visual estimation (CVES), which is the quantification method widely used in asbestos analysis via Polarized Light Microscopy (PLM). If the asbestos content is found to contain less than 10% asbestos as determined by a method other than point counting by PLM, it can only be treated as non-ACM if verified to contain less than 1% by the PCQM. If not point-counted, the sample must be assumed to be greater than 1% and thus considered and treated as ACM. It is MSG's experience that point counting samples with an estimated PLM asbestos content of more than 3% does not yield significantly different analytical results. No samples were point counted.

Suspect ACM sample locations are depicted on the attached figure. See *Table 1, Asbestos Sampling Results* for a listing of homogeneous materials identified by MSG during this survey. A copy of the analytical reports including chains of custody is attached in *Attachment C, Analytical Reports and Chains of Custody*.

Universal Wastes, Hazardous Materials, and Other Regulated Materials Survey Results

Universal wastes, hazardous materials, and/or other regulated materials wastes were identified within the Site building. Quantities identified are provided in *Table 2, Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory.*

CONCLUSIONS AND RECOMMENDATIONS

Asbestos Containing Materials

Of the fifteen (15) homogenous materials collected as part of the ACM survey, one (1) homogenous material contained asbestos greater than 1% (sample 10-1) with this one (1) homogenous material being classified as RACM. All materials containing ACM must be disposed of in a licensed landfill.

Prior to renovation, a notification of intent to demolish shall be made to the Michigan Department of Environmental Quality Air Quality Division (MDEQ-AQD) and Licensing and Regulatory Affairs (LARA), Asbestos Program. Notification, according to the procedure described by the NESHAP, Title 40 of the Code of Federal Regulations, Part 61, Subpart M, Notification, for renovation and demolition projects should be followed. A copy of this notification form is provided in *Attachment D, Notification of Intent to Renovate/Demolish*. This form shall be completed by the contractor who completes the renovation.

If additional suspect ACMs are discovered during renovation activities in areas that were determined during this survey to be structurally unsound and unsafe, inaccessible, concealed and/or in buried areas, shall be surveyed, tested, and abated if warranted. If suspect ACMs are determined to be RACM that would be disturbed during renovation activities, the RACM must be properly removed by a licensed asbestos abatement contractor.

Category I and Category II Non-Friable ACM may often be left in place during renovation activities if the ACM is not subjected to sanding, grinding, cutting, or abrading or has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material during the course of renovation.

Universal Wastes, Hazardous Materials, and Other Regulated Materials

The universal waste, hazardous materials, and other regulated materials (see Table 2) must be properly characterized (as necessary) and properly removed from the Site building for recycling and/or disposed of in accordance with Parts 111, 115, or 147 of Michigan Public Act 451 of 1994, as amended. If additional universal wastes, hazardous materials, and other regulated materials are discovered during renovation activities in areas that were determined during this survey to be structurally unsound and unsafe, inaccessible, concealed and/or in buried areas, these materials shall be characterized (as necessary) and properly removed in accordance with the above-mentioned regulations.

If you have any questions or concerns regarding the above information please contact us at 517-316-9232.

Sincerely,

Kory McKay

Environmental Scientist

Accreditation Number A47903

Charlie Bush

Senior Project Manager

Accreditation Number A34293

Attachments

FIGURE



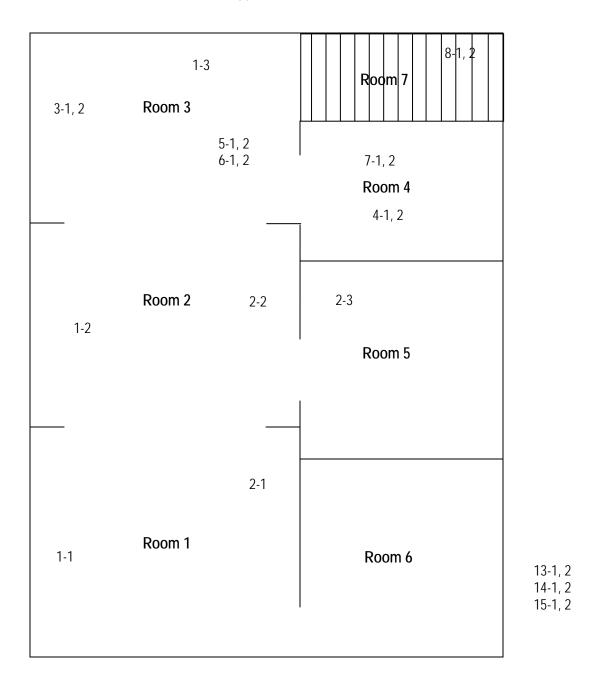
TECHNICAL SKILL. CREATIVE SPIRIT.

721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com

Address: 601 South Hayford Street Date: December 10, 2018

Drawing not to scale

1st Floor





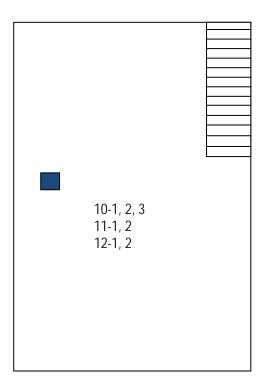
TECHNICAL SKILL. CREATIVE SPIRIT.

721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com

Address: 601 South Hayford Street Date: December 10, 2018

Drawing not to scale

Basement



Vent Wrap (15 SF total)

TABLES

TABLE 1
Asbestos Sampling Results

Client		Ingham Count	v Land Ba	ank Authority						
Survey Loc	ation	601 S Hayford		and reducinely						
Survey D	ate	December 10,	2018		L F2.LL.ML	1	ED4			
Functional Area	Floor	Sample ID	HM#	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
RM-1	1	AS 1-1	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1800 SF
RM-2	1	AS 1-2	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1800 SF
RM-3	1	AS 1-3	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1800 SF
RM-1	1	AS 2-1	HA-2	Plaster	Non-Friable	Good	Miscellaneous	No	No	1200 SF
RM-2	1	AS 2-2	HA-2	Plaster	Non-Friable	Good	Miscellaneous	No	No	1200 SF
RM-5	1	AS 2-3	HA-2	Plaster	Non-Friable	Good	Miscellaneous	No	No	1200 SF
RM-3	1	AS 3-1	HA-3	Sink undercoat	Non-Friable	Good	Miscellaneous	No	No	5 SF
RM-3	1	AS 3-2	HA-3	Sink undercoat	Non-Friable	Good	Miscellaneous	No	No	5 SF
RM-4	1	AS 4-1	HA-4	Wall mastic	Non-Friable	Good	Miscellaneous	No	No	280 SF
RM-4	1	AS 4-2	HA-4	Wall mastic	Non-Friable	Good	Miscellaneous	No	No	280 SF
RM-3	1	AS 5-1	HA-5	Tan Linoleum	Non-Friable	Good	Miscellaneous	No	No	225 SF
RM-3	1	AS 5-2	HA-5	Tan Linoleum	Non-Friable	Good	Miscellaneous	No	No	225 SF
RM-3	1	AS 6-1	HA-6	Green 12x12	Non-Friable	Good	Miscellaneous	No	No	150 SF
RM-3	1	AS 6-2	HA-6	Green 12x12	Non-Friable	Good	Miscellaneous	No	No	150 SF
RM-4	1	AS 7-1	HA-7	Blue 12x12	Non-Friable	Good	Miscellaneous	No	No	75 SF
RM-4	1	AS 7-2	HA-7	Blue 12x12	Non-Friable	Good	Miscellaneous	No	No	75 SF
RM-7	1	AS 8-1	HA-8	Door window glaze	Non-Friable	Good	Miscellaneous	No	No	5 SF

TABLE 1
Asbestos Sampling Results

Client		Ingham Count	y Land Ba	ank Authority						
Survey Loc		601 S Hayford		•						
Survey Di Functional Area	Floor	December 10, Sample ID	2018 HM #	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
RM-7	1	AS 8-2	HA-8	Door window glaze	Non-Friable	Good	Miscellaneous	No	No	5 SF
Basement	В	AS 9-1	HA-9	Basement window glaze	Non-Friable	Good	Miscellaneous	No	No	30 SF
Basement	В	AS 9-2	HA-9	Basement window glaze	Non-Friable	Good	Miscellaneous	No	No	30 SF
Basement	В	AS 10-1	HA-10	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	65% Chrysotile	15 SF
Basement	В	AS 10-2	HA-10	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	NA	15 SF
Basement	В	AS 10-3	HA-10	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	NA	15 SF
Basement	В	AS 11-1	HA-11	Basement Concrete floor	Non-Friable	Good	Miscellaneous	No	No	500 SF
Basement	В	AS 11-2	HA-11	Basement Concrete floor	Non-Friable	Good	Miscellaneous	No	No	500 SF
Basement	В	AS 12-1	HA-12	Stack Cement	Non-Friable	Good	Miscellaneous	No	No	5 SF
Basement	В	AS 12-2	HA-12	Stack Cement	Non-Friable	Good	Miscellaneous	No	No	5 SF
Exterior	Е	AS 13-1	HA-13	Siding underlayment	Non-Friable	Good	Miscellaneous	No	No	1400 SF
Exterior	Е	AS 13-2	HA-13	Siding underlayment	Non-Friable	Good	Miscellaneous	No	No	1400 SF
Roof	Е	AS 14-1	HA-14	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	1200 SF
Roof	Е	AS 14-2	HA-14	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	1200 SF
Exterior	Е	AS 15-1	HA-15	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	150 SF
Exterior	Е	AS 15-2	HA-15	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	150 SF

Table 2 Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory 601 South Hayford

Lansing, Ingham County, Michigan

	Universal Waste Inventory	
Location	Type of Waste	Approximate Quantity
RM-1	TV	1
Basement	CFL Bulb	1
RM-2	Thermostat	1
	Hazardous Materials Inventory	
Location	Type of Waste	Approximate Quantity
Basement	1 Gallon Paint Can	8
Oth	ner Regulated Materials Inventory	
Location	Type of Waste	Approximate Quantity
Basement	Washing Machine	1
RM-2, RM-3	Refrigerator	2
RM-1	Freezer	1

ATTACHMENT A PHOTO LOG



Property Photos



601 S Hayford, Front of House



Back of House



Side of House



Side of House

Ingham County Land Bank 601 S Hayford, Lansing, MI Photographs taken by: Kory McKay on 12/10/2018

Samples



Sample ID: AS 1-1 Location: RM-1 Notes: Drywall



Sample ID: AS 3-1 Location: RM-3

Notes: Sink Undercoating



Sample ID: AS 2-1 Location: RM-1 Notes: Plaster



Sample ID: AS 4-1 Location: RM-4 Notes: Wall Mastic



Sample ID: AS 10-1 Location: Basement Notes: Vent Wrap



Sample ID: AS 5-1 Location: RM-3 Notes: Tan Linoleum

Ingham County Land Bank 601 S Hayford, Lansing, MI Photographs taken by: Kory McKay on 12/10/2018

Samples



Sample ID: AS 7-1 Location: RM-4 Notes: Blue 12x12 Tile



Sample ID: AS 11-1 Location: Basement Notes: Basement Floor



Sample ID: AS 8-1 Location: RM-7 Notes: Door Window Glaze



Sample ID: AS 12-1 Location: Basement Notes: Stack Cement



Sample ID: AS 9-1 Location: Basement

Notes: Basement Window Glaze



Sample ID: AS 15-1 Location: Exterior Notes: Exterior Caulk

ATTACHMENT B LIMITATIONS



REGULATED MATERIALS SURVEY LIMITATIONS

The Mannik & Smith Group, Inc. (MSG) performed its services associated with this Regulated Materials Survey (RMS) in general accordance with guidelines set forth in the Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) 763, Occupational Safety and Health Administration (OHSA) 29 CFR 1926.62, and in conformance with the care and skill ordinarily used by other reputable environmental consulting firms practicing under similar conditions, at the same time, and in the same or similar locality. This RMS and related documentation are site-specific, which means they pertain to the conditions of the site surveyed.

Unless otherwise noted, MSG's RMS is limited to accessible areas. Areas determined to be not structurally sound, safely reached, limited by excessive accumulated obstructions, require specialized equipment to access, in operable windows, etc., are not included in this survey. There may be areas where regulated materials, such as suspected asbestos-containing materials (SACM) and lead containing paint cannot be viewed and/or tested. MSG shall not be responsible for identifying all SACM, lead containing paint, or other hazardous materials located in inaccessible locations, including by not limited to, above a plaster ceiling, behind a wall, embedded in concrete, buried, confined spaces, unsafe areas, or otherwise not readily identifiable.

Destructive sampling will only be conducted when permission has been granted by the owner. Destructive survey locations are limited to areas where hidden SACM, lead containing paint, or other hazardous materials is reasonably thought to be present and sampling can be conducted in a safe manner. If regulated materials are found during the course of demolition and/or renovation activities that are not listed in this report, the material should be assumed as asbestos-containing, lead containing, or hazardous until it can be sampled and analyzed at an accredited laboratory and safe work practices should always be used if those areas are to be disturbed.

MSG has prepared a logical assessment program to reduce the client's risk of discovering unknown regulated materials and/or hazardous substances. The presence of subsurface regulated materials and/or hazardous substances is based solely on surface observations and/or information provided by others. Descriptions of subsurface conditions provided in this report are not warranted to be complete or accurate. This risk may be reduced by more extensive exploration on the site, but even with additional exploration, it is not possible to completely eliminate the risk of discovering regulated materials and/or hazardous conditions. It cannot and should not be assumed that samples collected and conditions observed at the time of the RMS are representative of an area that has not been sampled and/or tested.

In preparing this report, MSG may have relied on information obtained from or provided by others. MSG makes no representation or warranty regarding the accuracy or completeness of this information gathered through outside sources or subcontracted services. No warranty, guarantee, or certification of any kind, expressed or implied, at common law or created by statute, is extended, made, or intended by rendering these environmental consulting services or by furnishing this written report. Environmental conditions and regulations are subject to constant change and reinterpretation. One should not assume that any on-site conditions and/or regulatory statutes or rules will remain constant after MSG has completed the scope of work for this project. Furthermore, because the facts stated in this report are subject to professional interpretation, differing conclusions could be reached by other environmental professionals.

The report is intended to offer support to a building owner, construction manager, general contractor, abatement contractor, architect, and/or other parties authorized by the owner in generally locating asbestos-containing materials (ACM), lead containing paint, universal and hazardous wastes, and/or other regulated materials. This report does not have the required components to serve as an Asbestos Project Design document, Asbestos and/or Lead Containing Paint Abatement Work Plan, and/or a Health and Safety Plan. Therefore, this report should not be utilized as a project specification document. The results, findings, conclusions, and recommendations expressed in

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this report are based only on conditions that were noted during this survey. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated. Quantities have been conservatively estimated and sampling locations have been described representatively; however, current site conditions should be field-verified by contractors bidding on and/or prior to abatement work.

ATTACHMENT C

ANALYTICAL REPORTS AND CHAINS OF CUSTODY



00010

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864		Received Analyzed Reported	12/14/18	Project Order # Project #	601 S Hayford 00010 I1440003
		BULK SAN	1PLE AN	ALYSIS SUMM	1ARY	
	Client ID AS 1-1 Layer 1 Drywall Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos	Layer 2 Skim Coat Type Non Detect White, homogenous, 100% non-asbes	0.00% fibrous.	O0010-1	l	ocation RM-1
	Client ID AS 1-2 Layer 1 Drywall Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos	Layer 2 Skim Coat Type Non Detect White, homogenous, 100% non-asbes	0.00% fibrous.	O0010-2	Į.	Location RM-2
	Client ID AS 1-3 Layer 1 Drywall Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Skim Coat Type Non Detect White, homogenous, 100% non-asbes	0.00% fibrous.	O0010-3	l	Location RM-3
	Client ID AS 2-1 Layer 1 Plaster Non Detect 0.00% homogenous, fibrous. 00% non-asbestos		Lab ID	O0010-4	L	ocation RM-1
	Client ID AS 2-2 Layer 1 Plaster Non Detect 0.00% homogenous, fibrous. 00% non-asbestos		Lab ID	O0010-5	L	ocation RM-2
Analytica Analyst: Reviewer	Christophe	0/R-93/116 by Polarized er A Claes Laboratory D ucchesi Quality Mana	irector	roscopy		Accreditations NIST-NVLAP No. 600212-0

00010

Client	The Mannik & Smith Group, Inc. 2193 Association Dr., Suite 200 Okemos, MI, 48864	Received 12/11/18 Analyzed 12/14/18 Reported 12/14/18	Project 601 S Hayford Order # 00010 Project # 11440003
		BULK SAMPLE ANALYSIS SUMN	MARY
	Client ID AS 2-3 Layer 1 Plaster Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID 00010-6	Location RM-5
	Client ID AS 3-1 Layer 1 Sink Undercoat Non Detect 0.00% nomogenous, fibrous. 20% non-asbestos	Lab ID 00010-7	Location RM-3
	Client ID AS 3-2 Layer 1 Sink Undercoat Non Detect 0.00% nomogenous, fibrous. 00% non-asbestos	Lab ID 00010-8	Location RM-3
	Client ID AS 4-1 Layer 1 Wall Mastic Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID 00010-9	Location RM-4
	Client ID AS 4-2 Layer 1 Wall Mastic Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID 00010-10	Location RM-4
Analytica Analyst: Reviewer	Christopher A Cla	/116 by Polarized Light Microscopy les Laboratory Director i Quality Manager	Accreditations NIST-NVLAP No. 600212-0

00010

Client	The Mannik & Smith 2193 Association Dr. Okemos, MI, 48864		Received Analyzed Reported	12/14/18	Project Order # Project #	601 S Hayford 00010 I1440003
		BULK SAM	1PLE AN	ALYSIS SUMM	ARY	
	Client ID AS Layer 1 Tan Linoleum Non Detect 0.00000000000000000000000000000000000	Layer 2 Mastic Type Non Detect	0.00% brous.	O0010-11	L	ocation RM-3
	Client ID AS Layer 1 Tan Linoleum Non Detect 0.0 homogenous, fibrou 00% non-asbestos	Layer 2 Mastic Type Non Detect	0.00% brous.	O0010-12	L	ocation RM-3
	Client ID AS Layer 1 Green 12x12 Non Detect 0.0 homogenous, fibro 00% non-asbestos	00%	Lab ID	O0010-13	L	ocation RM-3
	Client ID AS Layer 1 Green 12x12 Non Detect 0.0 homogenous, fibro 00% non-asbestos	00%	Lab ID	O0010-14	L	ocation RM-3
	Client ID AS Layer 1 Blue 12x12 Non Detect 0.4 homogenous, fibrou 00% non-asbestos	00%	Lab ID	O0010-15	L	ocation RM-4
Analytica Analyst: Reviewer	Chri	EPA 600/R-93/116 by Polarized stopher A Claes Laboratory Di nua P Lucchesi Quality Mana	rector	roscopy		Accreditations NIST-NVLAP No. 600212-0

00010

Client	The Mannik & Smith Group, 2193 Association Dr., Suite 2 Okemos, MI, 48864		12/14/18	Project 601 S Hayford Order # 00010 Project # 11440003
		BULK SAMPLE AN	ALYSIS SUMMARY	
	Client ID AS 7-2 Layer 1 Blue 12x12 Non Detect 0.00% , homogenous, fibrous. 100% non-asbestos	Lab ID	O0010-16	Location RM-4
Type Crean	Client ID AS 8-1 Layer 1 Door Window Glaze Non Detect 0.00% n, homogenous, fibrous. 100% non-asbestos	Lab ID	O0010-17	Location RM-7
Type Cream	Client ID AS 8-2 Layer 1 Door Window Glaze Non Detect 0.00% n, homogenous, fibrous. 100% non-asbestos	Lab ID	O0010-18	Location RM-7
Type Cream	Client ID AS 9-1 Layer 1 ement Window Glaze Non Detect 0.00% n, homogenous, fibrous. 100% non-asbestos	Lab ID	O0010-19	Location Basement
Type Cream	Client ID AS 9-2 Layer 1 ement Window Glaze Non Detect 0.00% n, homogenous, fibrous. 100% non-asbestos	Lab ID	O0010-20	Location Basement
Analytica Analyst: Reviewe	Christopher	/R-93/116 by Polarized Light Mico A Claes Laboratory Director cchesi Quality Manager	roscopy	Accreditations NIST-NVLAP No. 600212-0

00010

Client	The Mannik & Smith Group, 2193 Association Dr., Suite 2 Okemos, MI, 48864		12/14/18 Order	•
		BULK SAMPLE AN	ALYSIS SUMMARY	
Type Gray, I 3:	Client ID AS 10-1 Layer 1 Vent Wrap Chrysotile 65.00% homogenous, fibrous. 5% non-asbestos	Lab ID	O0010-21	Location Basement
Type Gray, I	Client ID AS 10-2 Layer 1 Vent Wrap Not Analyzed - homogenous, fibrous.	Lab ID	O0010-22	Location Basement
Type Gray, I	Client ID AS 10-3 Layer 1 Vent Wrap Not Analyzed - homogenous, fibrous.	Lab ID	O0010-23	Location Basement
Type Gray, l	Client ID AS 11-1 Layer 1 ment Concrete Floor Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0010-24	Location Basement
Type Gray, l	Client ID AS 11-2 Layer 1 ment Concrete Floor Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0010-25	Location Basement
Analytical Analyst: Reviewer	Christophei	/R-93/116 by Polarized Light Mico A Claes Laboratory Director cchesi Quality Manager	roscopy	Accreditations NIST-NVLAP No. 600212-0

00010

Client	The Mannik & Smith Group, Inc. 2193 Association Dr., Suite 200 Okemos, MI, 48864	Received Analyzed Reported	12/14/18	Project Order # Project #	601 S Hayford 00010 I1440003
		BULK SAMPLE AN	ALYSIS SUMN	1ARY	
	Client ID AS 12-1 Layer 1 Stack Cement Non Detect 0.00% , homogenous, fibrous. 100% non-asbestos	Lab ID	O0010-26	L	ocation Basement
	Client ID AS 12-2 Layer 1 Stack Cement Non Detect 0.00% , homogenous, fibrous. 100% non-asbestos	Lab ID	O0010-27	L	ocation Basement
Type Tan,	Client ID AS 13-1 Layer 1 iding Underlayment Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID	O0010-28	L	ocation Exterior
Type Tan,	Client ID AS 13-2 Layer 1 iding Underlayment Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID	O0010-29	L	ocation Exterior
	Client ID AS 14-1 Layer 1 Roof Shingle Non Detect 0.00% s, homogenous, fibrous. 100% non-asbestos	Lab ID	O0010-30	L	Location Roof
Analytic Analyst: Reviewe	Christopher A Clae	.16 by Polarized Light Mic Laboratory Director Quality Manager	roscopy		Accreditations NIST-NVLAP No. 600212-0

00010

Client	The Mannik & Smith Group, 2193 Association Dr., Suite 2 Okemos, MI, 48864		12/14/18 Order #	601 S Hayford 00010 11440003
		BULK SAMPLE AN	ALYSIS SUMMARY	
	Client ID AS 14-2 Layer 1 Roof Shingle Non Detect 0.00% A, homogenous, fibrous. 100% non-asbestos	Lab ID	O0010-31	Location Roof
	Client ID AS 15-1 Layer 1 Exterior Caulk Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID	O0010-32	Location Exterior
	Client ID AS 15-2 Layer 1 Exterior Caulk Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID	O0010-33	Location Exterior

Analytical Method:	US EPA 600/R-93/116 by Polarized Light Microscopy	Accreditations
Analyst:	Christopher A Claes Laboratory Director	NIST-NVLAP
Reviewer:	Joshua P Lucchesi Quality Manager	No. 600212-0

Address Client Comments: Project Turn Around 601 S Hayford 2193 Association Drive, Suite 200 The Mannik & Smith Group, Inc. ☐ 4 Hour AS 9-2 AS 8-1 AS 7-2 AS 7-1 AS 6-2 AS 5-2 AS 5-1 AS 4-2 AS 4-1 AS 3-1 AS 2-2 AS 1-1 AS 9-1 AS 8-2 AS 6-1 AS 3-2 AS 2-3 AS 2-1 AS 1-3 AS 1-2 The Mannik & Smith Group Analytical Laboratories 24 Hour Project# Basement window glaze Basement window glaze 48 Hour Door window glaze Door window glaze 11440003 Sink undercoat Sink undercoat Tan Linoleum Tan Linoleum Green 12x12 Green 12x12 Wall mastic Blue 12x12 Wall mastic Blue 12x12 Drywall Plaster Drywall Drywall Plaster Plaster Email Contact City, State Lansing, MI √ 72 Hour cbush@manniksmithgroup.com Charlie Bush Order Number: ☐ 1 Week Chain of Custody Phone Zip Code Report to Fax Basement Basement RM-7 RM-7 RM-4 RM-4 RM-3 RM-3 RM-3 RM-3 RM-4 RM-4 RM-3 RM-3 RM-5 RM-2 RM-1 RM-3 RM-2 RM-1 (517) 316-9232 ✓ Email Fax Date Sampled: 00010 12/10/2018

Relinquished by

Date and Time

Date and Time

Received by

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CITCHIA	Chain
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Order Number:

ļ					omments:
	Exterior	Exterior Caulk		AS 15-2	
	Exterior	Exterior Caulk		AS 15-1	
	Roof	Roof Shingle		AS 14-2	
	Roof	Roof Shingle		AS 14-1	
	Exterior	Siding underlayment		AS 13-2	
	Exterior	Siding underlayment		AS 13-1	
	Basement	Stack Cement	11	AS 12-2	
	Basement	Stack Cement		AS 12-1	
	Basement	Basement Concrete floor	Ba	AS 11-2	
	Basement	Basement Concrete floor	Ba	AS 11-1	
	Basement	Vent wrap		AS 10-3	
	Basement	Vent wrap		AS 10-2	
	Basement	Vent wrap		AS 10-1	
Notes	Material Location	Material Type	The state of the s	Customer ID	Lab ID
12/10/2018	Report to	48 Hour 72 Hour 1 Week	24 Hour	d 4 Hour	urn Around
Date Sampled:	Fax	11440003 Email cbush@manniksmithgroup.com	Project#	601 S Hayford	roject
✓ TTP ☐ Point Count	Phone (517) 316-9232	Contact Charlie Bush	ite 200	2193 Association Drive, Suite 200	ddress
Bulk Samples Only	Zip Code	City, State Lansing, MI	o, Inc.	The Mannik & Smith Group, Inc.	lient
	The second secon				

Relinquished by

Date and Time

Date and Time

Received by

ATTACHMENT D

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY (MDEQ) AIR QUALITY DIVISION NESHAP, 40 CFR Part 61, Subpart M

	•	5		,		
LICENSING	AND	REGI	RAI	on	AFI	AIRS
CHETTOWATER	DOM	No. 100	PDM	ree	101	over

MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS (LARA), ASBESTOS PROGRAM, P.A. 135 OF 1986, AS AMENDED, Section 220 (1-4) or (8)

·	
DEQ/LARA USE ONLY	3. ABATEMENT CONTRACTOR: Internal Project #:
Postmark Date/ Rec'd Date/	Name:
Emergency Date/ Valid No	Mailing Address:
☐ OK ☐ Send Def Ltr. Date of Def Ltr/	City/State/Zip:E-mail:
	Contact: Phone:
FOLLOW UP/ Spoke w/ Comments:	4. DEMOLITION CONTRACTOR: Internal Project #:
	Name:
	Mailing Address:
	City/State/Zip:
Notification NoTrans No	
Calculate LARA Asbestos Project Fee: (1% Project Fee)	Contact: Phone:
Total Project Cost: x 0.01 =	5. FACILITY OWNER: ("Facility" includes Bridges)
Type of Contractor: License No.:	Name:
Licensing Authority:	Mailing Address:
1. NOTIFICATION:	City/State/Zip:
Date of Notification:	E-mail:
Date of Revision(s):	Contact: Phone:
Notification Type: ☐ Original ☐ Revised ☐ Canceled ☐ Annual	6. FACILITY DESCRIPTION:
Mark appropriate boxes: (both DEQ and LARA may apply):	Facility Name: Location Address/Description:
DEQ (NESHAP) [260 In. ft./160 sq. ft. or more is threshold]	If Apt. # of units:
☐ Planned Renovation – 10 working days notice	City/Twp State: Zip Code:
☐ Emergency Renovation☐ Scheduled Demolition – 10 working days notice	County: Nearest Crossroad:
☐ Intentional Burn – 10 working days notice	Size: (sq. ft.) No. of Floors: Floor No.:
☐ Ordered Demolition LARA (MIOSHA) [Will not accept annual notifications]	Age: Present Use: Prior Use:
☐ Demo, Reno, Encap. (>10 In. ft./15 sq. ft.) 10 calendar days notice	Specific Location(s) in Facility:
☐ Emergency Renovation/Encapsulation	T DIODOCAL OUT
2. PROJECT SCHEDULE:	7. DISPOSAL SITE:
START DATE END DATE	Name:
* Renovation	Location Address:
+Asb. Removal	City/State/Zip:
+Demolition:	8. WASTE TRANSPORTER 1: WASTE TRANSPORTER 2:
Encapsulation:	Name:
Work Schedule: Please indicate the anticipated days of the week and work hours for the purpose of scheduling a compliance inspection.	Address:
Days of the Week Work Hours	City/State/Zip:
Asb. Removal:	Phone:
Demolition:	ORDERED DEMOLITIONS: (See NESHAP regulations for definition of "Ordered Demolition.") A copy of the official Order must accompany this
Encapsulation:	notification.
* Includes setup, build enclosure, asbestos removal, demobilizing, etc.	Gov't Agency Ordering Demo:
+Include only those dates you are conducting asbestos removal/demo.	Name/Title of Person Signing Order:
☐ Check here if this is a multi-phased project, attach a schedule showing	<u> </u>
the start/end date of each phase.	Date of Order: Date Ordered to Begin:
10. IS ASBESTOS PRESENT? ☐ Yes ☐ No ☐ To be remove	ed prior to demolition
The second secon	Non-friable ACM <u>not</u>
Estimate the amount of asbestos: Include RACM RACM to be (Regulated Asbestos Containing Material) to be Removed	RACM to be removed prior to demo. Encapsulated Category I Category II Units of Measure
removed, encapsulated, etc. Also include the amount	☐ Ln. Ft. ☐ Ln. M.
and type (floor tile, roofing, etc.) of non-friable Category I and/or Category II ACM that will not be removed prior	☐ Sq. Ft. ☐ Sq. M.
to demolition. (NOTE: In a demolition, cementatious	☐ Cu. Ft.*☐ Cu.M.*
ACM <u>cannot</u> remain in a structure, as it is likely to become regulated in the demolition/handling process.	ft (matera) should be used only if unable to measure by linear/aguare
Volume (Cubic)	ft./meters) should be used only if unable to measure by linear/square measure

(example: asbestos has fallen off of surface).

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH (continued)

11.	PROJECT DESCRIPTION: Complete A) for Renovation (asbestos remo	oval/encapsulation) and/or B) for Demolition:
	carefully lower, etc.):	
	B) DEMOLITION: Describe the method of demolition of facility, bridge, et bridge, etc., will be demolished:	tc., and indicate if complete or partial. If partial, describe which part of facility
12.	ENGINEERING CONTROLS: Describe work practices and engineering until proper disposal:	controls used to prevent visible emissions before, during, and after removal, and
13.		n the event that unexpected RACM is found or previously non-friable asbestos efore regulated:
14.		S: A) Indicate how you determined whether or not asbestos is in the facility. If ination of the presence or absence of asbestos must be made prior to submitting
		survey:
	C) Name, accreditation number of inspector, and date of inspection:	
15.	EMERGENCY RENOVATIONS: Date/time of emergency:	Describe the sudden, unexpected event:
	Explain how the event caused unsafe conditions, and/or would cause equ	ipment damage and/or an unreasonable financial burden:
16.	inspection at the renovation or demolition site.	Subpart M, will be on-site during the renovation and during demolition involving ence that this person has completed the required training will be available for
	Signature of Owner or Abatement Contractor Date	Signature of Owner or Demolition Contractor Date
17.	Signature of Building Owner or Lessee Date	ssure Enclosures: (required by LARA) ir monitoring is required for any asbestos abatement project involving 10 med within a negative pressure enclosure. I (the building owner or lessee) 135 to have clearance air monitoring performed on this project. Signature of Asbestos Abatement Contractor Representative Date sted. For affected projects, this section of the notification form must be completed, signed,
18.	I certify that the above information is correct:	
	Printed Name of Owner/Operator Date	Signature of Owner/Operator Date
MA	ILING ADDRESSES/PHONE NUMBERS: (See Item 1 to determine v	which agency requirements/regulations are applicable to your project.)
mai	Public Act 135 of 1986, as amended, Section 220 (1-4) or (8), I to address below. For more info visit: ://www.michigan.gov/asbestos	For NESHAP Demolitions/Renovations , 40 CFR , Part 61 , Subpart M , please use the e-submittal process. For more information visit http://www.michigan.gov/air , under Air Links click on Asbestos NESHAP Program.
LAF P.C	DSHA Asbestos Program RA, CSHD D. Box 30671 asing, MI 48909-8171	NESHAP Asbestos Program DEQ, AQD P.O. Box 30260 Lansing, MI 48909-7760 517.284.6777 (Office)
517	7.636.4551 (office), 517.322.1713 (fax)	· · · · · · · · · · · · · · · · · · ·

EQP5661 (rev. 03/14) MIOSHA-CSH 142 (rev. 08/14)



December 21, 2018

Ms. Roxanne Case Grant Manager Ingham County Land Bank 3024 Turner Street Lansing, Ingham County, Michigan 48906

Re: Pre-Renovation Regulated Materials Survey

706 South Hayford St., Lansing, Ingham County, MI

Dear Ms. Case:

The Mannik & Smith Group, Inc. (MSG) is pleased to present Ingham County with the results of the limited prerenovation regulated materials survey (RMS) performed at 706 South Hayford St., Lansing, Ingham County, Michigan (hereinafter referred to as the "Site") by Kory McKay (Accreditation Number A47903).

SUMMARY

Building Information			
Property Address 706 S. Hayford St., Lansing MI			
Parcel #	33-01-01-23-104-161		
No. Stories 2			
Square Footage (approx.) 750 SF			
Siding	Vinyl		
Basement	No		
Garage	No		



Asbestos Containing Material				
Location Material Group Friable/Non Friable Asbestos Quantity				Quantity
RM-1, RM-6, Basement	Vent Wrap	Non Friable	3% Chrysotile	175 SF
All exterior walls and ceiling	Vermiculite Insulation	Friable	Assumed Asbestos	800 CF

Universal Waste Inventory				
Location	Material Description	Quantity		
RM-3	Fire Extinguisher	1		
RM-1, RM-3, RM-4, RM-5	CFL Bulb	9		
RM-1, RM-5	Space Heater	2		
RM-1	TV	1		
RM-1, RM-6	Speaker	3		
RM-3	Microwave	1		

Other Regulated Materials Inventory		
Location Material Description Quantity		
No other regulated materials found on site		

Hazardous Materials		
Location Material Description Quantity		
No hazardous materials found on site		

PURPOSE AND SCOPE OF WORK

The purpose of the RMS was to identify, quantify and document the location of regulated materials that may be encountered during renovation of the on-site structure. To accomplish this purpose, MSG performed the following scope of work:

- 1) Pre-renovation asbestos-containing material (ACM) survey.
- 2) Universal wastes, hazardous materials, and other regulated wastes survey.

METHODOLOGIES

The RMS was conducted on December 7, 2018. Methodologies employed during the completion of each task of the RMS are detailed below.

ACM Survey Procedures

The ACM survey was performed in general accordance with guidelines set forth in the Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) 763. The National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations govern demolition and renovation activities in which asbestos is present. The NESHAP rule distinguishes between Regulated Asbestos-Containing Materials (RACM) that would readily release asbestos fibers when damaged or disturbed and those materials that are unlikely to result in significant fiber release during renovation activities. The purpose of this survey is to determine if ACM within the Site building are RACM and thus, subject to the NESHAP, and to comply with the Michigan Occupational Safety and Health Administration (MIOSHA) and guidelines set forth in the Occupational Safety and Health Administration (OSHA) Regulations Standards 29 CFR 1910.1101.

RACM, as defined by NESHAP, is classified into four parts, (1) friable asbestos material, (2) Category I non-friable ACM (packing, gaskets, floor tile and roofing products) that has become friable, (3) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (4) Category II non-friable ACM (all other ACM products) that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

The suspect ACM identified during this survey was grouped into homogeneous materials (i.e. similar materials which are uniform in color and texture) and:

- Described and quantified it in linear feet (LF) or square feet (SF);
- Identified and classified as friable or non-friable;
- Assessed as being in good, fair or poor condition;
- Assigned an EPA classification type (surfacing material, thermal system insulation or miscellaneous):
- Classified as RACM or non-RACM; and
- Sampled, or identified as presumed ACM (PACM).

MSG performed services associated with the ACM survey in conformance with the care and skill ordinarily used by other reputable environmental consulting firms practicing under similar conditions, at the same time, and in the same or similar locality. The ACM survey included a systematic visual inspection of readily accessible areas of the Site building. Destructive sampling methods were used and suspect ACM samples were collected by State of Michigan Accredited Asbestos Inspector, Kory McKay (Accreditation Number A47903). Based on the quantity of each classification of material, MSG collected samples of each suspect ACM in accordance with EPA guidelines.

Universal Wastes and Hazardous Material Survey Procedures

MSG identified and inventoried universal wastes and hazardous materials by a visual reconnaissance of the Site. Materials were identified, described, and quantified to the extent possible; however, no equipment or containers were opened and/or sampled as part of this survey.

A hazardous material, as defined in OSHA 29 CFR 1910.1200, is any item or chemical which is a "health hazard" or "physical hazard", including the following:

- Chemicals that are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, hepatotoxins, nephrotoxins, neurotoxins, agents that act on the hematopoietic system, and agents that damage the lungs, skin, eyes, or mucous membranes;
- Chemicals that are combustible liquids, compressed gases, explosives, flammable liquids, flammable solids, organic peroxides, oxidizers, pyrophorics, unstable (reactive) or water-reactive;
- Chemicals that, in the course of normal handling, use or storage, may produce or release dusts, gases, fumes, vapors, mists or smoke which have any of the above characteristics; and
- Any item or chemical which, when being transported or moved, is a risk to public safety or an
 environmental hazard, and is regulated as such by one or more of the following:
 - o DOT Department of Transportation; Hazardous Materials Regulations (49 CFR 100-180);
 - IMO International Maritime Organization; International Maritime Dangerous Goods (IMDG)
 Code;
 - o IATA International Air Transport Association; Dangerous Goods Regulations;
 - o ICAO International Civil Aviation Organization; Technical Instructions; and
 - AF Air Force "INTERSERVICE" Manual, Preparing Hazmat for Military Air Shipments (AFMAN 24-204).

Hazardous materials may also include:

- Any item or chemical listed in the United States Environmental Protection Agency (USEPA) *List of Hazardous Substances and Reportable Quantities*, dated September 1992.
- Noticeable as inventory under the reporting requirements of the Hazardous Chemical Reporting (40 CFR Part 302).
- An environmental release under the reporting requirements of the Toxic Chemical Release Reporting: Community Right To Know (40 CFR Part 372) or under Part 201, Environmental Remediation of the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 201) and Part 213, Leaking Underground Storage Tanks (Part 213).

These would include chemicals with special characteristics which, in the opinion of the manufacturer, can cause harm to people, plants, or animals when released by spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other receptacles).

Universal wastes are waste that comes primarily from consumer products containing mercury, lead, cadmium or other substances that are hazardous to human health and the environment. These items cannot be discarded in household trash nor disposed of in landfills but have less stringent handling and disposal requirements than hazardous waste streams. In Michigan, universal wastes are regulated by the MDEQ Office of Waste Management and Radiological Protection under Part 111 of Act 451 and the federal

Resource Conservation and Recovery Act (RCRA) of 1976 under 40 CFR Part 273. Universal waste is also regulated by the US Department of Transportation (US DOT) under 49 CFR Parts 171 through 180. Most of the universal waste requirements overseen by the DEQ are addressed by R 299.9228 of Part 111 of 1994 P.A. 451, as amended and 40 CFR Part 273. These regulations are designed to encourage proper collection, recycling, treatment, or disposal of these wastes.

Examples of universal waste are mercury-containing equipment (e.g. thermostats, barometers, manometers, temperature and pressure gauges, and mercury switches), nickel-cadmium and spent lead-acid batteries, lamps (e.g. incandescent, fluorescent, high intensity discharge, neon, mercury vapor, and high pressure sodium and metal halide), pesticides, polychlorinated biphenyl (PCB) containing transformers and light ballasts, stored chemical and/or petroleum products, etc. In Michigan, Part 111 also includes pharmaceutical and consumer electronics as additional types of universal wastes.

Other Regulated Materials

This RMS also included identifying and inventorying other regulated materials which may pose physical or chemical concerns during renovation of the Site building(s) including chlorofluorocarbon (CFC) containing devices, tanks, vessels, equipment, and building materials that may contain or become contaminated with hazardous materials.

Specifically, CFC containing devices are regulated Under Title VI of the Clean Air Act (CAA). The Stratospheric Protection Division of the EPA manages programs protecting the stratospheric ozone layer. Title 40, Part 82 of the Code of Federal Regulations contains the EPA regulations protecting the ozone layer. The RMS survey of the premises identified and quantified any CFC containers and CFC containing equipment, which could include the following:

- Drinking fountains, air conditioners, refrigerators
- Air conditioners in control panels and other process equipment
- Water and air chillers
- Roof top and stand-alone air conditioners
- Cafeteria equipment: freezers, walk-in coolers/freezers
- CFC canisters and cylinders

In Michigan, underground storage tanks are regulated under the authority of Part 211, Underground Storage Tank Regulations, of Act 451 of 1994, as amended, and the Michigan Underground Storage Tank Rules (MUSTR). Therefore, this survey included whether any evidence of underground storage tanks and related piping and dispensers were present at the Site.

MSG also surveyed for the presence of equipment, other storage tanks, and materials that may contain or be contaminated by regulated chemicals. These include, but may not be comprehensive of:

- Above ground storage tanks
- Oil-containing equipment (hydraulic equipment, blowers, fans, motors, elevators, compressors, etc.)
- Fire brick
- Contaminated building materials (concrete, block walls, wood, plaster, etc.) with staining, odor or other signs of a hazardous chemical release

SURVEY RESULTS

The following subsections include a discussion of the RMS results. Photographs of the residence are located in the *Attachment A, Photo Log.* The results of this report are valid as of the report date, subject to the limitations presented in *Attachment B. Limitations*.

ACM Survey Results

MSG identified fifteen (15) homogenous materials that were suspect as asbestos containing during the ACM survey. Thirty one (31) bulk samples were collected from these suspect homogeneous materials and were submitted to Mannik & Smith Group Analytical Laboratories (MSGAL) for laboratory analysis of Bulk Materials by Polarized Light Microscopy using USEPA Method 600/R-93/116. MSGAL is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) to analyzed bulk samples for asbestos content. Of the aforementioned suspect homogenous materials identified during this ACM survey, laboratory analysis found one (1) homogenous material (sample 5-1) contained greater than 1% asbestos. The EPA defines ACM as materials containing greater than 1% asbestos. MSG identified vermiculite insulation in all exterior walls and the ceiling on the first floor. This material was not sampled but is presumed to be an ACM.

A point-count quantification procedure (PCQM) allows for lower detection limits than calibrated visual estimation (CVES), which is the quantification method widely used in asbestos analysis via Polarized Light Microscopy (PLM). If the asbestos content is found to contain less than 10% asbestos as determined by a method other than point counting by PLM, it can only be treated as non-ACM if verified to contain less than 1% by the PCQM. If not point-counted, the sample must be assumed to be greater than 1% and thus considered and treated as ACM. It is MSG's experience that point counting samples with an estimated PLM asbestos content of more than 3% does not yield significantly different analytical results. One sample (5-1) was point count confirmed.

Suspect ACM sample locations are depicted on the attached figure. See *Table 1, Asbestos Sampling Results* for a listing of homogeneous materials identified by MSG during this survey. A copy of the analytical reports including chains of custody is attached in *Attachment C, Analytical Reports and Chains of Custody*.

Universal Wastes, Hazardous Materials, and Other Regulated Materials Survey Results

Universal wastes, hazardous materials, and/or other regulated materials wastes were identified within the Site building. Quantities identified are provided in *Table 2, Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory.*

CONCLUSIONS AND RECOMMENDATIONS

Asbestos Containing Materials

Of the fifteen (15) homogenous materials identified as part of the ACM survey, two (2) homogenous materials contained asbestos greater than 1% (sample 5-1 and PACM vermiculite insulation) with these two (2) homogenous materials, window glaze and vermiculite insulation, being classified as RACM. All materials containing ACM must be disposed of in a licensed landfill.

Prior to renovation, a notification of intent to demolish shall be made to the Michigan Department of Environmental Quality Air Quality Division (MDEQ-AQD) and Licensing and Regulatory Affairs (LARA), Asbestos Program. Notification, according to the procedure described by the NESHAP, Title 40 of the Code of Federal Regulations, Part 61, Subpart M, Notification, for renovation and demolition projects should be followed. A copy of this notification form is provided in *Attachment D, Notification of Intent to Renovate/Demolish*. This form shall be completed by the contractor who completes the renovation.

If additional suspect ACMs are discovered during renovation activities in areas that were determined during this survey to be structurally unsound and unsafe, inaccessible, concealed and/or in buried areas, shall be surveyed, tested, and abated if warranted. If suspect ACMs are determined to be RACM that would be disturbed during renovation activities, the RACM must be properly removed by a licensed asbestos abatement contractor.

Category I and Category II Non-Friable ACM may often be left in place during renovation activities if the ACM is not subjected to sanding, grinding, cutting, or abrading or has a high probability of becoming or has

become crumbled, pulverized, or reduced to powder by the forces expected to act on the material during the course of renovation.

Universal Wastes, Hazardous Materials, and Other Regulated Materials

The universal waste, hazardous materials, and other regulated materials (see Table 2) must be properly characterized (as necessary) and properly removed from the Site building for recycling and/or disposed of in accordance with Parts 111, 115, or 147 of Michigan Public Act 451 of 1994, as amended. If additional universal wastes, hazardous materials, and other regulated materials are discovered during renovation activities in areas that were determined during this survey to be structurally unsound and unsafe, inaccessible, concealed and/or in buried areas, these materials shall be characterized (as necessary) and properly removed in accordance with the above-mentioned regulations.

If you have any questions or concerns regarding the above information please contact us at 517-316-9232.

Sincerely,

Kory McKay

Environmental Scientist Accreditation Number A47903 Charlie Bush

Senior Project Manager

Accreditation Number A34293

2-6

Attachments

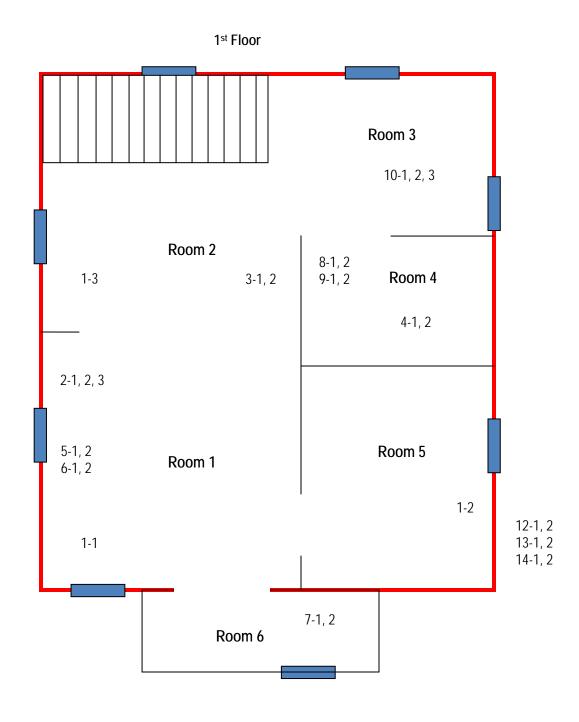
FIGURE



721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com

Address:706 South Hayford StreetDate:December 7, 2018

Drawing not to scale





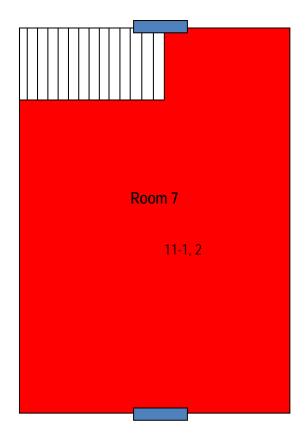
TECHNICAL SKILL. CREATIVE SPIRIT.

721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com

Address: 706 South Hayford Street Date: December 7, 2018

Drawing not to scale

2nd Floor



TABLES

TABLE 1
Asbestos Sampling Results

Client		Ingham Count	v Land Da	ank Authority						
Survey Loc		Ingham County Land Bank Authority 706 S Hayford								
Survey D	ate	December 7, 2	2018							
Functional Area	Floor	Sample ID	HM#	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
RM-1	1	AS 1-1	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
RM-5	1	AS 1-2	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
RM-2	1	AS 1-3	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
RM-1	1	AS 2-1	HA-2	Textured Ceiling	Non-Friable	Good	Miscellaneous	No	No	150 SF
RM-1	1	AS 2-2	HA-2	Textured Ceiling	Non-Friable	Good	Miscellaneous	No	No	150 SF
RM-1	1	AS 2-3	HA-2	Textured Ceiling	Non-Friable	Good	Miscellaneous	No	No	150 SF
RM-2	1	AS 3-1	HA-3	Wall mastic	Non-Friable	Good	Miscellaneous	No	No	1500 SF
RM-2	1	AS 3-2	HA-3	Wall mastic	Non-Friable	Good	Miscellaneous	No	No	1500 SF
RM-4	1	AS 4-1	HA-4	Bathroom Wall mastic	Non-Friable	Good	Miscellaneous	No	No	250 SF
RM-4	1	AS 4-2	HA-4	Bathroom Wall mastic	Non-Friable	Good	Miscellaneous	No	No	250 SF
RM-2	1	AS 5-1	HA-5	Window Glaze	Non-Friable	Good	Miscellaneous	Yes	3% Chrysotile	125 SF
RM-2	1	AS 5-2	HA-5	Window Glaze	Non-Friable	Good	Miscellaneous	Yes	NA	125 SF
RM-2	1	AS 6-1	HA-6	Window caulk	Non-Friable	Good	Miscellaneous	No	No	125 LF
RM-2	1	AS 6-2	HA-6	Window caulk	Non-Friable	Good	Miscellaneous	No	No	125 LF
RM-6	1	AS 7-1	HA-7	Tan 12x12	Non-Friable	Good	Miscellaneous	No	No	75 SF
RM-6	1	AS 7-2	HA-7	Tan 12x12	Non-Friable	Good	Miscellaneous	No	No	75 SF
RM-4	1	AS 8-1	HA-8	Brown Linoleum	Non-Friable	Good	Miscellaneous	No	No	55 SF

TABLE 1
Asbestos Sampling Results

		1								
Client Survey Loc		Ingham Count 706 S Hayford		ınk Authority						
Survey Loca		December 7. 2								
Functional Area	Floor	Sample ID	HM#	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
RM-4	1	AS 8-2	HA-8	Brown Linoleum	Non-Friable	Good	Miscellaneous	No	No	55 SF
RM-4	1	AS 9-1	HA-9	White 12x12	Non-Friable	Good	Miscellaneous	No	No	55 SF
RM-4	1	AS 9-2	HA-9	White 12x12	Non-Friable	Good	Miscellaneous	No	No	55 SF
RM-3	1	AS 10-1	HA-10	Plaster and Ceiling	Non-Friable	Good	Miscellaneous	No	No	650 SF
RM-3	1	AS 10-2	HA-10	Plaster and Ceiling	Non-Friable	Good	Miscellaneous	No	No	650 SF
RM-3	1	AS 10-3	HA-10	Plaster and Ceiling	Non-Friable	Good	Miscellaneous	No	No	650 SF
RM-7	2	AS 11-1	HA-11	Black Sealant	Non-Friable	Good	Miscellaneous	No	No	15 SF
RM-7	2	AS 11-2	HA-11	Black Sealant	Non-Friable	Good	Miscellaneous	No	No	15 SF
Roof	E	AS 12-1	HA-12	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	1000 SF
Roof	E	AS 12-2	HA-12	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	1000 SF
Exterior	Е	AS 13-1	HA-13	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	150 LF
Exterior	E	AS 13-2	HA-13	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	150 LF
Roof	Е	AS 14-1	HA-14	Roof underlayment	Non-Friable	Good	Miscellaneous	No	No	1000 SF
Roof	Е	AS 14-2	HA-14	Roof underlayment	Non-Friable	Good	Miscellaneous	No	No	1000 SF

Table 2 Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory

706 South Hayford Street Lansing, Ingham County, Michigan

Universal Waste Inventory						
Location	Type of Waste	Approximate Quantity				
RM-3	Fire Extinguisher	1				
RM-1, RM-3, RM-4, RM-5	CFL Bulb	9				
RM-1, RM-5	Space Heater	2				
RM-1	TV	1				
RM-1, RM-6	Speaker	3				
RM-3	Microwave	1				
Hazardous Materials Inventory						
Location	Type of Waste	Approximate Quantity				
-	-	-				
Other Regulated Materials Inventory						
Location	Type of Waste	Approximate Quantity				
-	-	-				

ATTACHMENT A PHOTO LOG

Property Photos



706 S Hayford, Front of House



Back of House



Side of House



Side of House

Ingham County Land Bank 706 S Hayford, Lansing, MI Photographs taken by: Kory McKay on 12/07/2018

Additional Photos



Sample ID: AS 1-1 Location: RM-1 Notes: Drywall



Sample ID: AS 3-1 Location: RM-2 Notes: Wall Mastic



Sample ID: AS 5-1 Location: RM-2 Notes: Window Glaze



Sample ID: AS 4-1 Location: RM-4 Notes: Bathroom Wall Mastic



Sample ID: AS 2-1 Location: RM-1 Notes: Textured Ceiling



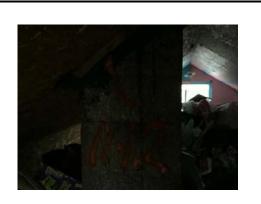
Sample ID: AS 7-1 Location: RM-6 Notes: Tan 12x12 Tile

Ingham County Land Bank 706 S Hayford, Lansing, MI Photographs taken by: Kory McKay on 12/07/2018

Additional Photos



Sample ID: AS 8-1 Location: RM-4 Notes: Brown Linoleum



Sample ID: AS 11-1 Location: RM-7 Notes: Black Sealant



Sample ID: AS 9-1 Location: RM-4 Notes: White 12x12 Tile



Sample ID: AS 13-1 Location: Exterior Notes: Exterior Caulk



Sample ID: AS 10-1 Location: RM-3 Notes: Plaster



Sample ID: AS 14-1 Location: Roof Notes: Roof Underlayment

ATTACHMENT B LIMITATIONS



REGULATED MATERIALS SURVEY LIMITATIONS

The Mannik & Smith Group, Inc. (MSG) performed its services associated with this Regulated Materials Survey (RMS) in general accordance with guidelines set forth in the Environmental Protection Agency (EPA) 40 Code of Federal Regulations (CFR) 763, Occupational Safety and Health Administration (OHSA) 29 CFR 1926.62, and in conformance with the care and skill ordinarily used by other reputable environmental consulting firms practicing under similar conditions, at the same time, and in the same or similar locality. This RMS and related documentation are site-specific, which means they pertain to the conditions of the site surveyed.

Unless otherwise noted, MSG's RMS is limited to accessible areas. Areas determined to be not structurally sound, safely reached, limited by excessive accumulated obstructions, require specialized equipment to access, in operable windows, etc., are not included in this survey. There may be areas where regulated materials, such as suspected asbestos-containing materials (SACM) and lead containing paint cannot be viewed and/or tested. MSG shall not be responsible for identifying all SACM, lead containing paint, or other hazardous materials located in inaccessible locations, including by not limited to, above a plaster ceiling, behind a wall, embedded in concrete, buried, confined spaces, unsafe areas, or otherwise not readily identifiable.

Destructive sampling will only be conducted when permission has been granted by the owner. Destructive survey locations are limited to areas where hidden SACM, lead containing paint, or other hazardous materials is reasonably thought to be present and sampling can be conducted in a safe manner. If regulated materials are found during the course of demolition and/or renovation activities that are not listed in this report, the material should be assumed as asbestos-containing, lead containing, or hazardous until it can be sampled and analyzed at an accredited laboratory and safe work practices should always be used if those areas are to be disturbed.

MSG has prepared a logical assessment program to reduce the client's risk of discovering unknown regulated materials and/or hazardous substances. The presence of subsurface regulated materials and/or hazardous substances is based solely on surface observations and/or information provided by others. Descriptions of subsurface conditions provided in this report are not warranted to be complete or accurate. This risk may be reduced by more extensive exploration on the site, but even with additional exploration, it is not possible to completely eliminate the risk of discovering regulated materials and/or hazardous conditions. It cannot and should not be assumed that samples collected and conditions observed at the time of the RMS are representative of an area that has not been sampled and/or tested.

In preparing this report, MSG may have relied on information obtained from or provided by others. MSG makes no representation or warranty regarding the accuracy or completeness of this information gathered through outside sources or subcontracted services. No warranty, guarantee, or certification of any kind, expressed or implied, at common law or created by statute, is extended, made, or intended by rendering these environmental consulting services or by furnishing this written report. Environmental conditions and regulations are subject to constant change and reinterpretation. One should not assume that any on-site conditions and/or regulatory statutes or rules will remain constant after MSG has completed the scope of work for this project. Furthermore, because the facts stated in this report are subject to professional interpretation, differing conclusions could be reached by other environmental professionals.

The report is intended to offer support to a building owner, construction manager, general contractor, abatement contractor, architect, and/or other parties authorized by the owner in generally locating asbestos-containing materials (ACM), lead containing paint, universal and hazardous wastes, and/or other regulated materials. This report does not have the required components to serve as an Asbestos Project Design document, Asbestos and/or Lead Containing Paint Abatement Work Plan, and/or a Health and Safety Plan. Therefore, this report should not be utilized as a project specification document. The results, findings, conclusions, and recommendations expressed in

TECHNICAL SKILL. CREATIVE SPIRIT.

this report are based only on conditions that were noted during this survey. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated. Quantities have been conservatively estimated and sampling locations have been described representatively; however, current site conditions should be field-verified by contractors bidding on and/or prior to abatement work.

ATTACHMENT C

ANALYTICAL REPORTS AND CHAINS OF CUSTODY



00008

Client	The Mannik & Smith Group, 2193 Association Dr., Suite 2 Okemos, MI, 48864		12/14/18 Or	oject 706 S Hayford der # 00008 oject # 11440003
		BULK SAMPLE AN	ALYSIS SUMMARY	
	Client ID AS 1-1 Layer 1 Drywall Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-1	Location RM-1
	Client ID AS 1-2 Layer 1 Drywall Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-2	Location RM-5
	Client ID AS 1-3 Layer 1 Drywall Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-3	Location RM-2
	Client ID AS 2-1 Layer 1 Textured Ceiling Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-4	Location RM-1
	Client ID AS 2-2 Layer 1 Textured Ceiling Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-5	Location RM-1
Analytic Analyst: Reviewe	Joshua P Lu	r/R-93/116 by Polarized Light Micr scchesi Quality Manager r A Claes Laboratory Director	oscopy	Accreditations NIST-NVLAP No. 600212-0

00008

Client	The Mannik & Smith Group, 2193 Association Dr., Suite Okemos, MI, 48864		12/14/18 Order	•
		BULK SAMPLE ANA	ALYSIS SUMMARY	
	Client ID AS 2-3 Layer 1 Textured Ceiling Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-6	Location RM-1
	Client ID AS 3-1 Layer 1 Wall Mastic Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-7	Location RM-2
	Client ID AS 3-2 Layer 1 Wall Mastic Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-8	Location RM-2
Type Tan,	Client ID AS 4-1 Layer 1 athroom Wall Mastic Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-9	Location RM-4
Type Tan,	Client ID AS 4-2 Layer 1 athroom Wall Mastic Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-10	Location RM-4
Analytic Analyst: Reviewe	Joshua P Li	0/R-93/116 by Polarized Light Micr ucchesi Quality Manager r A Claes Laboratory Director	oscopy	Accreditations NIST-NVLAP No. 600212-0

00008

2	he Mannik & Smith Group, 193 Association Dr., Suite 2 Okemos, MI, 48864		12/14/18 Order #	706 S Hayford O0008 # 11440003
		BULK SAMPLE AN	ALYSIS SUMMARY	
Type Tream, he 97%	Client ID AS 5-1 Layer 1 /indow Glaze Chrysotile 3.00% omogenous, fibrous. 6 non-asbestos count performed.			Location RM-2
W Type N	Client ID AS 5-2 Layer 1 /indow Glaze lot Analyzed - omogenous, fibrous.	Lab ID	O0008-12	Location RM-2
W Type White, ho	Client ID AS 6-1 Layer 1 /indow Caulk Non Detect 0.00% omogenous, fibrous. % non-asbestos	Lab ID	O0008-13	Location RM-2
W Type White, ho	Client ID AS 6-2 Layer 1 /indow Caulk Non Detect 0.00% Demogenous, fibrous. % non-asbestos	Lab ID	O0008-14	Location RM-2
Type Tan, hor	Client ID AS 7-1 Layer 1 Tan 12x12 Non Detect 0.00% mogenous, fibrous. % non-asbestos	Lab ID	O0008-15	Location RM-6
Analytical M Analyst: Reviewer:	Joshua P Lu	/R-93/116 by Polarized Light Mico cchesi Quality Manager A Claes Laboratory Director	roscopy	Accreditations NIST-NVLAP No. 600212-0

00008

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864		12/14/18	Project 706 S Hayford Order # 00008 Project # 11440003
		BULK SAMPLE AN	ALYSIS SUMMARY	
	Client ID AS 7-2 Layer 1 Tan 12x12 Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-16	Location RM-6
	Client ID AS 8-1 Layer 1 Brown Linoleum Non Detect 0.00% n, homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-17	Location RM-4
	Client ID AS 8-2 Layer 1 Brown Linoleum Non Detect 0.00% n, homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-18	Location RM-4
	Client ID AS 9-1 Layer 1 White 12x12 Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-19	Location RM-4
	Client ID AS 9-2 Layer 1 White 12x12 Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-20	Location RM-4
Analytica Analyst: Reviewe	Joshua P L	0/R-93/116 by Polarized Light Mico ucchesi Quality Manager er A Claes Laboratory Director	roscopy	Accreditations NIST-NVLAP No. 600212-0

00008

Client	The Mannik & Smith Group, 2193 Association Dr., Suite 2 Okemos, MI, 48864		12/14/18	Project 706 S Hayford Order # 00008 Project # 11440003	
		BULK SAMPLE AN	ALYSIS SUMMARY		
Type Gray <i>,</i>	Client ID AS 10-1 Layer 1 Plaster and Ceiling Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0008-21	Location RM-3	
Type Gray,	Client ID AS 10-2 Layer 1 Plaster and Ceiling Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0008-22	Location RM-3	
Type Gray,	Client ID AS 10-3 Layer 1 Plaster and Ceiling Non Detect 0.00% homogenous, fibrous00% non-asbestos	Lab ID	O0008-23	Location RM-3	
	Client ID AS 11-1 Layer 1 Black Sealant Non Detect 0.00% , homogenous, fibrous00% non-asbestos	Lab ID	O0008-24	Location RM-7	
	Client ID AS 11-2 Layer 1 Black Sealant Non Detect 0.00% , homogenous, fibrous00% non-asbestos	Lab ID	O0008-25	Location RM-7	
Analytica Analyst: Reviewe	Joshua P Lu	r/R-93/116 by Polarized Light Mico acchesi Quality Manager r A Claes Laboratory Director	roscopy	Accreditations NIST-NVLAP No. 600212-0	

00008

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864		12/14/18	Project Order # Project #	706 S Hayford O0008 I1440003
		BULK SAMPLE AN	ALYSIS SUMMA	ARY	
	Client ID AS 13-1 Layer 1 Exterior Caulk Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-26	L	ocation Exterior
	Client ID AS 13-2 Layer 1 Exterior Caulk Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-27	L	ocation Exterior
	Client ID AS 12-1 Layer 1 Roof Shingle Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-28	L	ocation Roof
	Client ID AS 12-2 Layer 1 Roof Shingle Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID	O0008-29	L	ocation Roof
Type Black	Client ID AS 14-1 Layer 1 Roof Underlayment Non Detect 0.00% s, homogenous, fibrous. 1,00% non-asbestos	Lab ID	O0008-30	L	ocation Roof
Analytica Analyst: Reviewe	Joshua P L	D/R-93/116 by Polarized Light Mico ucchesi Quality Manager er A Claes Laboratory Director	roscopy		Accreditations NIST-NVLAP No. 600212-0

80000

Client The Mannik & Smith Group, Inc.

Received 12/11/18

Project 706 S Hayford

2193 Association Dr., Suite 200

Analyzed **12/14/18**

Order # 00008

Okemos, MI, 48864

Reported 12/14/18

Project # I1440003

BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 14-2 Layer 1 Lab ID 00008-31

Location Roof

Roof Underlayment

Type Non Detect 0.00% Black, homogenous, fibrous. 100% non-asbestos

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy Accreditations
Analyst: Joshua P Lucchesi Quality Manager NIST-NVLAP
Reviewer: Christopher A Claes Laboratory Director No. 600212-0

The

Client Address

The Mannik & Smith Group, Inc.

City, State Lansing, MI

Contact

Phone Zip Code

(517) 316-9232

Bulk Samples Only

☐ TTP ☐ Point Count

0000		
0000	Order Number:	nalytical Laboratories
dV	Chain of Custody	Maillik & Sillini Glonb
	5	1 1 0 Cm 1+h C 10 10

address	2193 Association Drive, Suite 200	Contact		Point Count
roject	706 S Hayford	003 Em	rax	Date Sampieu:
Turn Around	1 4 Hour	24 Hour 48 Hour 72 Hour 1 Week	Report to	12/7/2018
Lab ID	Customer ID	Material Type	Material Location	Notes
	AS 1-1	Drywall	RM-1	
	AS 1-2	Drywall	RM-5	
	AS 1-3	Drywall	RM-2	
	AS 2-1	Textured Ceiling	RM-1	
	AS 2-2	Textured Ceiling	RM-1	
	AS 2-3	Textured Ceiling	RM-1	
	AS 3-1	Wall mastic	RM-2	
	AS 3-2	Wall mastic	RM-2	
	AS 4-1	Bathroom Wall mastic	RM-4	
	AS 4-2	Bathroom Wall mastic	RM-4	
	AS 5-1	Window Glaze	RM-2	
	AS 5-2	Window Glaze	RM-2	
	AS 6-1	Window caulk	RM-2	
	AS 6-2	Window caulk	RM-2	
	AS 7-1	Tan 12x12	RM-6	
	AS 7-2	Tan 12x12	RM-6	
N.	AS 8-1	Brown Linoleum	RM-4	
	AS 8-2	Brown Linoleum	RM-4	
	AS 9-1	White 12x12	RM-4	
	AS 9-2	White 12x12	RM-4	

Relinquished by

Date and Time_

Date and Time

Received by

CAC

	dp	
Order Number:	Chain of Custody	
		١

lient	The Mannik & Smith Group, Inc.	ıp, Inc.		City, State Lansing, MI		Zip Code		*Bulk Samples Only*
ddress	2193 Association Drive, Suite 200	uite 200		Contact Charlie Bush	h	Phone (51	(517) 316-9232	✓ TTP ☐ Point Count
roject	706 S Hayford		Project # 11440003	Email	cbush@manniksmithgroup.com	Fax		Date Sampled:
urn Around	4 Hour	24 Hour	☐ 48 Hour	✓ 72 Hour	☐ 1 Week	Report to	✓ Email ☐ Fax	12/7/2018
Lab ID	Customer ID		Mater	Material Type		Material Location	tion	Notes
	AS 10-1		Plaster :	Plaster and Ceiling		RM-3		
	AS 10-2		Plaster :	Plaster and Ceiling		RM-3		
	AS 10-3		Plaster a	Plaster and Ceiling		RM-3		
	AS 11-1		Black	Black Sealant		RM-7		
	AS 11-2		Black	Black Sealant		RM-7		
	AS 13-1		Exteri	Exterior Caulk		Exterior		
	AS 13-2		Exteri	Exterior Caulk		Exterior		
	AS 12-1		Roof	Roof Shingle		Roof		
	AS 12-2		Roof	Roof Shingle		Roof	**	
	AS 14-1		Roof unc	Roof underlayment		Roof		
	AS 14-2		Roof unc	Roof underlayment		Roof		
							h h	
omments:			201					

Relinquished by

Date and Time _

Date and Time

Received by

ATTACHMENT D

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY (MDEQ) AIR QUALITY DIVISION NESHAP, 40 CFR Part 61, Subpart M

	•	5		,		
LICENSING	AND	REGI	RAI	on	AFI	AIRS
CHETTOWATER	DOM	No. 100	PDM.	ree	101	over

MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS (LARA), ASBESTOS PROGRAM, P.A. 135 OF 1986, AS AMENDED, Section 220 (1-4) or (8)

DEQ/LARA USE ONLY	3. ABATEMENT CONTRACTOR: Internal Project #:				
Postmark Date/ Rec'd Date/	Name:				
Emergency Date/ Valid No	Mailing Address:				
☐ OK ☐ Send Def Ltr. Date of Def Ltr/	City/State/Zip:E-mail:				
	Contact: Phone:				
FOLLOW UP/ Spoke w/ Comments:	4. DEMOLITION CONTRACTOR: Internal Project #:				
	Name:				
	Mailing Address:				
	City/State/Zip:				
Notification NoTrans No	/ E-mail:				
Calculate LARA Asbestos Project Fee: (1% Project Fee)	Contact: Phone:				
Total Project Cost: x 0.01 =	5. FACILITY OWNER: ("Facility" includes Bridges)				
Type of Contractor: License No.:	Name:				
Licensing Authority:	Mailing Address:				
1. NOTIFICATION:	City/State/Zip:				
Date of Notification:	E-mail:				
Date of Revision(s):	Contact: Phone:				
Notification Type: ☐ Original ☐ Revised ☐ Canceled ☐ Annual	6. FACILITY DESCRIPTION:				
Mark appropriate boxes: (both DEQ and LARA may apply):	Facility Name: Location Address/Description:				
DEQ (NESHAP) [260 In. ft./160 sq. ft. or more is threshold]	If Apt. # of units:				
☐ Planned Renovation – 10 working days notice	City/Twp State: Zip Code:				
 ☐ Emergency Renovation ☐ Scheduled Demolition – 10 working days notice 	County: Nearest Crossroad:				
☐ Intentional Burn – 10 working days notice	Size: (sq. ft.) No. of Floors: Floor No.:				
☐ Ordered Demolition LARA (MIOSHA) [Will not accept annual notifications]	Age: Present Use: Prior Use:				
☐ Demo, Reno, Encap. (>10 In. ft./15 sq. ft.) 10 calendar days notice	Specific Location(s) in Facility:				
☐ Emergency Renovation/Encapsulation	- Diabooti oler				
2. PROJECT SCHEDULE:	7. DISPOSAL SITE:				
START DATE END DATE	Name:				
* Renovation	Location Address:				
+Asb. Removal	City/State/Zip:				
+Demolition:	8. WASTE TRANSPORTER 1: WASTE TRANSPORTER 2:				
Encapsulation:	Name:				
Work Schedule: Please indicate the anticipated days of the week and work hours for the purpose of scheduling a compliance inspection.	Address:				
Days of the Week Work Hours	City/State/Zip:				
Asb. Removal:	Phone:				
Demolition:	 ORDERED DEMOLITIONS: (See NESHAP regulations for definition of "Ordered Demolition.") A copy of the official Order must accompany this 				
Encapsulation:	notification.				
* Includes setup, build enclosure, asbestos removal, demobilizing, etc.	Gov't Agency Ordering Demo:				
+Include only those dates you are conducting asbestos removal/demo.	Name/Title of Person Signing Order:				
☐ Check here if this is a multi-phased project, attach a schedule showing					
the start/end date of each phase.	Date of Order: Date Ordered to Begin:				
10. IS ASBESTOS PRESENT? ☐ Yes ☐ No ☐ To be remove	ed prior to demolition				
	Non-friable ACM <u>not</u>				
Estimate the amount of asbestos: Include RACM (Regulated Asbestos Containing Material) to be RACM to be Removed	RACM to be removed prior to demo. Encapsulated Category I Category II Units of Measure				
removed, encapsulated, etc. Also include the amount	□ Ln. Ft. □ Ln. M.				
and type (floor tile, roofing, etc.) of non-friable Category I and/or Category II ACM that will not be removed prior	☐ Sq. Ft. ☐ Sq. M.				
to demolition. (NOTE: In a demolition, cementatious	☐ Cu. Ft.* ☐ Cu.M.*				
ACM <u>cannot</u> remain in a structure, as it is likely to become regulated in the demolition/handling process.	4 (masters) about the constant of the transfer of the constant				
*\/olumo /oubje f	t./meters) should be used only if unable to measure by linear/square measure				

(example: asbestos has fallen off of surface).

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH (continued)

11.	PROJECT DESCRIPTION: Complete A) for Renovation (asbestos remo	oval/encapsulation) and/or B) for Demolition:			
	A) RENOVATION: Mark all surfaces/types of RACM to be removed: Piping Fittings Boiler(s) Tanks(s) Piping Fittings Boiler(s) Tank(s) Beam(s) Duct(s) Tunnel(s) Ceiling Tile(s) Beam(s) Duct(s) Tunnel(s) Ceiling Tile(s) Mag Block Other (describe) Other (describe) Other (describe) Method of removal: Describe how the asbestos will be removed from the surface (example: glove bag, scrape with hand tools, cut in sections and carefully lower, etc.):				
	B) DEMOLITION: Describe the method of demolition of facility, bridge, et bridge, etc., will be demolished:	tc., and indicate if complete or partial. If partial, describe which part of facility			
12.	ENGINEERING CONTROLS: Describe work practices and engineering until proper disposal:	controls used to prevent visible emissions before, during, and after removal, and			
13.		n the event that unexpected RACM is found or previously non-friable asbestos efore regulated:			
14.	4. PROCEDURE(S) USED TO DETECT THE PRESENCE OF ASBESTOS: A) Indicate how you determined whether or not asbestos is in the facility. If analytical sampling was used, describe method of analysis. (The determination of the presence or absence of asbestos must be made prior to submitting a renovation/demolition notification.):				
		survey:			
	C) Name, accreditation number of inspector, and date of inspection:				
15.	EMERGENCY RENOVATIONS: Date/time of emergency:	Describe the sudden, unexpected event:			
	Explain how the event caused unsafe conditions, and/or would cause equ	ipment damage and/or an unreasonable financial burden:			
16.	inspection at the renovation or demolition site.	Subpart M, will be on-site during the renovation and during demolition involving ence that this person has completed the required training will be available for			
	Signature of Owner or Abatement Contractor Date	Signature of Owner or Demolition Contractor Date			
17.	Signature of Building Owner or Lessee Date	ssure Enclosures: (required by LARA) ir monitoring is required for any asbestos abatement project involving 10 med within a negative pressure enclosure. I (the building owner or lessee) 135 to have clearance air monitoring performed on this project. Signature of Asbestos Abatement Contractor Representative Date sted. For affected projects, this section of the notification form must be completed, signed,			
18.	I certify that the above information is correct:				
	Printed Name of Owner/Operator Date	Signature of Owner/Operator Date			
MAILING ADDRESSES/PHONE NUMBERS: (See Item 1 to determine which agency requirements/regulations are applicable to your project.)					
mai	Public Act 135 of 1986, as amended, Section 220 (1-4) or (8), I to address below. For more info visit: ://www.michigan.gov/asbestos	For NESHAP Demolitions/Renovations , 40 CFR , Part 61 , Subpart M , please use the e-submittal process. For more information visit http://www.michigan.gov/air , under Air Links click on Asbestos NESHAP Program.			
LAF P.C	DSHA Asbestos Program RA, CSHD D. Box 30671 Ising, MI 48909-8171	NESHAP Asbestos Program DEQ, AQD P.O. Box 30260 Lansing, MI 48909-7760 517.284.6777 (Office)			
517	7.636.4551 (office), 517.322.1713 (fax)	· · · · · · · · · · · · · · · · · · ·			

EQP5661 (rev. 03/14) MIOSHA-CSH 142 (rev. 08/14)