



December 21, 2018  
Updated: January 8, 2019

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

Re: Pre-Renovation Regulated Materials Survey  
712 Brook 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 pre-renovation regulated materials survey (RMS) performed at 712 Brook St., Lansing, Ingham County, Michigan (hereinafter referred to as the "Site") by Kory McKay (Accreditation Number A47903).

#### SUMMARY

Building Information	
Property Address	712 Brook St., Lansing, MI
Parcel #	33-01-01-09-306-021
No. Stories	2
Square Footage (approx.)	1,000 SF
Siding	Asphalt
Basement	Yes
Garage	Yes



Asbestos Containing Material				
Location	Material Group	Friable/Non Friable	Asbestos	Quantity
All rooms	Plaster	Non Friable	6% Chrysotile	3,000 SF
RM-1, RM-2, RM-3, RM-8, RM-9, RM-10	Vent Wrap	Non Friable	65% Chrysotile	200 SF
Basement	Duct Wrap	Non Friable	75% Chrysotile	150 SF
RM-8	Tan Linoleum	Non Friable	20% Chrysotile	80 SF
Basement	Stack Cement	Non Friable	12% Chrysotile	5 SF
Exterior	Exterior Caulk	Non Friable	2% Chrysotile	200 LF (24 Doors/Windows)

TECHNICAL SKILL.  
CREATIVE SPIRIT.

Universal Waste Inventory		
Location	Material Description	Quantity
RM-2, RM-7	Smoke Detector	2
RM-1	Fluorescent Bulb	2
RM-6	1 Gallon Household Batteries	2
Basement	Computer	6

Other Regulated Materials Inventory		
Location	Material Description	Quantity
Basement	Washing Machine	2
Basement	Dryer	1
RM-6, Basement	Refrigerator	2
RM-2, Basement	Space Heater	3
RM-7	Window AC Unit	1
RM-4	Microwave	1

Hazardous Materials		
Location	Material Description	Quantity
** No hazardous materials were 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 5, 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:
  - DOT - Department of Transportation; Hazardous Materials Regulations (49 CFR 100-180);
  - IMO - International Maritime Organization; International Maritime Dangerous Goods (IMDG) Code;
  - IATA - International Air Transport Association; Dangerous Goods Regulations;
  - 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 eighteen (18) homogenous materials that were suspect as asbestos containing during the ACM survey. Forty three (43) 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 analyze bulk samples for asbestos content. Of the aforementioned suspect homogenous materials identified during this ACM survey, laboratory analysis found six (6) homogenous materials (samples 1-1, 3-1, 9-1, 11-1, 13-1 and 17-1) 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. Sample 17-1 was 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 eighteen (18) homogenous materials collected as part of the ACM survey, six (6) homogenous materials contained asbestos greater than 1% (samples 1-1, 3-1, 9-1, 11-1, 13-1 and 17-1) with these six (6) 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.

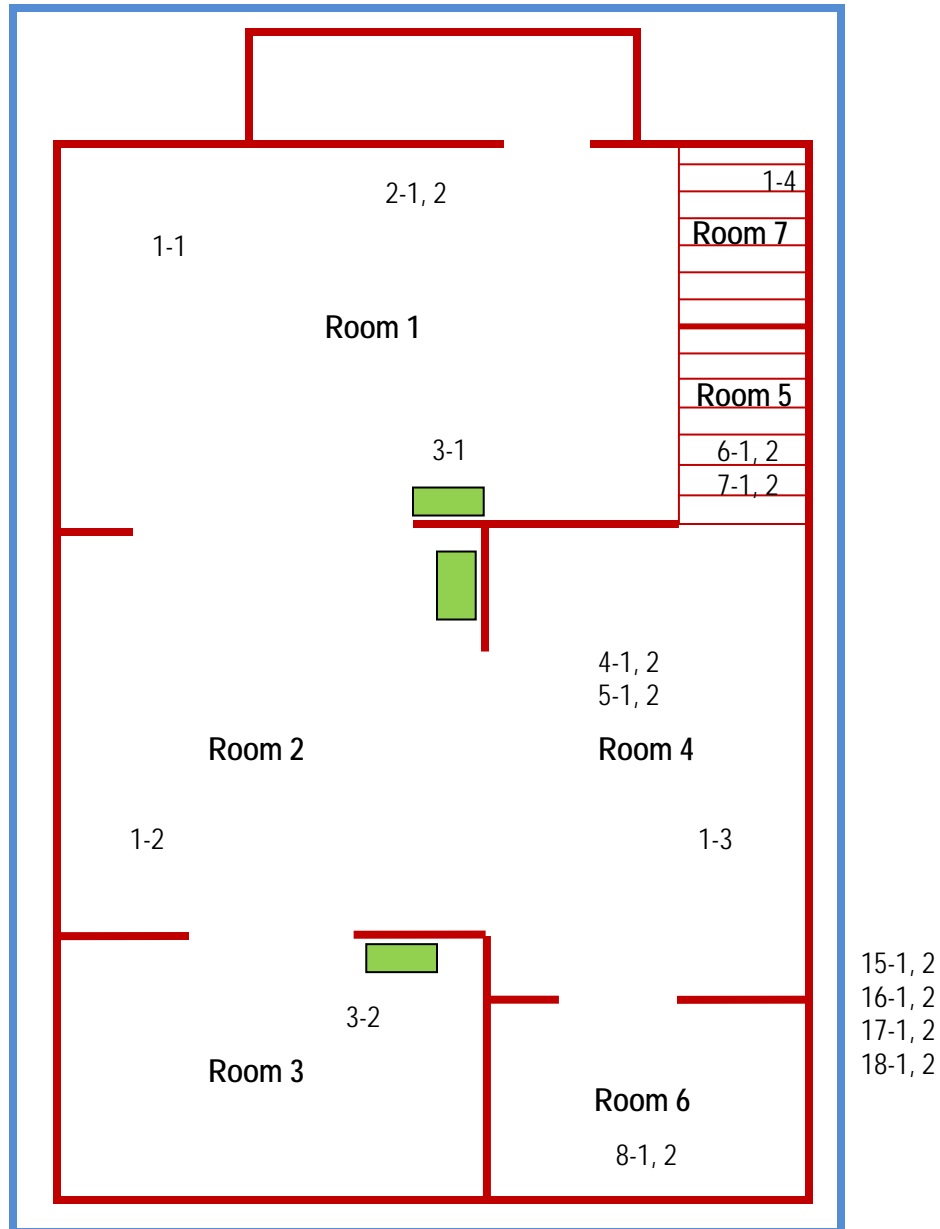
721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com




Address: 712 Brook Street

Date: December 5, 2018

Drawing not to scale

### 1<sup>st</sup> Floor



-  Vent Wrap (200 SF total)
-  Plaster (3,000 SF total)
-  Exterior Caulk (200 LF total, around doors and windows)

#-# = Asbestos Sample





TECHNICAL SKILL.  
CREATIVE SPIRIT.

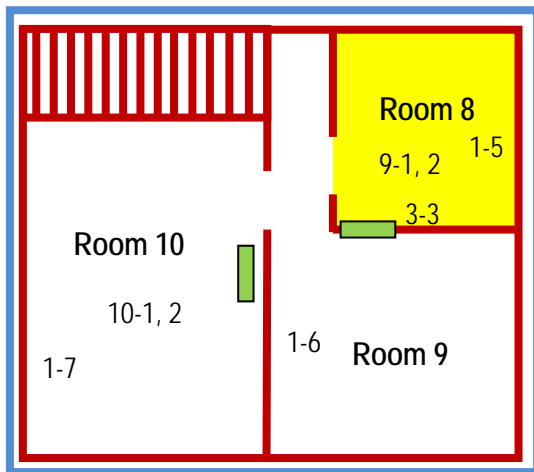
721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com

Address: 712 Brook Street

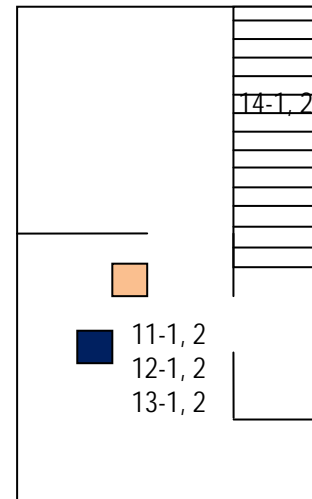
Date: December 5, 2018

Drawing not to scale

2<sup>nd</sup> Floor



Basement



- Tan Linoleum (80 SF total)
- Duct Wrap (150 SF total)
- Stack Cement (5 SF total)
- Vent Wrap (200 SF total)
- Plaster (3,000 SF total)
- Exterior Caulk (200 LF total, around doors and windows)

#-# = Asbestos Sample

## TABLES



**TABLE 1**  
**Asbestos Sampling Results**

Client		Ingham County Land Bank Authority								
Survey Location		712 Brook Street								
Survey Date		December 5, 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	Plaster	Non-Friable	Good	Miscellaneous	Yes	6% Chrysotile	3000 SF
RM-2	1	AS 1-2	HA-1	Plaster	Non-Friable	Good	Miscellaneous	Yes	NA	3000 SF
RM-4	1	AS 1-3	HA-1	Plaster	Non-Friable	Good	Miscellaneous	Yes	NA	3000 SF
RM-7	1	AS 1-4	HA-1	Plaster	Non-Friable	Good	Miscellaneous	Yes	NA	3000 SF
RM-8	2	AS 1-5	HA-1	Plaster	Non-Friable	Good	Miscellaneous	Yes	NA	3000 SF
RM-9	2	AS 1-6	HA-1	Plaster	Non-Friable	Good	Miscellaneous	Yes	NA	3000 SF
RM-10	2	AS 1-7	HA-1	Plaster	Non-Friable	Good	Miscellaneous	Yes	NA	3000 SF
RM-1	1	AS 2-1	HA-2	Window Glaze	Non-Friable	Good	Miscellaneous	No	No	450 SF
RM-1	1	AS 2-2	HA-2	Window Glaze	Non-Friable	Good	Miscellaneous	No	No	450 SF
RM-1	1	AS 3-1	HA-3	Vent Wrap	Non-Friable	Good	Miscellaneous	Yes	65% Chrysotile	200 SF
RM-3	1	AS 3-2	HA-3	Vent Wrap	Non-Friable	Good	Miscellaneous	Yes	NA	200 SF
RM-8	2	AS 3-3	HA-3	Vent Wrap	Non-Friable	Good	Miscellaneous	Yes	NA	200 SF
RM-4	1	AS 4-1	HA-4	Brown Linoleum	Non-Friable	Good	Miscellaneous	No	No	100 SF
RM-4	1	AS 4-2	HA-4	Brown Linoleum	Non-Friable	Good	Miscellaneous	No	No	100 SF
RM-4	1	AS 5-1	HA-5	Tan 12x12	Non-Friable	Good	Miscellaneous	No	No	100 SF
RM-4	1	AS 5-2	HA-5	Tan 12x12	Non-Friable	Good	Miscellaneous	No	No	100 SF
RM-5	1	AS 6-1	HA-6	Beige Linoleum	Non-Friable	Good	Miscellaneous	No	No	25 SF

**TABLE 1**  
**Asbestos Sampling Results**

Client		Ingham County Land Bank Authority								
Survey Location		712 Brook Street								
Survey Date		December 5, 2018								
Functional Area	Floor	Sample ID	HM #	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
RM-5	1	AS 6-2	HA-6	Beige Linoleum	Non-Friable	Good	Miscellaneous	No	No	25 SF
RM-5	1	AS 7-1	HA-7	Brown 12x12	Non-Friable	Good	Miscellaneous	No	No	25 SF
RM-5	1	AS 7-2	HA-7	Brown 12x12	Non-Friable	Good	Miscellaneous	No	No	25 SF
RM-6	1	AS 8-1	HA-8	Multi color Linoleum	Non-Friable	Good	Miscellaneous	No	No	40 SF
RM-6	1	AS 8-2	HA-8	Multi color Linoleum	Non-Friable	Good	Miscellaneous	No	No	40 SF
RM-8	2	AS 9-1	HA-9	Tan Linoleum	Non-Friable	Good	Miscellaneous	Yes	20% Chrysotile	80 SF
RM-8	2	AS 9-2	HA-9	Tan Linoleum	Non-Friable	Good	Miscellaneous	Yes	NA	80 SF
RM-10	2	AS 10-1	HA-10	Yellow Linoleum	Non-Friable	Good	Miscellaneous	No	No	150 SF
RM-10	2	AS 10-2	HA-10	Yellow Linoleum	Non-Friable	Good	Miscellaneous	No	No	150 SF
Basement	B	AS 11-1	HA-11	Duct Wrap	Non-Friable	Good	Miscellaneous	Yes	75% Chrysotile	150 SF
Basement	B	AS 11-2	HA-11	Duct Wrap	Non-Friable	Good	Miscellaneous	Yes	NA	150 SF
Basement	B	AS 11-3	HA-11	Duct Wrap	Non-Friable	Good	Miscellaneous	Yes	NA	150 SF
Basement	B	AS 12-1	HA-12	Foundation Concrete	Non-Friable	Good	Miscellaneous	No	No	800 SF
Basement	B	AS 12-2	HA-12	Foundation Concrete	Non-Friable	Good	Miscellaneous	No	No	800 SF
Basement	B	AS 13-1	HA-13	Stack Cement	Non-Friable	Good	Miscellaneous	Yes	12% Chrysotile	5 SF
Basement	B	AS 13-2	HA-13	Stack Cement	Non-Friable	Good	Miscellaneous	Yes	NA	5 SF

**TABLE 1**  
**Asbestos Sampling Results**

Client		Ingham County Land Bank Authority								
Survey Location		712 Brook Street								
Survey Date		December 5, 2018								
Functional Area	Floor	Sample ID	HM #	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
Basement	B	AS 14-1	HA-14	Basement Window Glaze	Non-Friable	Good	Miscellaneous	No	No	50 SF
Basement	B	AS 14-2	HA-14	Basement Window Glaze	Non-Friable	Good	Miscellaneous	No	No	50 SF
Exterior	E	AS 15-1	HA-15	Asphalt Siding	Non-Friable	Good	Miscellaneous	No	No	2000 SF
Exterior	E	AS 15-2	HA-15	Asphalt Siding	Non-Friable	Good	Miscellaneous	No	No	2000 SF
Exterior	E	AS 16-1	HA-16	Siding Underlayment	Non-Friable	Good	Miscellaneous	No	No	2000 SF
Exterior	E	AS 16-2	HA-16	Siding Underlayment	Non-Friable	Good	Miscellaneous	No	No	2000 SF
Exterior	E	AS 17-1	HA-17	Exterior Caulk	Non-Friable	Good	Miscellaneous	Yes	2% Chrysotile	200 LF
Exterior	E	AS 17-2	HA-17	Exterior Caulk	Non-Friable	Good	Miscellaneous	Yes	NA	200 LF
Roof	E	AS 18-1	HA-18	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	1100 SF
Roof	E	AS 18-2	HA-18	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	1100 SF

Table 2  
 Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory  
 712 Brook Street  
 Lansing, Ingham County, Michigan

Universal Waste Inventory		
Location	Type of Waste	Approximate Quantity
Rm-2, Rm-7	Smoke Detector	2
RM-1	Fluorescent Bulb	2
RM-6	1 Gallon Household Batteries	2
Basement	Computer	6
Hazardous Materials Inventory		
Location	Type of Waste	Approximate Quantity
-	-	-
Other Regulated Materials Inventory		
Location	Type of Waste	Approximate Quantity
Basement	Washing Machine	2
Basement	Dryer	1
RM-6, Basement	Refridgerator	2
RM-2, Basement	Space Heater	3
RM-7	Window AC Unit	1
RM-4	Microwave	1

## ATTACHMENT A

### PHOTO LOG



Property Photos



712 Brook St, Front of House



Back of House



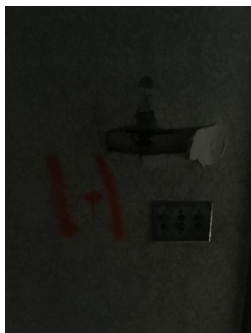
Side of House



Side of House



### Samples



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



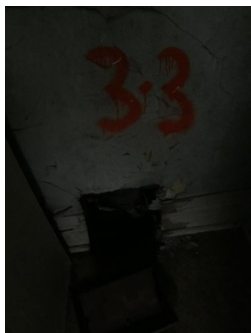
**Sample ID:** AS 9-1  
**Location:** RM-8  
**Notes:** Tan Linoleum



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



**Sample ID:** AS 11-1  
**Location:** Basement  
**Notes:** Duct Wrap



**Sample ID:** AS 3-3  
**Location:** RM-8  
**Notes:** Vent Wrap

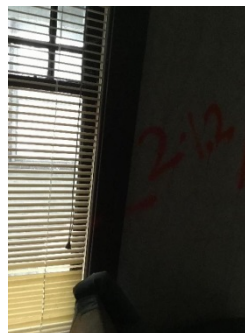


**Sample ID:** AS 13-1  
**Location:** Basement  
**Notes:** Stack Cement

### Samples



**Sample ID:** AS 17-1  
**Location:** Exterior  
**Notes:** Exterior Caulk



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



**Sample ID:** AS 7-1  
**Location:** RM-5  
**Notes:** Brown 12x12 Tile



**Sample ID:** AS 10-1  
**Location:** RM-10  
**Notes:** Yellow Linoleum



**Sample ID:** AS 8-1  
**Location:** RM-6  
**Notes:** Multicolor Linoleum



**Sample ID:** AS 14-1  
**Location:** Basement  
**Notes:** Basement 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

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



# The Mannik & Smith Group Analytical Laboratories

00005

Client The Mannik & Smith Group, Inc.  
2193 Association Dr., Suite 200  
Okemos, MI, 48864

Received 12/06/18  
Analyzed 12/11/18  
Reported 12/11/18

Project 712 Brook St  
Order # 00005  
Project # I1440003

## BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 1-1 Layer 1 Plaster Type <b>Chrysotile 6.00%</b> Gray, homogenous, fibrous. 94% non-asbestos	Lab ID 00005-1	Location RM-1
Client ID AS 1-2 Layer 1 Plaster Type Not Analyzed - Gray, homogenous, fibrous.	Lab ID 00005-2	Location RM-2
Client ID AS 1-3 Layer 1 Plaster Type Not Analyzed - Gray, homogenous, fibrous.	Lab ID 00005-3	Location RM-4
Client ID AS 1-4 Layer 1 Plaster Type Not Analyzed - Gray, homogenous, fibrous.	Lab ID 00005-4	Location RM-7
Client ID AS 1-5 Layer 1 Plaster Type Not Analyzed - Gray, homogenous, fibrous.	Lab ID 00005-5	Location RM-8

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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# The Mannik & Smith Group

## Analytical Laboratories

00005

Client The Mannik & Smith Group, Inc.  
2193 Association Dr., Suite 200  
Okemos, MI, 48864

Received 12/06/18  
Analyzed 12/11/18  
Reported 12/11/18

Project 712 Brook St  
Order # 00005  
Project # I1440003

### BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 1-6 Layer 1 Plaster Type Not Analyzed - Gray, homogenous, fibrous.	Lab ID 00005-6	Location RM-9
Client ID AS 1-7 Layer 1 Plaster Type Not Analyzed - Gray, homogenous, fibrous.	Lab ID 00005-7	Location RM-10
Client ID AS 2-1 Layer 1 Window Glaze Type Non Detect 0.00% Cream, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-8	Location RM-1
Client ID AS 2-2 Layer 1 Window Glaze Type Non Detect 0.00% Cream, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-9	Location RM-1
Client ID AS 3-1 Layer 1 Vent Wrap Type Chrysotile 65.00% Gray, homogenous, fibrous. 35% non-asbestos	Lab ID 00005-10	Location RM-1

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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# The Mannik & Smith Group

## Analytical Laboratories

00005

Client The Mannik & Smith Group, Inc.  
2193 Association Dr., Suite 200  
Okemos, MI, 48864

Received 12/06/18  
Analyzed 12/11/18  
Reported 12/11/18

Project 712 Brook St  
Order # 00005  
Project # I1440003

### BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 3-2 Layer 1 Vent Wrap Type Not Analyzed - Gray, homogenous, fibrous.	Lab ID 00005-11	Location RM-3
Client ID AS 3-3 Layer 1 Vent Wrap Type Not Analyzed - Gray, homogenous, fibrous.	Lab ID 00005-12	Location RM-8
Client ID AS 4-1 Layer 1 Brown Linoleum Type Non Detect 0.00% Brown, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-13 Layer 2 Mastic Type Non Detect 0.00% Brown, homogenous, fibrous. 100% non-asbestos	Location RM-4
Client ID AS 4-2 Layer 1 Brown Linoleum Type Non Detect 0.00% Brown, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-14 Layer 2 Mastic Type Non Detect 0.00% Brown, homogenous, fibrous. 100% non-asbestos	Location RM-4
Client ID AS 5-1 Layer 1 Tan 12x12 Type Non Detect 0.00% Tan, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-15 Layer 2 Mastic Type Non Detect 0.00% Black, homogenous, fibrous. 100% non-asbestos	Location RM-4

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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# The Mannik & Smith Group

## Analytical Laboratories

00005

Client The Mannik & Smith Group, Inc.  
2193 Association Dr., Suite 200  
Okemos, MI, 48864

Received 12/06/18  
Analyzed 12/11/18  
Reported 12/11/18

Project 712 Brook St  
Order # 00005  
Project # I1440003

### BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 5-2 Layer 1 Tan 12x12 Type <b>Non Detect</b> 0.00% Tan, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-16 Layer 2 Mastic Type <b>Non Detect</b> 0.00% Black, homogenous, fibrous. 100% non-asbestos	Location RM-4
Client ID AS 6-1 Layer 1 Beige Linoleum Type <b>Non Detect</b> 0.00% Beige, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-17 Layer 2 Backing Type <b>Non Detect</b> 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Location RM-5
Client ID AS 6-2 Layer 1 Beige Linoleum Type <b>Non Detect</b> 0.00% Beige, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-18 Layer 2 Backing Type <b>Non Detect</b> 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Location RM-5
Client ID AS 7-1 Layer 1 Brown 12x12 Type <b>Non Detect</b> 0.00% Brown, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-19 Layer 2 Backing Type <b>Non Detect</b> 0.00% Red, homogenous, fibrous. 100% non-asbestos	Location RM-5
Client ID AS 7-2 Layer 1 Brown 12x12 Type <b>Non Detect</b> 0.00% Brown, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-20 Layer 2 Backing Type <b>Non Detect</b> 0.00% Red, homogenous, fibrous. 100% non-asbestos	Location RM-5

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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# The Mannik & Smith Group Analytical Laboratories

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2193 Association Dr., Suite 200  
Okemos, MI, 48864

Received 12/06/18  
Analyzed 12/11/18  
Reported 12/11/18

Project 712 Brook St  
Order # 00005  
Project # I1440003

## BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 8-1 Layer 1 Multi color Linoleum Type <b>Non Detect</b> 0.00% Orange, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-21	Location RM-6
Client ID AS 8-2 Layer 1 Multi color Linoleum Type <b>Non Detect</b> 0.00% Orange, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-22	Location RM-6
Client ID AS 9-1 Layer 1 Tan Linoleum Type <b>Chrysotile</b> 20.00% Tan, homogenous, fibrous. 80% non-asbestos	Lab ID 00005-23	Location RM-8
Client ID AS 9-2 Layer 1 Tan Linoleum Type <b>Not Analyzed</b> - Tan, homogenous, fibrous.	Lab ID 00005-24	Location RM-8
Client ID AS 10-1 Layer 1 Yellow Linoleum Type <b>Non Detect</b> 0.00% Yellow, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-25	Location RM-10

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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00005

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2193 Association Dr., Suite 200  
Okemos, MI, 48864

Received 12/06/18  
Analyzed 12/11/18  
Reported 12/11/18

Project 712 Brook St  
Order # 00005  
Project # I1440003

## BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 10-2 Layer 1 Yellow Linoleum Type <b>Non Detect</b> 0.00% Yellow, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-26	Location RM-10
Client ID AS 11-1 Layer 1 Duct Wrap Type <b>Chrysotile</b> 75.00% Gray, homogenous, fibrous. 25% non-asbestos	Lab ID 00005-27	Location Basement
Client ID AS 11-2 Layer 1 Duct Wrap Type <b>Not Analyzed</b> - Gray, homogenous, fibrous.	Lab ID 00005-28	Location Basement
Client ID AS 11-3 Layer 1 Duct Wrap Type <b>Not Analyzed</b> - Gray, homogenous, fibrous.	Lab ID 00005-29	Location Basement
Client ID AS 12-1 Layer 1 Foundation Concrete Type <b>Non Detect</b> 0.00% Gray, homogenous, nonfibrous. 100% non-asbestos	Lab ID 00005-30	Location Basement

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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# The Mannik & Smith Group

## Analytical Laboratories

00005

Client The Mannik & Smith Group, Inc.  
2193 Association Dr., Suite 200  
Okemos, MI, 48864

Received 12/06/18  
Analyzed 12/11/18  
Reported 12/11/18

Project 712 Brook St  
Order # 00005  
Project # I1440003

### BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 12-2 Layer 1 Foundation Concrete Type <b>Non Detect</b> 0.00% Gray, homogenous, nonfibrous. 100% non-asbestos	Lab ID 00005-31	Location Basement
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Client ID AS 13-1 Layer 1 Stack Cement Type <b>Chrysotile</b> 12.00% Gray, homogenous, fibrous. 88% non-asbestos	Lab ID 00005-32	Location Basement
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Client ID AS 13-2 Layer 1 Stack Cement Type <b>Not Analyzed</b> - Gray, homogenous, fibrous.	Lab ID 00005-33	Location Basement
----------------------------------------------------------------------------------------------------------	-----------------	-------------------

Client ID AS 14-1 Layer 1 Basement Window Glaze Type <b>Non Detect</b> 0.00% Cream, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-34	Location Basement
-------------------------------------------------------------------------------------------------------------------------------------------	-----------------	-------------------

Client ID AS 14-2 Layer 1 Basement Window Glaze Type <b>Non Detect</b> 0.00% Cream, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-35	Location Basement
-------------------------------------------------------------------------------------------------------------------------------------------	-----------------	-------------------

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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# The Mannik & Smith Group

## Analytical Laboratories

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Okemos, MI, 48864

Received 12/06/18  
Analyzed 12/11/18  
Reported 12/11/18

Project 712 Brook St  
Order # 00005  
Project # I1440003

### BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 15-1 Layer 1 Asphalt Siding Type <b>Non Detect</b> 0.00% Black, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-36	Location Exterior
Client ID AS 15-2 Layer 1 Asphalt Siding Type <b>Non Detect</b> 0.00% Black, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-37	Location Exterior
Client ID AS 16-1 Layer 1 Siding Underlayment Type <b>Non Detect</b> 0.00% Tan, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-38	Location Exterior
Client ID AS 16-2 Layer 1 Siding Underlayment Type <b>Non Detect</b> 0.00% Tan, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-39	Location Exterior
Client ID AS 17-1 Layer 1 Exterior Caulk Type <b>Chrysotile</b> 2.00% Gray, homogenous, fibrous. 98% non-asbestos <b>Point count performed.</b>	Lab ID 00005-40	Location Exterior

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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# The Mannik & Smith Group Analytical Laboratories

00005

Client The Mannik & Smith Group, Inc.  
2193 Association Dr., Suite 200  
Okemos, MI, 48864

Received 12/06/18  
Analyzed 12/11/18  
Reported 12/11/18

Project 712 Brook St  
Order # 00005  
Project # I1440003

## BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 17-2 Layer 1 Exterior Caulk Type Not Analyzed - Gray, homogenous, fibrous.	Lab ID 00005-41	Location Exterior
Client ID AS 18-1 Layer 1 Roof Shingle Type Non Detect 0.00% Black, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-42	Location Roof
Client ID AS 18-2 Layer 1 Roof Shingle Type Non Detect 0.00% Black, homogenous, fibrous. 100% non-asbestos	Lab ID 00005-43	Location Roof

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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# The Mannik & Smith Group Analytical Laboratories

Chain of Custody  
Order Number: 0004

Client	The Mannik & Smith Group, Inc.			City, State	Lansing, MI	Zip Code		* Bulk Samples Only*
Address	2193 Association Drive, Suite 200			Contact	Charlie Bush	Phone	(517) 316-9232	<input checked="" type="checkbox"/> TTP <input type="checkbox"/> Point Count
Project	712 Brook St	Project #	11440003	Email	cbush@manniksmithgroup.com	Fax		Date Sampled: 12/5/2018
Turn Around	<input type="checkbox"/> 4 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input checked="" type="checkbox"/> 72 Hour <input type="checkbox"/> 1 Week	Report to	<input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax					

Lab ID	Customer ID	Material Type	Material Location	Notes
	AS 1-1	Plaster	RM-1	
	AS 1-2	Plaster	RM-2	
	AS 1-3	Plaster	RM-4	
	AS 1-4	Plaster	RM-7	
	AS 1-5	Plaster	RM-8	
	AS 1-6	Plaster	RM-9	
	AS 1-7	Plaster	RM-10	
	AS 2-1	Window Glaze	RM-1	
	AS 2-2	Window Glaze	RM-1	
	AS 3-1	Vent wrap	RM-1	
	AS 3-2	Vent wrap	RM-3	
	AS 3-3	Vent wrap	RM-8	
	AS 4-1	Brown Linoleum	RM-4	
	AS 4-2	Brown Linoleum	RM-4	
	AS 5-1	Tan 12x12	RM-4	
	AS 5-2	Tan 12x12	RM-4	
	AS 6-1	Beige Linoleum	RM-5	
	AS 6-2	Beige Linoleum	RM-5	
	AS 7-1	Brown 12x12	RM-5	
	AS 7-2	Brown 12x12	RM-5	

Comments:

Relinquished by Kory McKay

Date and Time 12-6-18 1600

Received by MRM

Date and Time 12/6/18



# The Mannik & Smith Group Analytical Laboratories

## Chain of Custody

Order Number:

Client	The Mannik & Smith Group, Inc.		City/State	Lansing, MI	Zip Code		*Bulk Samples Only*
Address	2193 Association Drive, Suite 200		Contact	Charlie Bush	Phone	(517) 316-9232	<input checked="" type="checkbox"/> TTP <input type="checkbox"/> Point Count
Project	712 Brook St	Project #	11440003	Email	cbush@manniksmithgroup.com		Date Sampled: 12/5/2018
Turn Around	<input type="checkbox"/> 4 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input checked="" type="checkbox"/> 72 Hour <input type="checkbox"/> 1 Week	Report to	<input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax				

Lab ID	Customer ID	Material Type	Material Location	Notes
	AS 8-1	Multi color Linoleum	RM-6	
	AS 8-2	Multi color Linoleum	RM-6	
	AS 9-1	Tan Linoleum	RM-8	
	AS 9-2	Tan Linoleum	RM-8	
	AS 10-1	Yellow linoleum	RM-10	
	AS 10-2	Yellow linoleum	RM-10	
	AS 11-1	Duct wrap	Basement	
	AS 11-2	Duct wrap	Basement	
	AS 11-3	Duct wrap	Basement	
	AS 12-1	Foundation Concrete	Basement	
	AS 12-2	Foundation Concrete	Basement	
	AS 13-1	Stack Cement	Basement	
	AS 13-2	Stack Cement	Basement	
	AS 14-1	Basement Window Glaze	Basement	
	AS 14-2	Basement Window Glaze	Basement	
	AS 15-1	Asphalt Siding	Exterior	
	AS 15-2	Asphalt Siding	Exterior	
	AS 16-1	Siding underlayment	Exterior	
	AS 16-2	Siding underlayment	Exterior	
	AS 17-1	Exterior Caulk	Exterior	

Comments:

Relinquished by \_\_\_\_\_

Date and Time \_\_\_\_\_

Received by \_\_\_\_\_

Date and Time \_\_\_\_\_



## Chain of Custody

Order Number:

Client	The Mannik & Smith Group, Inc.		City, State	Lansing, MI		Zip Code	<input checked="" type="checkbox"/> Bulk Samples Only* <input type="checkbox"/> TTP <input type="checkbox"/> Point Count
Address	2193 Association Drive, Suite 200		Contact	Charlie Bush		Phone	
Project	712 Brook St	Project #	11440003		Email	<a href="mailto:cbush@mnniksmitthgroup.com">cbush@mnniksmitthgroup.com</a>	
Turn Around	<input type="checkbox"/> 4 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input checked="" type="checkbox"/> 72 Hour <input type="checkbox"/> 1 Week	Report to	<input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax		Date Sampled:		
						12/5/2018	

[illegible]

Relinquished by

Received by \_\_\_\_\_

Date and Time

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



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

Postmark Date \_\_\_\_/\_\_\_\_/\_\_\_\_ Rec'd Date \_\_\_\_/\_\_\_\_/\_\_\_\_  
Emergency Date \_\_\_\_/\_\_\_\_/\_\_\_\_ Valid No. \_\_\_\_  
☐ OK ☐ Send Def Ltr. Date of Def Ltr. \_\_\_\_/\_\_\_\_/\_\_\_\_  
FOLLOW UP \_\_\_\_/\_\_\_\_/\_\_\_\_ Spoke w/ \_\_\_\_  
Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Notification No. \_\_\_\_\_ Trans No. \_\_\_\_\_

### Calculate LARA Asbestos Project Fee: (1% Project Fee)

Total Project Cost: \_\_\_\_\_ x 0.01 = \_\_\_\_\_  
Type of Contractor: \_\_\_\_\_ License No.: \_\_\_\_\_  
Licensing Authority: \_\_\_\_\_

### 1. NOTIFICATION:

Date of Notification: \_\_\_\_\_  
Date of Revision(s): \_\_\_\_\_  
Notification Type: ☐ Original ☐ Revised ☐ Canceled ☐ Annual

#### Mark appropriate boxes: (both DEQ and LARA may apply):

#### DEQ (NESHAP) [260 ln. ft./160 sq. ft. or more is threshold]

- ☐ Planned Renovation – 10 working days notice  
☐ Emergency Renovation  
☐ Scheduled Demolition – 10 working days notice  
☐ Intentional Burn – 10 working days notice  
☐ Ordered Demolition

#### LARA (MIOSHA) [Will not accept annual notifications]

- ☐ Demo, Reno, Encap. (>10 ln. ft./15 sq. ft.) 10 calendar days notice  
☐ Emergency Renovation/Encapsulation

### 2. PROJECT SCHEDULE:

	START DATE	END DATE
* Renovation	_____	_____
+Asb. Removal	_____	_____
+Demolition:	_____	_____
Encapsulation:	_____	_____

**Work Schedule:** Please indicate the anticipated days of the week and work hours for the purpose of scheduling a compliance inspection.

	Days of the Week	Work Hours
Asb. Removal:	_____	_____
Demolition:	_____	_____
Encapsulation:	_____	_____

\* Includes setup, build enclosure, asbestos removal, demobilizing, etc.  
+Include only those dates you are conducting asbestos removal/demo.

☐ Check here if this is a multi-phased project, attach a schedule showing the start/end date of each phase.

**3. ABATEMENT CONTRACTOR:** Internal Project #: \_\_\_\_\_  
Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_  
E-mail: \_\_\_\_\_  
Contact: \_\_\_\_\_ Phone: \_\_\_\_\_

**4. DEMOLITION CONTRACTOR:** Internal Project #: \_\_\_\_\_  
Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_  
E-mail: \_\_\_\_\_  
Contact: \_\_\_\_\_ Phone: \_\_\_\_\_

### 5. FACILITY OWNER: ("Facility" includes Bridges)

Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_  
E-mail: \_\_\_\_\_  
Contact: \_\_\_\_\_ Phone: \_\_\_\_\_

### 6. FACILITY DESCRIPTION:

Facility Name: \_\_\_\_\_  
Location Address/Description: \_\_\_\_\_  
\_\_\_\_\_ If Apt. # of units: \_\_\_\_\_  
City/Twp. \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
County: \_\_\_\_\_ Nearest Crossroad: \_\_\_\_\_  
Size: (sq. ft.) \_\_\_\_\_ No. of Floors: \_\_\_\_\_ Floor No.: \_\_\_\_\_  
Age: \_\_\_\_\_ Present Use: \_\_\_\_\_ Prior Use: \_\_\_\_\_  
Specific Location(s) in Facility: \_\_\_\_\_

### 7. DISPOSAL SITE:

Name: \_\_\_\_\_  
Location Address: \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_

### 8. WASTE TRANSPORTER 1:

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_

### WASTE TRANSPORTER 2:

### 9. ORDERED DEMOLITIONS: (See NESHAP regulations for definition of "Ordered Demolition.") A copy of the official Order must accompany this notification.

Gov't Agency Ordering Demo: \_\_\_\_\_  
Name/Title of Person Signing Order: \_\_\_\_\_  
\_\_\_\_\_  
Date of Order: \_\_\_\_\_ Date Ordered to Begin: \_\_\_\_\_

### 10. IS ASBESTOS PRESENT?

☐ Yes ☐ No

☐ To be removed prior to demolition

**Estimate the amount of asbestos:** Include RACM (Regulated Asbestos Containing Material) to be removed, encapsulated, etc. Also include the amount and type (floor tile, roofing, etc.) of non-friable Category I and/or Category II ACM that will not be removed prior to demolition. (**NOTE:** In a demolition, cementitious ACM cannot remain in a structure, as it is likely to become regulated in the demolition/handling process. It must be removed prior to demolition.)

RACM to be Removed	RACM to be Encapsulated	Non-friable ACM <u>not</u> removed prior to demo.		Units of Measure	
		Category I	Category II		
				<input type="checkbox"/> Ln. Ft.	<input type="checkbox"/> Ln. M.
				<input type="checkbox"/> Sq. Ft.	<input type="checkbox"/> Sq. M.
				<input type="checkbox"/> Cu. Ft.*	<input type="checkbox"/> Cu. M.*

\*Volume (cubic ft./meters) should be used only if unable to measure by linear/square measure (example: asbestos has fallen off of surface).

(continued on reverse side)

**NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH (continued)**

**11. PROJECT DESCRIPTION:** Complete **A) for Renovation** (asbestos removal/encapsulation) and/or **B) for Demolition**:

**A) RENOVATION:** Mark all surfaces/types of RACM to be removed:

☐ Piping    ☐ Fittings    ☐ Boiler(s)    ☐ Tanks(s)  
☐ Beam(s)    ☐ Duct(s)    ☐ Tunnel(s)    ☐ Ceiling Tile(s)  
☐ Mag Block    ☐ Other (describe) \_\_\_\_\_

**Encapsulation (for LARA):** Mark surfaces/types to be encapsulated:

☐ Piping    ☐ Fittings    ☐ Boiler(s)    ☐ Tank(s)  
☐ Beam(s)    ☐ Duct(s)    ☐ Tunnel(s)    ☐ Ceiling Tile(s)  
☐ 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, etc., and indicate if complete or partial. If partial, describe which part of facility bridge, etc., will be demolished: \_\_\_\_\_  
 \_\_\_\_\_

**12. ENGINEERING CONTROLS:** Describe work practices and engineering controls used to prevent visible emissions before, during, and after removal, and until proper disposal: \_\_\_\_\_  
 \_\_\_\_\_

**13. UNEXPECTED ASBESTOS:** Describe the steps you intend to follow in the event that unexpected RACM is found or previously non-friable asbestos becomes friable (crumbled, pulverized, reduced to powder, etc.) and therefore regulated: \_\_\_\_\_  
 \_\_\_\_\_

**14. 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.): \_\_\_\_\_  
 \_\_\_\_\_

**B)** Name, address, and phone number of company performing asbestos 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 equipment damage and/or an unreasonable financial burden: \_\_\_\_\_  
 \_\_\_\_\_

**16.** I certify that an individual trained in the provisions of 40 CFR Part 61, Subpart M, will be on-site during the renovation and during demolition involving RACM above the threshold and/or during an ordered demolition. Evidence that this person has completed the required training will be available for inspection at the renovation or demolition site.

\_\_\_\_\_  
*Signature of Owner or Abatement Contractor      Date*

\_\_\_\_\_  
*Signature of Owner or Demolition Contractor      Date*

**17. Signature Requirements for Projects with Negative Pressure Enclosures: (required by LARA)**  
**Per Section 221(1)(2) of P.A. 135 of 1986, as amended, clearance air monitoring is required for any asbestos abatement project involving 10 linear feet/15 square feet or more of friable material which is performed within a negative pressure enclosure. I (the building owner or lessee) have been advised by the contractor of my responsibility under Act 135 to have clearance air monitoring performed on this project.**

\_\_\_\_\_  
*Signature of Building Owner or Lessee      Date*

\_\_\_\_\_  
*Signature of Asbestos Abatement Contractor Representative      Date*

**NOTE:** **It is not mandatory that a signed copy be sent to LARA unless requested.** For affected projects, this section of the notification form must be completed, signed, and made part of your records before the project begins.

**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.)

For **Public Act 135 of 1986, as amended, Section 220 (1-4) or (8)**, mail to address below. For more info visit:  
<http://www.michigan.gov/asbestos>

MIOSHA Asbestos Program  
 LARA, CSHD  
 P.O. Box 30671  
 Lansing, MI 48909-8171

517.636.4551 (office), 517.322.1713 (fax)

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.

NESHAP Asbestos Program  
 DEQ, AQD  
 P.O. Box 30260  
 Lansing, MI 48909-7760

517.284.6777 (Office)





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  
534 North Pine 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 pre-renovation regulated materials survey (RMS) performed at 534 North Pine St., Lansing, Ingham County, Michigan (hereinafter referred to as the "Site") by Kory McKay (Accreditation Number A47903).

#### SUMMARY

Building Information	
Property Address	534 N Pine St., Lansing MI
Parcel #	33-01-01-16-107-001
No. Stories	2
Square Footage (approx.)	1000 SF
Siding	Vinyl
Basement	Yes
Garage	No



Asbestos Containing Material				
Location	Material Group	Friable/Non Friable	Asbestos	Quantity
RM-1, RM-6, Basement	Vent Wrap	Non Friable	60% Chrysotile	75 SF

Universal Waste Inventory		
Location	Material Description	Quantity
RM-1	TV	2
RM-2	Thermostat	1
Basement	CFL Light Bulb	1
RM-5, Basement	Smoke Detector	2

TECHNICAL SKILL.  
CREATIVE SPIRIT.

Other Regulated Materials Inventory		
Location	Material Description	Quantity
RM-2	Microwave	1
Basement	Window AC Unit	1

Hazardous Materials		
Location	Material Description	Quantity
RM-4, RM-6	5 Gallon Paint Bucket	4
RM-3, Basement, Exterior	1 Gallon Paint Can	21

## 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:
  - DOT - Department of Transportation; Hazardous Materials Regulations (49 CFR 100-180);
  - IMO - International Maritime Organization; International Maritime Dangerous Goods (IMDG) Code;
  - IATA - International Air Transport Association; Dangerous Goods Regulations;
  - 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 twenty three (23) homogenous materials that were suspect as asbestos containing during the ACM survey. Fifty three (53) 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 analyze bulk samples for asbestos content. Of the aforementioned suspect homogenous materials identified during this ACM survey, laboratory analysis found one (1) homogenous material (sample 6-1) 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 twenty three (23) homogenous materials collected as part of the ACM survey, one (1) homogenous material contained asbestos greater than 1% (sample 6-1) 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.

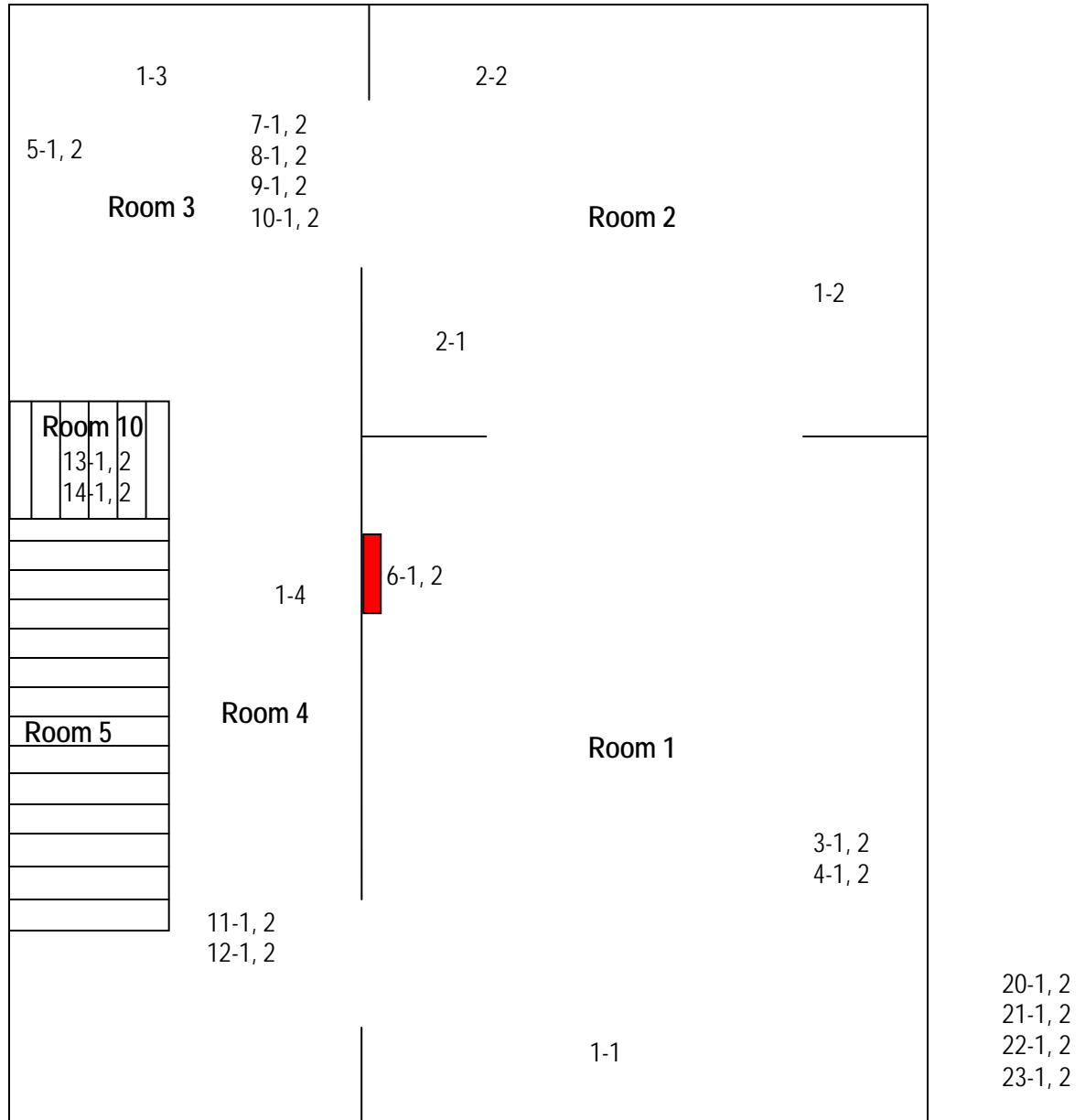
721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com

Address: 534 North Pine Street

Date: December 10, 2018

Drawing not to scale

### 1<sup>st</sup> Floor



 Vent with Vent Wrap (175 SF total)

#-# = Asbestos Sample



TECHNICAL SKILL.  
CREATIVE SPIRIT.

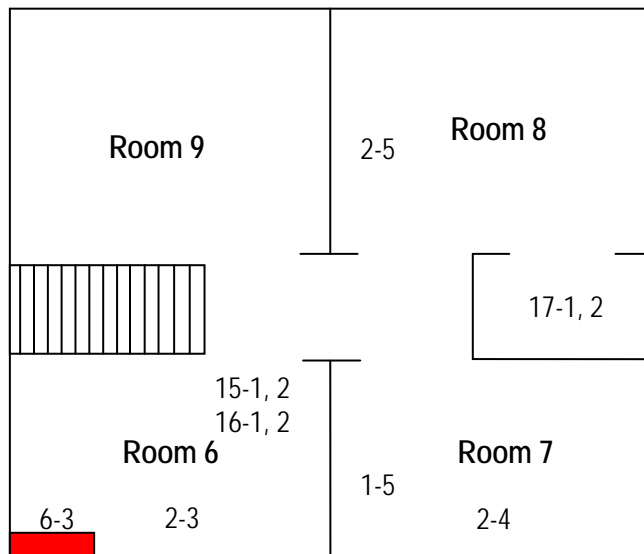
721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com

Address: 534 North Pine Street

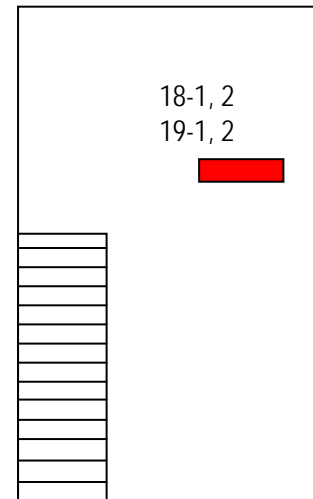
Date: December 10, 2018

Drawing not to scale

2<sup>nd</sup> Floor



Basement



 Vent with Vent Wrap (175 SF total)

#-# = Asbestos Sample

## TABLES



**TABLE 1**  
**Asbestos Sampling Results**

Client		Ingham County Land Bank Authority								
Survey Location		534 N Pine St								
Survey Date		December 10, 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	1300 SF
RM-2	1	AS 1-2	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1300 SF
RM-3	1	AS 1-3	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1300 SF
RM-4	1	AS 1-4	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1300 SF
RM-7	2	AS 1-5	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1300 SF
RM-7	2	AS 2-4	HA-2	Plaster	Non-Friable	Good	Miscellaneous	No	No	1800 SF
RM-8	2	AS 2-5	HA-2	Plaster	Non-Friable	Good	Miscellaneous	No	No	1800 SF
RM-6	2	AS 2-3	HA-2	Plaster	Non-Friable	Good	Miscellaneous	No	No	1800 SF
RM-2	1	AS 2-1	HA-2	Plaster	Non-Friable	Good	Miscellaneous	No	No	1800 SF
RM-2	1	AS 2-2	HA-2	Plaster	Non-Friable	Good	Miscellaneous	No	No	1800 SF
Exterior	E	AS 3-1	HA-3	Window Glaze	Non-Friable	Good	Miscellaneous	No	No	175 SF
Exterior	E	AS 3-2	HA-3	Window Glaze	Non-Friable	Good	Miscellaneous	No	No	175 SF
Exterior	E	AS 4-1	HA-4	Window caulk	Non-Friable	Good	Miscellaneous	No	No	120 LF
Exterior	E	AS 4-2	HA-4	Window caulk	Non-Friable	Good	Miscellaneous	No	No	120 LF
RM-3	1	AS 5-1	HA-5	Sink undercoat	Non-Friable	Good	Miscellaneous	No	No	5 SF
RM-3	1	AS 5-2	HA-5	Sink undercoat	Non-Friable	Good	Miscellaneous	No	No	5 SF
RM-1	1	AS 6-1	HA-6	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	60% Chrysotile	175 SF
RM-1	1	AS 6-2	HA-6	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	NA	175 SF
RM-6	2	AS 6-3	HA-6	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	NA	175 SF



**TABLE 1**  
**Asbestos Sampling Results**

Client		Ingham County Land Bank Authority								
Survey Location		534 N Pine St								
Survey Date		December 10, 2018								
Functional Area	Floor	Sample ID	HM #	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
RM-3	1	AS 7-1	HA-7	Gray 12x12	Non-Friable	Good	Miscellaneous	No	No	150 SF
RM-3	1	AS 7-2	HA-7	Gray 12x12	Non-Friable	Good	Miscellaneous	No	No	150 SF
RM-3	1	AS 8-1	HA-8	Tan Linoleum	Non-Friable	Good	Miscellaneous	No	No	150 SF
RM-3	1	AS 8-2	HA-8	Tan Linoleum	Non-Friable	Good	Miscellaneous	No	No	150 SF
RM-3	1	AS 9-1	HA-9	White 12x12	Non-Friable	Good	Miscellaneous	No	No	150 SF
RM-3	1	AS 9-2	HA-9	White 12x12	Non-Friable	Good	Miscellaneous	No	No	150 SF
RM-3	1	AS 10-2	HA-10	Cream linoleum	Non-Friable	Good	Miscellaneous	No	No	150 SF
RM-3	1	AS 10-1	HA-10	Cream linoleum	Non-Friable	Good	Miscellaneous	No	No	150 SF
RM-4	1	AS 11-1	HA-11	Green Linoleum	Non-Friable	Good	Miscellaneous	No	No	40 SF
RM-4	1	AS 11-2	HA-11	Green Linoleum	Non-Friable	Good	Miscellaneous	No	No	40 SF
RM-4	1	AS 12-1	HA-12	Red 12x12	Non-Friable	Good	Miscellaneous	No	No	25 SF
RM-4	1	AS 12-2	HA-12	Red 12x12	Non-Friable	Good	Miscellaneous	No	No	25 SF
RM-10	1	AS 13-1	HA-13	White Linoleum	Non-Friable	Good	Miscellaneous	No	No	20 SF
RM-10	1	AS 13-2	HA-13	White Linoleum	Non-Friable	Good	Miscellaneous	No	No	20 SF
RM-10	1	AS 14-1	HA-14	Multi color Linoleum	Non-Friable	Good	Miscellaneous	No	No	20 SF
RM-10	1	AS 14-2	HA-14	Multi color Linoleum	Non-Friable	Good	Miscellaneous	No	No	20 SF
RM-6	2	AS 15-1	HA-15	Wall mastic	Non-Friable	Good	Miscellaneous	No	No	320 SF
RM-6	2	AS 15-2	HA-15	Wall mastic	Non-Friable	Good	Miscellaneous	No	No	320 SF
RM-6	2	AS 16-1	HA-16	Flower Linoleum	Non-Friable	Good	Miscellaneous	No	No	100 SF

**TABLE 1**  
**Asbestos Sampling Results**

Client		Ingham County Land Bank Authority								
Survey Location		534 N Pine St								
Survey Date		December 10, 2018								
Functional Area	Floor	Sample ID	HM #	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
RM-6	2	AS 16-2	HA-16	Flower Linoleum	Non-Friable	Good	Miscellaneous	No	No	100 SF
RM-8	2	AS 17-1	HA-17	Blue Linoleum	Non-Friable	Good	Miscellaneous	No	No	20 SF
RM-8	2	AS 17-2	HA-17	Blue Linoleum	Non-Friable	Good	Miscellaneous	No	No	20 SF
Basement	B	AS 18-1	HA-18	Stack Cement	Non-Friable	Good	Miscellaneous	No	No	5 SF
Basement	B	AS 18-2	HA-18	Stack Cement	Non-Friable	Good	Miscellaneous	No	No	5 SF
Basement	B	AS 19-1	HA-19	Basement Concrete floor	Non-Friable	Good	Miscellaneous	No	No	350 SF
Basement	B	AS 19-2	HA-19	Basement Concrete floor	Non-Friable	Good	Miscellaneous	No	No	350 SF
Exterior	E	AS 20-1	HA-20	Asphalt Siding	Non-Friable	Good	Miscellaneous	No	No	1900 SF
Exterior	E	AS 20-2	HA-20	Asphalt Siding	Non-Friable	Good	Miscellaneous	No	No	1900 SF
Exterior	E	AS 21-1	HA-21	Chimney Mortar	Non-Friable	Good	Miscellaneous	No	No	150 SF
Exterior	E	AS 21-2	HA-21	Chimney Mortar	Non-Friable	Good	Miscellaneous	No	No	150 SF
Exterior	E	AS 22-1	HA-22	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	100 SF
Exterior	E	AS 22-2	HA-22	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	100 SF
Roof	E	AS 23-1	HA-23	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	800 SF
Roof	E	AS 23-2	HA-23	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	800 SF

Table 2  
 Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory  
 534 Pine St.  
 Lansing, Ingham County, Michigan

Universal Waste Inventory		
Location	Type of Waste	Approximate Quantity
RM-1	TV	2
RM-2	Thermostat	1
Basement	CFL Light Bulb	1
RM-5, Basement	Smoke Detector	2
Hazardous Materials Inventory		
Location	Type of Waste	Approximate Quantity
RM-4, RM-6	5 Gallon Paint Bucket	4
RM-3, Basement, Exterior	1 Gallon Paint Can	21
Other Regulated Materials Inventory		
Location	Type of Waste	Approximate Quantity
RM-2	Microwave	1
Basement	Window AC Unit	1

# ATTACHMENT A

## PHOTO LOG



Property Photos



534 N Pine St, Front of House



Back of House



Side of House



Side of House

### Samples



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



Sample ID: AS 5-1  
Location: RM-3  
Notes: Sink Undercoating



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



Sample ID: AS 6-1  
Location: RM-1  
Notes: Vent Wrap



Sample ID: AS 3-1  
Location: Exterior  
Notes: Window Glaze

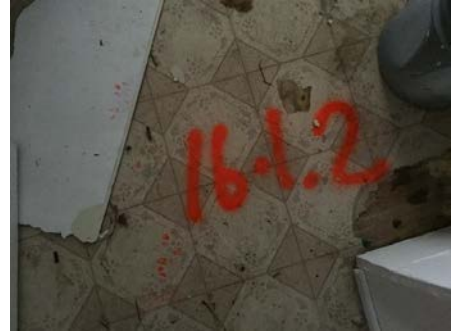


Sample ID: AS 6-3  
Location: RM-3  
Notes: Vent Wrap

### Samples



**Sample ID:** AS 8-1  
**Location:** RM-3  
**Notes:** Tan Linoleum



**Sample ID:** AS 16-1  
**Location:** RM-6  
**Notes:** Flower Linoleum



**Sample ID:** AS 12-1  
**Location:** RM-4  
**Notes:** Red 12x12 Tile



**Sample ID:** AS 18-1  
**Location:** Basement  
**Notes:** Stack Cement



**Sample ID:** AS 15-1  
**Location:** RM-6  
**Notes:** Wall Mastic



**Sample ID:** AS 20-1  
**Location:** Exterior  
**Notes:** Asphalt Siding



### Samples



**Sample ID:** AS 21-1  
**Location:** Exterior  
**Notes:** Chimney Mortar



**Sample ID:** AS 22-1  
**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 (OSHA) 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 but 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

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



# The Mannik & Smith Group

## Analytical Laboratories

00009

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 534 N Pine St  
Order # 00009  
Project # I1440003

### BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 1-1 Layer 1 Drywall Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-1 Layer 2 Joint Compound Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Location RM-1
Client ID AS 1-2 Layer 1 Drywall Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-2 Layer 2 Joint Compound Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Location RM-2
Client ID AS 1-3 Layer 1 Drywall Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-3 Layer 2 Joint Compound Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Location RM-3
Client ID AS 1-4 Layer 1 Drywall Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-4 Layer 2 Joint Compound Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Location RM-4
Client ID AS 1-5 Layer 1 Drywall Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-5 Layer 2 Joint Compound Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Location RM-7

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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# The Mannik & Smith Group

## Analytical Laboratories

00009

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2193 Association Dr., Suite 200  
Okemos, MI, 48864

Received 12/11/18  
Analyzed 12/14/18  
Reported 12/14/18

Project 534 N Pine St  
Order # 00009  
Project # I1440003

### BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 2-4 Layer 1 Plaster Type <b>Non Detect</b> 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-6 Layer 2 Skim Coat Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Location RM-7
Client ID AS 2-5 Layer 1 Plaster Type <b>Non Detect</b> 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-7 Layer 2 Skim Coat Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Location RM-8
Client ID AS 2-3 Layer 1 Plaster Type <b>Non Detect</b> 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-8 Layer 2 Skim Coat Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Location RM-6
Client ID AS 2-1 Layer 1 Plaster Type <b>Non Detect</b> 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-9 Layer 2 Skim Coat Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Location RM-2
Client ID AS 2-2 Layer 1 Plaster Type <b>Non Detect</b> 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-10 Layer 2 Skim Coat Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Location RM-2

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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Received 12/11/18  
Analyzed 12/14/18  
Reported 12/14/18

Project 534 N Pine St  
Order # 00009  
Project # I1440003

### BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 3-1 Layer 1 Window Glaze Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-11	Location Exterior
Client ID AS 3-2 Layer 1 Window Glaze Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-12	Location Exterior
Client ID AS 4-1 Layer 1 Window Caulk Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-13	Location Exterior
Client ID AS 4-2 Layer 1 Window Caulk Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-14	Location Exterior
Client ID AS 5-1 Layer 1 Sink Undercoat Type <b>Non Detect</b> 0.00% Black, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-15	Location RM-3

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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Okemos, MI, 48864

Received 12/11/18  
Analyzed 12/14/18  
Reported 12/14/18

Project 534 N Pine St  
Order # 00009  
Project # I1440003

## BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 5-2 Layer 1 Sink Undercoat Type <b>Non Detect</b> 0.00% Black, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-16	Location RM-3
Client ID AS 7-1 Layer 1 Gray 12x12 Type <b>Non Detect</b> 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-17	Location RM-3
Client ID AS 7-2 Layer 1 Gray 12x12 Type <b>Non Detect</b> 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-18	Location RM-3
Client ID AS 8-1 Layer 1 Tan Linoleum Type <b>Non Detect</b> 0.00% Tan, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-19 Layer 2 Mastic Type <b>Non Detect</b> 0.00% Tan, homogenous, fibrous. 100% non-asbestos	Location RM-3
Client ID AS 8-2 Layer 1 Tan Linoleum Type <b>Non Detect</b> 0.00% Tan, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-20 Layer 2 Mastic Type <b>Non Detect</b> 0.00% Tan, homogenous, fibrous. 100% non-asbestos	Location RM-3

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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Okemos, MI, 48864

Received 12/11/18  
Analyzed 12/14/18  
Reported 12/14/18

Project 534 N Pine St  
Order # 00009  
Project # I1440003

### BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 9-1 Layer 1 White 12x12 Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-21 Layer 2 Mastic Type <b>Non Detect</b> 0.00% Tan, homogenous, fibrous. 100% non-asbestos	Location RM-3
Client ID AS 9-2 Layer 1 White 12x12 Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-22 Layer 2 Mastic Type <b>Non Detect</b> 0.00% Tan, homogenous, fibrous. 100% non-asbestos	Location RM-3
Client ID AS 10-2 Layer 1 Cream Linoleum Type <b>Non Detect</b> 0.00% Cream, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-23 Layer 2 Mastic Type <b>Non Detect</b> 0.00% Cream, homogenous, fibrous. 100% non-asbestos	Location RM-3
Client ID AS 10-1 Layer 1 Cream Linoleum Type <b>Non Detect</b> 0.00% Cream, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-24 Layer 2 Mastic Type <b>Non Detect</b> 0.00% Cream, homogenous, fibrous. 100% non-asbestos	Location RM-3
Client ID AS 6-1 Layer 1 Vent Wrap Type <b>Chrysotile</b> 60.00% Gray, homogenous, fibrous. 40% non-asbestos	Lab ID 00009-25	Location RM-1

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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# The Mannik & Smith Group

## Analytical Laboratories

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Okemos, MI, 48864

Received 12/11/18  
Analyzed 12/14/18  
Reported 12/14/18

Project 534 N Pine St  
Order # 00009  
Project # I1440003

### BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 6-2 Layer 1 Vent Wrap Type Not Analyzed - Gray, homogenous, fibrous.	Lab ID 00009-26	Location RM-1
Client ID AS 11-1 Layer 1 Green Linoleum Type Non Detect 0.00% Green, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-27 Layer 2 Linoleum Type Non Detect 0.00% White, homogenous, fibrous. 100% non-asbestos	Layer 3 Mastic Type Non Detect 0.00% Cream, homogenous, fibrous. 100% non-asbestos
Client ID AS 11-2 Layer 1 Green Linoleum Type Non Detect 0.00% Green, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-28 Layer 2 Linoleum Type Non Detect 0.00% White, homogenous, fibrous. 100% non-asbestos	Layer 3 Mastic Type Non Detect 0.00% Cream, homogenous, fibrous. 100% non-asbestos
Client ID AS 12-1 Layer 1 Red 12x12 Type Non Detect 0.00% Red, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-29	Location RM-4
Client ID AS 12-2 Layer 1 Red 12x12 Type Non Detect 0.00% Red, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-30	Location RM-4

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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Reported 12/14/18

Project 534 N Pine St  
Order # 00009  
Project # I1440003

### BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 13-1 Layer 1 White Linoleum Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-31	Location RM-10
Client ID AS 13-2 Layer 1 White Linoleum Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-32	Location RM-10
Client ID AS 14-1 Layer 1 Multi Color Linoleum Type <b>Non Detect</b> 0.00% Tan, homogenous, fibrous. 100% non-asbestos	Layer 2 Linoleum Type <b>Non Detect</b> 0.00% Cream, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-33 Location RM-10
Client ID AS 14-2 Layer 1 Multi Color Linoleum Type <b>Non Detect</b> 0.00% Tan, homogenous, fibrous. 100% non-asbestos	Layer 2 Linoleum Type <b>Non Detect</b> 0.00% Cream, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-34 Location RM-10
Client ID AS 15-1 Layer 1 Wall Mastic Type <b>Non Detect</b> 0.00% Yellow, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-35	Location RM-6

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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# The Mannik & Smith Group

## Analytical Laboratories

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2193 Association Dr., Suite 200  
Okemos, MI, 48864

Received 12/11/18  
Analyzed 12/14/18  
Reported 12/14/18

Project 534 N Pine St  
Order # 00009  
Project # I1440003

### BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 15-2 Layer 1 Wall Mastic Type <b>Non Detect</b> 0.00% Yellow, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-36	Location RM-6
Client ID AS 16-1 Layer 1 Flower Linoleum Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Layer 2 Mastic Type <b>Non Detect</b> 0.00% Cream, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-37 Location RM-6
Client ID AS 16-2 Layer 1 Flower Linoleum Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Layer 2 Mastic Type <b>Non Detect</b> 0.00% Cream, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-38 Location RM-6
Client ID AS 17-1 Layer 1 Blue Linoleum Type <b>Non Detect</b> 0.00% Blue, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-39	Location RM-8
Client ID AS 17-2 Layer 1 Blue Linoleum Type <b>Non Detect</b> 0.00% Blue, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-40	Location RM-8

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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# The Mannik & Smith Group

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Reported 12/14/18

Project 534 N Pine St  
Order # 00009  
Project # I1440003

### BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 6-3 Layer 1 Vent Wrap Type Not Analyzed - Gray, homogenous, fibrous.	Lab ID 00009-41	Location RM-6
Client ID AS 18-1 Layer 1 Stack Cement Type Non Detect 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-42	Location Basement
Client ID AS 18-2 Layer 1 Stack Cement Type Non Detect 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-43	Location Basement
Client ID AS 19-1 Layer 1 Basement Concrete Floor Type Non Detect 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-44	Location Basement
Client ID AS 19-2 Layer 1 Basement Concrete Floor Type Non Detect 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-45	Location Basement

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
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Received 12/11/18  
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Reported 12/14/18

Project 534 N Pine St  
Order # 00009  
Project # I1440003

## BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 20-1 Layer 1 Asphalt Siding Type <span>Non Detect</span> 0.00% Black, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-46	Location Exterior
Client ID AS 20-2 Layer 1 Asphalt Siding Type <span>Non Detect</span> 0.00% Black, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-47	Location Exterior
Client ID AS 21-1 Layer 1 Chimney Mortar Type <span>Non Detect</span> 0.00% Black, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-48	Location Exterior
Client ID AS 21-2 Layer 1 Chimney Mortar Type <span>Non Detect</span> 0.00% Black, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-49	Location Exterior
Client ID AS 22-1 Layer 1 Exterior Caulk Type <span>Non Detect</span> 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-50	Location Exterior

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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Client The Mannik & Smith Group, Inc.  
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Okemos, MI, 48864

Received 12/11/18  
Analyzed 12/14/18  
Reported 12/14/18

Project 534 N Pine St  
Order # 00009  
Project # I1440003

BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 22-2 Layer 1 Exterior Caulk Type Non Detect 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-51	Location Exterior
Client ID AS 23-1 Layer 1 Roof Shingle Type Non Detect 0.00% Black, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-52	Location Roof
Client ID AS 23-2 Layer 1 Roof Shingle Type Non Detect 0.00% Black, homogenous, fibrous. 100% non-asbestos	Lab ID 00009-53	Location Roof

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Christopher A Claes Laboratory Director  
Reviewer: Joshua P Lucchesi Quality Manager

Accreditations  
NIST-NVLAP  
No. 600212-0

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# The Mannik & Smith Group Analytical Laboratories

## Chain of Custody

Order Number:

60009

Client	The Mannik & Smith Group, Inc.			City/State	Lansing, MI	Zip Code		* Bulk Samples Only*
Address	2193 Association Drive, Suite 200			Contact	Charlie Bush	Phone	(517) 316-9232	<input checked="" type="checkbox"/> TTP <input type="checkbox"/> Point Count
Project	534 N Pine St	Project #	11440003	Email	cbush@manniksmithgroup.com	Fax		Date Sampled:
Turn Around	<input type="checkbox"/> 4 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input checked="" type="checkbox"/> 72 Hour <input type="checkbox"/> 1 Week	Report to	<input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax	12/10/2018				

Lab ID	Customer ID	Material Type	Material Location	Notes
	AS 1-1	Drywall	RM-1	
	AS 1-2	Drywall	RM-2	
	AS 1-3	Drywall	RM-3	
	AS 1-4	Drywall	RM-4	
	AS 1-5	Drywall	RM-7	
	AS 2-4	Plaster	RM-7	
	AS 2-5	Plaster	RM-8	
	AS 2-3	Plaster	RM-6	
	AS 2-1	Plaster	RM-2	
	AS 2-2	Plaster	RM-2	
	AS 3-1	Window Glaze	Exterior	
	AS 3-2	Window Glaze	Exterior	
	AS 4-1	Window caulk	Exterior	
	AS 4-2	Window caulk	Exterior	
	AS 5-1	Sink undercoat	RM-3	
	AS 5-2	Sink undercoat	RM-3	
	AS 7-1	Gray 12x12	RM-3	
	AS 7-2	Gray 12x12	RM-3	
	AS 8-1	Tan Linoleum	RM-3	
	AS 8-2	Tan Linoleum	RM-3	

Comments:

Relinquished by

*[Signature]*

Date and Time

12/11/18

Received by

*CAC*

Date and Time

12/11/18



# The Mannik & Smith Group Analytical Laboratories

## Chain of Custody

Order Number: \_\_\_\_\_

Client	The Mannik & Smith Group, Inc.			City, State	Lansing, MI	Zip Code	<input checked="" type="checkbox"/> TTP <input type="checkbox"/> Point Count	*Bulk Samples Only*
Address	2193 Association Drive, Suite 200			Contact	Charlie Bush	Phone	(517) 316-9232	
Project	534 N Pine St	Project #	11440003	Email	cbush@manniksmithgroup.com	Fax		Date Sampled:
Turn Around	<input type="checkbox"/> 4 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input checked="" type="checkbox"/> 72 Hour	<input type="checkbox"/> 1 Week	Report to	<input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax				12/10/2018

Lab ID	Customer ID	Material Type	Material Location	Notes
	AS 9-1	White 12x12	RM-3	
	AS 9-2	White 12x12	RM-3	
	AS 10-2	Cream linoleum	RM-3	
	AS 10-1	Cream linoleum	RM-3	
	AS 6-1	Vent wrap	RM-1	
	AS 6-2	Vent wrap	RM-1	
	AS 11-1	Green Linoleum	RM-4	
	AS 11-2	Green Linoleum	RM-4	
	AS 12-1	Red 12x12	RM-4	
	AS 12-2	Red 12x12	RM-4	
	AS 13-1	White Linoleum	RM-10	
	AS 13-2	White Linoleum	RM-10	
	AS 14-1	Multi color Linoleum	RM-10	
	AS 14-2	Multi color Linoleum	RM-10	
	AS 15-1	Wall mastic	RM-6	
	AS 15-2	Wall mastic	RM-6	
	AS 16-1	Flower Linoleum	RM-6	
	AS 16-2	Flower Linoleum	RM-6	
	AS 17-1	Blue Linoleum	RM-8	
	AS 17-2	Blue Linoleum	RM-8	

Comments:

Relinquished by



Date and Time

12/11/18

Received by

Date and Time



## Chain of Custody

Order Number:

Client	The Mannik & Smith Group, Inc.		City, State	Lansing, MI		Zip Code	<input checked="" type="checkbox"/> TTP	<input type="checkbox"/> Point Count	*Bulk Samples Only*
Address	2193 Association Drive, Suite 200		Contact	Charlie Bush		Phone	(517) 316-9232		
Project	534 N Pine St	Project #	I1440003		Email	<a href="mailto:cbush@manniksmithgroup.com">cbush@manniksmithgroup.com</a>			
Turn Around	<input type="checkbox"/> 4 Hour	<input type="checkbox"/> 24 Hour	<input type="checkbox"/> 48 Hour	<input checked="" type="checkbox"/> 72 Hour	<input type="checkbox"/> 1 Week	Report to	<input checked="" type="checkbox"/> Email	<input type="checkbox"/> Fax	
						Date Sampled:	12/10/2018		

[illegible]

Comments:

Relinquished by

Received by

Date and Time

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



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

Postmark Date \_\_\_\_/\_\_\_\_/\_\_\_\_ Rec'd Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Emergency Date \_\_\_\_/\_\_\_\_/\_\_\_\_ Valid No. \_\_\_\_\_

☐ OK ☐ Send Def Ltr. Date of Def Ltr. \_\_\_\_/\_\_\_\_/\_\_\_\_

FOLLOW UP \_\_\_\_/\_\_\_\_/\_\_\_\_ Spoke w/ \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Notification No. \_\_\_\_\_ Trans No. \_\_\_\_\_

### Calculate LARA Asbestos Project Fee: (1% Project Fee)

Total Project Cost: \_\_\_\_\_ x 0.01 = \_\_\_\_\_

Type of Contractor: \_\_\_\_\_ License No.: \_\_\_\_\_

Licensing Authority: \_\_\_\_\_

### 1. NOTIFICATION:

Date of Notification: \_\_\_\_\_

Date of Revision(s): \_\_\_\_\_

Notification Type: ☐ Original ☐ Revised ☐ Canceled ☐ Annual

#### Mark appropriate boxes: (both DEQ and LARA may apply):

#### DEQ (NESHAP) [260 ln. ft./160 sq. ft. or more is threshold]

☐ Planned Renovation – 10 working days notice

☐ Emergency Renovation

☐ Scheduled Demolition – 10 working days notice

☐ Intentional Burn – 10 working days notice

☐ Ordered Demolition

#### LARA (MIOSHA) [Will not accept annual notifications]

☐ Demo, Reno, Encap. (>10 ln. ft./15 sq. ft.) 10 calendar days notice

☐ Emergency Renovation/Encapsulation

### 2. PROJECT SCHEDULE:

**START DATE**

**END DATE**

\* Renovation \_\_\_\_\_

+Asb. Removal \_\_\_\_\_

+Demolition: \_\_\_\_\_

Encapsulation: \_\_\_\_\_

**Work Schedule:** Please indicate the anticipated days of the week and work hours for the purpose of scheduling a compliance inspection.

**Days of the Week**

**Work Hours**

Asb. Removal: \_\_\_\_\_

Demolition: \_\_\_\_\_

Encapsulation: \_\_\_\_\_

\* Includes setup, build enclosure, asbestos removal, demobilizing, etc.

+Include only those dates you are conducting asbestos removal/demo.

☐ Check here if this is a multi-phased project, attach a schedule showing the start/end date of each phase.

### 3. ABATEMENT CONTRACTOR:

Internal Project #: \_\_\_\_\_

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

E-mail: \_\_\_\_\_

Contact: \_\_\_\_\_ Phone: \_\_\_\_\_

### 4. DEMOLITION CONTRACTOR:

Internal Project #: \_\_\_\_\_

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

E-mail: \_\_\_\_\_

Contact: \_\_\_\_\_ Phone: \_\_\_\_\_

### 5. FACILITY OWNER: ("Facility" includes Bridges)

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

E-mail: \_\_\_\_\_

Contact: \_\_\_\_\_ Phone: \_\_\_\_\_

### 6. FACILITY DESCRIPTION:

Facility Name: \_\_\_\_\_

Location Address/Description: \_\_\_\_\_

\_\_\_\_\_ If Apt. # of units: \_\_\_\_\_

City/Twp. \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

County: \_\_\_\_\_ Nearest Crossroad: \_\_\_\_\_

Size: (sq. ft.) \_\_\_\_\_ No. of Floors: \_\_\_\_\_ Floor No.: \_\_\_\_\_

Age: \_\_\_\_\_ Present Use: \_\_\_\_\_ Prior Use: \_\_\_\_\_

Specific Location(s) in Facility: \_\_\_\_\_

### 7. DISPOSAL SITE:

Name: \_\_\_\_\_

Location Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

### 8. WASTE TRANSPORTER 1:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

### WASTE TRANSPORTER 2:

### 9. ORDERED DEMOLITIONS: (See NESHAP regulations for definition of "Ordered Demolition.") A copy of the official Order must accompany this notification.

Gov't Agency Ordering Demo: \_\_\_\_\_

Name/Title of Person Signing Order: \_\_\_\_\_

\_\_\_\_\_

Date of Order: \_\_\_\_\_ Date Ordered to Begin: \_\_\_\_\_

### 10. IS ASBESTOS PRESENT?

☐ Yes ☐ No

☐ To be removed prior to demolition

**Estimate the amount of asbestos:** Include RACM (Regulated Asbestos Containing Material) to be removed, encapsulated, etc. Also include the amount and type (floor tile, roofing, etc.) of non-friable Category I and/or Category II ACM that will not be removed prior to demolition. (**NOTE:** In a demolition, cementitious ACM cannot remain in a structure, as it is likely to become regulated in the demolition/handling process. It must be removed prior to demolition.)

RACM to be  
Removed

RACM to be  
Encapsulated

Non-friable ACM not  
removed prior to demo.

Category I

Category II

Units of Measure

				<input type="checkbox"/> Ln. Ft.	<input type="checkbox"/> Ln. M.
				<input type="checkbox"/> Sq. Ft.	<input type="checkbox"/> Sq. M.
				<input type="checkbox"/> Cu. Ft.*	<input type="checkbox"/> Cu. M.*

\*Volume (cubic ft./meters) should be used only if unable to measure by linear/square measure (example: asbestos has fallen off of surface).

(continued on reverse side)

**NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH (continued)**

**11. PROJECT DESCRIPTION:** Complete **A) for Renovation** (asbestos removal/encapsulation) and/or **B) for Demolition**:

**A) RENOVATION:** Mark all surfaces/types of RACM to be removed:

☐ Piping    ☐ Fittings    ☐ Boiler(s)    ☐ Tanks(s)  
☐ Beam(s)    ☐ Duct(s)    ☐ Tunnel(s)    ☐ Ceiling Tile(s)  
☐ Mag Block    ☐ Other (describe) \_\_\_\_\_

**Encapsulation (for LARA):** Mark surfaces/types to be encapsulated:

☐ Piping    ☐ Fittings    ☐ Boiler(s)    ☐ Tank(s)  
☐ Beam(s)    ☐ Duct(s)    ☐ Tunnel(s)    ☐ Ceiling Tile(s)  
☐ 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, etc., and indicate if complete or partial. If partial, describe which part of facility bridge, etc., will be demolished: \_\_\_\_\_  
 \_\_\_\_\_

**12. ENGINEERING CONTROLS:** Describe work practices and engineering controls used to prevent visible emissions before, during, and after removal, and until proper disposal: \_\_\_\_\_  
 \_\_\_\_\_

**13. UNEXPECTED ASBESTOS:** Describe the steps you intend to follow in the event that unexpected RACM is found or previously non-friable asbestos becomes friable (crumbled, pulverized, reduced to powder, etc.) and therefore regulated: \_\_\_\_\_  
 \_\_\_\_\_

**14. 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.): \_\_\_\_\_  
 \_\_\_\_\_

**B)** Name, address, and phone number of company performing asbestos 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 equipment damage and/or an unreasonable financial burden: \_\_\_\_\_  
 \_\_\_\_\_

**16.** I certify that an individual trained in the provisions of 40 CFR Part 61, Subpart M, will be on-site during the renovation and during demolition involving RACM above the threshold and/or during an ordered demolition. Evidence that this person has completed the required training will be available for inspection at the renovation or demolition site.

\_\_\_\_\_  
*Signature of Owner or Abatement Contractor      Date*

\_\_\_\_\_  
*Signature of Owner or Demolition Contractor      Date*

**17. Signature Requirements for Projects with Negative Pressure Enclosures: (required by LARA)**  
**Per Section 221(1)(2) of P.A. 135 of 1986, as amended, clearance air monitoring is required for any asbestos abatement project involving 10 linear feet/15 square feet or more of friable material which is performed within a negative pressure enclosure. I (the building owner or lessee) have been advised by the contractor of my responsibility under Act 135 to have clearance air monitoring performed on this project.**

\_\_\_\_\_  
*Signature of Building Owner or Lessee      Date*

\_\_\_\_\_  
*Signature of Asbestos Abatement Contractor Representative      Date*

**NOTE:** **It is not mandatory that a signed copy be sent to LARA unless requested.** For affected projects, this section of the notification form must be completed, signed, and made part of your records before the project begins.

**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.)

For **Public Act 135 of 1986, as amended, Section 220 (1-4) or (8)**, mail to address below. For more info visit:  
<http://www.michigan.gov/asbestos>

MIOSHA Asbestos Program  
 LARA, CSHD  
 P.O. Box 30671  
 Lansing, MI 48909-8171

517.636.4551 (office), 517.322.1713 (fax)

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.

NESHAP Asbestos Program  
 DEQ, AQD  
 P.O. Box 30260  
 Lansing, MI 48909-7760

517.284.6777 (Office)



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  
2109 South Rundle 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 pre-renovation regulated materials survey (RMS) performed at 2109 South Rundle Ave., Lansing, Ingham County, Michigan (hereinafter referred to as the "Site") by Kory McKay (Accreditation Number A47903).

#### SUMMARY

Building Information	
Property Address	2109 S. Rundle Ave., Lansing MI
Parcel #	33-01-01-28-106-011
No. Stories	1
Square Footage (approx.)	800 SF
Siding	Metal
Basement	No
Garage	No



Asbestos Containing Material				
Location	Material Group	Friable/Non Friable	Asbestos	Quantity
RM-3	Sink Undercoating	Non Friable	1.5% Chrysotile	5 SF
RM-3	Duct Wrap	Non Friable	45% Chrysotile	10 SF
RM-3	Tan 12x12	Non Friable	2% Chrysotile	75 SF

Universal Waste Inventory		
Location	Material Description	Quantity
RM-3, RM-1, Exterior, RM-4	CFL light bulb	7
RM-1	Thermostat	1
RM-1	Smoke detector	1
RM-3, Exterior	Fire Extinguisher	2
Exterior	Fluorescent bulb	2

TECHNICAL SKILL.  
CREATIVE SPIRIT.



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

Hazardous Materials		
Location	Material Description	Quantity
Exterior	1 Gallon Paint Can	7
Exterior	1 Gallon Paint Thinner	2
Exterior	Spray Can	10
Exterior	16.4 Oz Propane Tank	1
Exterior	20 lb Propane Tank	2

## 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 11, 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:
  - DOT - Department of Transportation; Hazardous Materials Regulations (49 CFR 100-180);
  - IMO - International Maritime Organization; International Maritime Dangerous Goods (IMDG) Code;
  - IATA - International Air Transport Association; Dangerous Goods Regulations;
  - 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 three (3) homogenous materials (samples 3-1, 4-1 and 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. Two samples (3-1 and 8-1) 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, three (3) homogenous materials contained asbestos greater than 1% (samples 3-1, 4-1 and 10-1) with these three (3) 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.

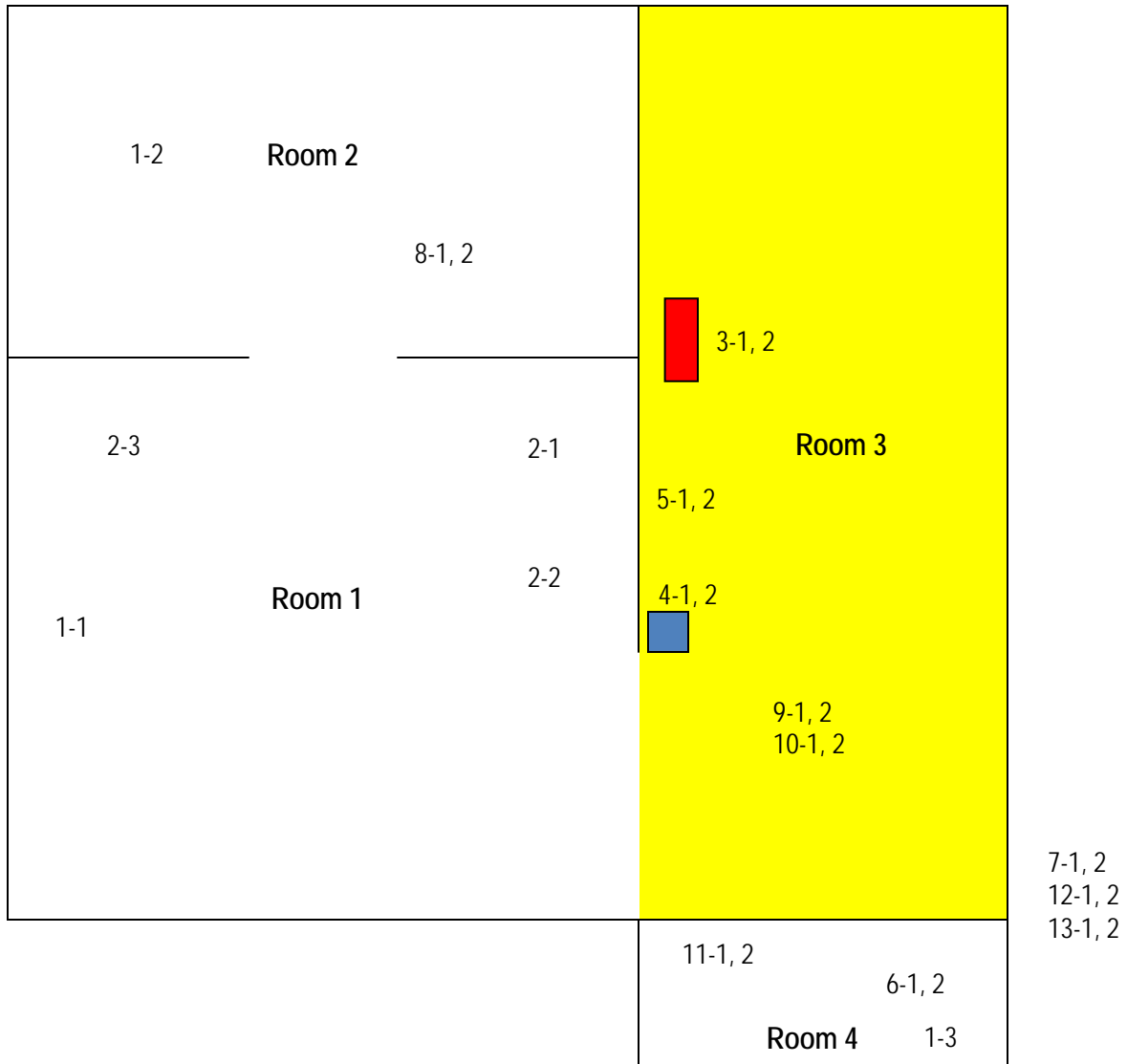
721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com




Address: 2109 South Rundle Avenue

Date: December 11, 2018

Drawing not to scale

1<sup>st</sup> Floor



-  Duct Wrap (10 SF total)
-  Tan 12x12 (75 SF total)
-  Sink Undercoating (5 SF total)

#-# = Asbestos Sample

## TABLES



**TABLE 1**  
**Asbestos Sampling Results**

Client		Ingham County Land Bank Authority								
Survey Location		2109 S Rundle Ave								
Survey Date		December 11, 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	1050 SF
RM-2	1	AS 1-2	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1050 SF
RM-4	1	AS 1-3	HA-1	Drywall	Non-Friable	Good	Miscellaneous	No	No	1050 SF
RM-1	1	AS 2-1	HA-2	Plaster	Non-Friable	Good	Miscellaneous	No	No	200 SF
RM-1	1	AS 2-2	HA-2	Plaster	Non-Friable	Good	Miscellaneous	No	No	200 SF
RM-1	1	AS 2-3	HA-2	Plaster	Non-Friable	Good	Miscellaneous	No	No	200 SF
RM-3	1	AS 3-1	HA-3	Sink undercoat	Non-Friable	Good	Miscellaneous	Yes	1.5% Chrysotile	5 SF
RM-3	1	AS 3-2	HA-3	Sink undercoat	Non-Friable	Good	Miscellaneous	Yes	NA	5 SF
RM-3	1	AS 4-1	HA-4	Duct wrap	Non-Friable	Good	Miscellaneous	Yes	45% Chrysotile	10 SF
RM-3	1	AS 4-2	HA-4	Duct wrap	Non-Friable	Good	Miscellaneous	Yes	NA	10 SF
RM-3	1	AS 4-3	HA-4	Duct wrap	Non-Friable	Good	Miscellaneous	Yes	NA	10 SF
RM-3	1	AS 5-1	HA-5	Wall mastic	Non-Friable	Good	Miscellaneous	No	No	30 SF
RM-3	1	AS 5-2	HA-5	Wall mastic	Non-Friable	Good	Miscellaneous	No	No	30 SF
RM-4	1	AS 6-1	HA-6	Bathroom Wall mastic	Non-Friable	Good	Miscellaneous	No	No	250 SF
RM-4	1	AS 6-2	HA-6	Bathroom Wall mastic	Non-Friable	Good	Miscellaneous	No	No	250 SF
Exterior	E	AS 7-1	HA-7	Window Glaze	Non-Friable	Good	Miscellaneous	No	No	75 SF
Exterior	E	AS 7-2	HA-7	Window Glaze	Non-Friable	Good	Miscellaneous	No	No	75 SF

**TABLE 1**  
**Asbestos Sampling Results**

Client		Ingham County Land Bank Authority								
Survey Location		2109 S Rundle Ave								
Survey Date		December 11, 2018								
Functional Area	Floor	Sample ID	HM #	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
RM-2	1	AS 8-1	HA-8	Floor Underlayment	Non-Friable	Good	Miscellaneous	No	No	100 SF
RM-2	1	AS 8-2	HA-8	Floor Underlayment	Non-Friable	Good	Miscellaneous	No	No	100 SF
RM-3	1	AS 9-1	HA-9	Gray 12x12	Non-Friable	Good	Miscellaneous	No	No	75 SF
RM-3	1	AS 9-2	HA-9	Gray 12x12	Non-Friable	Good	Miscellaneous	No	No	75 SF
RM-3	1	AS 10-1	HA-10	Tan 12x12	Non-Friable	Good	Miscellaneous	Yes	2% Chrysotile	75 SF
RM-3	1	AS 10-2	HA-10	Tan 12x12	Non-Friable	Good	Miscellaneous	Yes	NA	75 SF
RM-4	1	AS 11-1	HA-11	Black 12x12	Non-Friable	Good	Miscellaneous	No	No	55 SF
RM-4	1	AS 11-2	HA-11	Black 12x12	Non-Friable	Good	Miscellaneous	No	No	55 SF
Exterior	E	AS 12-1	HA-12	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	175 LF
Exterior	E	AS 12-2	HA-12	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	175 LF
Roof	E	AS 13-1	HA-13	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	600 SF
Roof	E	AS 13-2	HA-13	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	600 SF



Table 2  
 Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory  
 2109 S Rundle Ave.  
 Lansing, Ingham County, Michigan

Universal Waste Inventory		
Location	Type of Waste	Approximate Quantity
RM-3, RM-1, Exterior, RM-4	CFL light bulb	7
RM-1	Thermostat	1
RM-1	Smoke detector	1
RM-3, Exterior	Fire Extinguisher	2
Exterior	Fluorescent bulb	2
Hazardous Materials Inventory		
Location	Type of Waste	Approximate Quantity
Exterior	1 Gallon Paint Can	7
Exterior	1 Gallon Paint Thinner	2
Exterior	Spray Can	10
Exterior	16.4 Oz Propane Tank	1
Exterior	20 lb Propane Tank	2
Other Regulated Materials Inventory		
Location	Type of Waste	Approximate Quantity
-	-	-

# ATTACHMENT A

## PHOTO LOG



Property Photos



2109 S Rundle Ave, Front of House



Back of House



Side of House



Side of House

### Samples



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



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



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



Sample ID: AS 10-1  
Location: RM-3  
Notes: Tan 12x12 Tile



Sample ID: AS 3-1  
Location: RM-3  
Notes: Sink Undercoating



Sample ID: AS 5-1  
Location: RM-3  
Notes: Wall Mastic

### Samples



**Sample ID:** AS 6-1  
**Location:** RM-4  
**Notes:** Bathroom Wall Mastic



**Sample ID:** AS 11-1  
**Location:** RM-4  
**Notes:** Black 12x12 Tile



**Sample ID:** AS 7-1  
**Location:** Exterior  
**Notes:** Window Glaze



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



**Sample ID:** AS 8-1  
**Location:** RM-2  
**Notes:** Floor Underlayment



**Sample ID:** AS 13-1  
**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 (OSHA) 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

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



# The Mannik & Smith Group

## Analytical Laboratories

00013

Client The Mannik & Smith Group, Inc.  
2193 Association Dr., Suite 200  
Okemos, MI, 48864

Received 12/13/18  
Analyzed 12/17/18  
Reported 12/17/18

Project 2109 S Rundle Ave  
Order # 00013  
Project # I1440003

### BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 1-1 Layer 1 Drywall Type Non Detect 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-1 Layer 2 Joint Compound Type Non Detect 0.00% White, homogenous, fibrous. 100% non-asbestos	Location RM-1
Client ID AS 2-1 Layer 1 Plaster Type Non Detect 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-2 Layer 2 Skim Coat Type Non Detect 0.00% White, homogenous, fibrous. 100% non-asbestos	Location RM-1
Client ID AS 2-2 Layer 1 Plaster Type Non Detect 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-3 Layer 2 Skim Coat Type Non Detect 0.00% White, homogenous, fibrous. 100% non-asbestos	Location RM-1
Client ID AS 2-3 Layer 1 Plaster Type Non Detect 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-4 Layer 2 Skim Coat Type Non Detect 0.00% White, homogenous, fibrous. 100% non-asbestos	Location RM-1
Client ID AS 1-2 Layer 1 Drywall Type Non Detect 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-5 Layer 2 Joint Compound Type Non Detect 0.00% White, homogenous, fibrous. 100% non-asbestos	Location RM-2

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Joshua P Lucchesi Quality Manager  
Reviewer: Christopher A Claes Laboratory Director

Accreditations  
NIST-NVLAP  
No. 600212-0

The results herein relate only to the samples as received and tested by The Mannik & Smith Analytical Laboratories. This report can not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any other agency of the Federal Government. Please see the Sample Protocol before submitting samples for analysis in order to ensure laboratory staff safety and analysis accuracy.

# The Mannik & Smith Group Analytical Laboratories

00013

Client The Mannik & Smith Group, Inc.  
2193 Association Dr., Suite 200  
Okemos, MI, 48864

Received 12/13/18  
Analyzed 12/17/18  
Reported 12/17/18

Project 2109 S Rundle Ave  
Order # 00013  
Project # I1440003

## BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 1-3 Layer 1 Drywall Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-6 Location RM-4 Layer 2 Joint Compound Type <b>Non Detect</b> 0.00% White, homogenous, fibrous. 100% non-asbestos
Client ID AS 3-1 Layer 1 Sink Undercoat Type <b>Chrysotile</b> 1.50% Black, homogenous, fibrous. 98.5% non-asbestos Point count performed.	Lab ID 00013-7 Location RM-3
Client ID AS 3-2 Layer 1 Sink Undercoat Type <b>Not Analyzed</b> - Black, homogenous, fibrous.	Lab ID 00013-8 Location RM-3
Client ID AS 4-1 Layer 1 Duct Wrap Type <b>Chrysotile</b> 45.00% Gray, homogenous, fibrous. 55% non-asbestos	Lab ID 00013-9 Location RM-3
Client ID AS 4-2 Layer 1 Duct Wrap Type <b>Not Analyzed</b> - Gray, homogenous, fibrous.	Lab ID 00013-10 Location RM-3

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Joshua P Lucchesi Quality Manager  
Reviewer: Christopher A Claes Laboratory Director

Accreditations  
NIST-NVLAP  
No. 600212-0

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# The Mannik & Smith Group Analytical Laboratories

00013

Client The Mannik & Smith Group, Inc.  
2193 Association Dr., Suite 200  
Okemos, MI, 48864

Received 12/13/18  
Analyzed 12/17/18  
Reported 12/17/18

Project 2109 S Rundle Ave  
Order # 00013  
Project # I1440003

## BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 4-3 Layer 1 Duct Wrap Type Not Analyzed - Gray, homogenous, fibrous.	Lab ID 00013-11	Location RM-3
Client ID AS 5-1 Layer 1 Wall Mastic Type Non Detect 0.00% Brown, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-12	Location RM-3
Client ID AS 5-2 Layer 1 Wall Mastic Type Non Detect 0.00% Brown, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-13	Location RM-3
Client ID AS 6-1 Layer 1 Bathroom Wall Mastic Type Non Detect 0.00% Brown, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-14 Layer 2 Tile Type Non Detect 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Location RM-4
Client ID AS 6-2 Layer 1 Bathroom Wall Mastic Type Non Detect 0.00% Brown, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-15 Layer 2 Tile Type Non Detect 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Location RM-4

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Joshua P Lucchesi Quality Manager  
Reviewer: Christopher A Claes Laboratory Director

Accreditations  
NIST-NVLAP  
No. 600212-0

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# The Mannik & Smith Group

## Analytical Laboratories

00013

Client The Mannik & Smith Group, Inc.  
2193 Association Dr., Suite 200  
Okemos, MI, 48864

Received 12/13/18  
Analyzed 12/17/18  
Reported 12/17/18

Project 2109 S Rundle Ave  
Order # 00013  
Project # I1440003

### BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 7-1 Layer 1 Window Glaze Type <b>Non Detect</b> 0.00% Cream, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-16	Location Exterior
Client ID AS 7-2 Layer 1 Window Glaze Type <b>Non Detect</b> 0.00% Cream, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-17	Location Exterior
Client ID AS 8-1 Layer 1 Floor Underlayment Type <b>Non Detect</b> 0.00% Brown, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-18	Location RM-2
Client ID AS 8-2 Layer 1 Floor Underlayment Type <b>Non Detect</b> 0.00% Brown, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-19	Location RM-2
Client ID AS 9-1 Layer 1 Gray 12x12 Type <b>Non Detect</b> 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-20 Layer 2 Mastic Type <b>Non Detect</b> 0.00% Black, homogenous, fibrous. 100% non-asbestos	Location RM-3

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Joshua P Lucchesi Quality Manager  
Reviewer: Christopher A Claes Laboratory Director

Accreditations  
NIST-NVLAP  
No. 600212-0

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# The Mannik & Smith Group Analytical Laboratories

00013

Client The Mannik & Smith Group, Inc.  
2193 Association Dr., Suite 200  
Okemos, MI, 48864

Received 12/13/18  
Analyzed 12/17/18  
Reported 12/17/18

Project 2109 S Rundle Ave  
Order # 00013  
Project # I1440003

## BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 9-2 Layer 1 Gray 12x12 Type <b>Non Detect</b> 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-21 Layer 2 Mastic Type <b>Non Detect</b> 0.00% Black, homogenous, fibrous. 100% non-asbestos	Location RM-3
Client ID AS 10-1 Layer 1 Tan 12x12 Type <b>Chrysotile</b> 2.00% Tan, homogenous, fibrous. 98% non-asbestos Point count performed.	Lab ID 00013-22 Layer 2 Mastic Type <b>Non Detect</b> 0.00% Beige, homogenous, fibrous. 100% non-asbestos	Location RM-3
Client ID AS 10-2 Layer 1 Tan 12x12 Type <b>Not Analyzed</b> - Tan, homogenous, fibrous.	Lab ID 00013-23 Layer 2 Mastic Type <b>Non Detect</b> 0.00% Beige, homogenous, fibrous. 100% non-asbestos	Location RM-3
Client ID AS 11-1 Layer 1 Black 12x12 Type <b>Non Detect</b> 0.00% Black, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-24	Location RM-4
Client ID AS 11-2 Layer 1 Black 12x12 Type <b>Non Detect</b> 0.00% Black, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-25	Location RM-4

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Joshua P Lucchesi Quality Manager  
Reviewer: Christopher A Claes Laboratory Director

Accreditations  
NIST-NVLAP  
No. 600212-0

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Client The Mannik & Smith Group, Inc.  
2193 Association Dr., Suite 200  
Okemos, MI, 48864

Received 12/13/18  
Analyzed 12/17/18  
Reported 12/17/18

Project 2109 S Rundle Ave  
Order # 00013  
Project # I1440003

### BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 12-1 Layer 1 Exterior Caulk Type <b>Non Detect</b> 0.00% Cream, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-26	Location Exterior
Client ID AS 12-2 Layer 1 Exterior Caulk Type <b>Non Detect</b> 0.00% Cream, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-27	Location Exterior
Client ID AS 13-1 Layer 1 Roof Shingle Type <b>Non Detect</b> 0.00% Black, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-28	Location Roof
Client ID AS 13-2 Layer 1 Roof Shingle Type <b>Non Detect</b> 0.00% Black, homogenous, fibrous. 100% non-asbestos	Lab ID 00013-29	Location Roof

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy  
Analyst: Joshua P Lucchesi Quality Manager  
Reviewer: Christopher A Claes Laboratory Director

Accreditations  
NIST-NVLAP  
No. 600212-0

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# The Mannik & Smith Group Analytical Laboratories

## Chain of Custody

Order Number:

00013

Client	The Mannik & Smith Group, Inc.			City, State	Lansing, MI	Zip Code		*Bulk Samples Only*
Address	2193 Association Drive, Suite 200			Contact	Charlie Bush	Phone	(517) 316-9232	<input checked="" type="checkbox"/> TTP <input type="checkbox"/> Point Count
Project	2109 S Rundle Ave	Project #	11440003	Email	cbush@manniksmithgroup.com	Fax		Date Sampled:
Turn Around	<input type="checkbox"/> 4 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input checked="" type="checkbox"/> 72 Hour <input type="checkbox"/> 1 Week	Report to	<input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax	12/11/2018				

Lab ID	Customer ID	Material Type	Material Location	Notes
	AS 1-1	Drywall	RM-1	
	AS 2-1	Plaster	RM-1	
	AS 2-2	Plaster	RM-1	
	AS 2-3	Plaster	RM-1	
	AS 1-2	Drywall	RM-2	
	AS 1-3	Drywall	RM-4	
	AS 3-1	Sink undercoat	RM-3	
	AS 3-2	Sink undercoat	RM-3	
	AS 4-1	Duct wrap	RM-3	
	AS 4-2	Duct wrap	RM-3	
	AS 4-3	Duct wrap	RM-3	
	AS 5-1	Wall mastic	RM-3	
	AS 5-2	Wall mastic	RM-3	
	AS 6-1	Bathroom Wall mastic	RM-4	
	AS 6-2	Bathroom Wall mastic	RM-4	
	AS 7-1	Window Glaze	Exterior	
	AS 7-2	Window Glaze	Exterior	
	AS 8-1	Floor Underlayment	RM-2	
	AS 8-2	Floor Underlayment	RM-2	
	AS 9-1	Gray 12x12	RM-3	

Comments:

Relinquished by



Date and Time

12/13/18

Received by



Date and Time

12/13/18



## Chain of Custody

Order Number:

Client	The Mannik & Smith Group, Inc.		City, State	Lansing, MI	Zip Code	*Bulk Samples Only*
Address	2193 Association Drive, Suite 200		Contact	Charlie Bush	Phone	<input checked="" type="checkbox"/> TTP <input type="checkbox"/> Point Count
Project	2109 S Rundle Ave	Project #	11440003		Email	<a href="mailto:cbush@manniksmithgroup.com">cbush@manniksmithgroup.com</a>
Turn Around	<input type="checkbox"/> 4 Hour	<input type="checkbox"/> 24 Hour	<input type="checkbox"/> 48 Hour	<input checked="" type="checkbox"/> 72 Hour	<input type="checkbox"/> 1 Week	Date Sampled: 12/11/2018
Report to					<input checked="" type="checkbox"/> Email	<input type="checkbox"/> Fax

[illegible]

Comments:

Received by

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



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

Postmark Date \_\_\_\_/\_\_\_\_/\_\_\_\_ Rec'd Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Emergency Date \_\_\_\_/\_\_\_\_/\_\_\_\_ Valid No. \_\_\_\_\_

☐ OK ☐ Send Def Ltr. Date of Def Ltr. \_\_\_\_/\_\_\_\_/\_\_\_\_

FOLLOW UP \_\_\_\_/\_\_\_\_/\_\_\_\_ Spoke w/ \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Notification No. \_\_\_\_\_ Trans No. \_\_\_\_\_

### Calculate LARA Asbestos Project Fee: (1% Project Fee)

Total Project Cost: \_\_\_\_\_ x 0.01 = \_\_\_\_\_

Type of Contractor: \_\_\_\_\_ License No.: \_\_\_\_\_

Licensing Authority: \_\_\_\_\_

### 1. NOTIFICATION:

Date of Notification: \_\_\_\_\_

Date of Revision(s): \_\_\_\_\_

Notification Type: ☐ Original ☐ Revised ☐ Canceled ☐ Annual

**Mark appropriate boxes: (both DEQ and LARA may apply):**

**DEQ (NESHAP) [260 ln. ft./160 sq. ft. or more is threshold]**

☐ Planned Renovation – 10 working days notice

☐ Emergency Renovation

☐ Scheduled Demolition – 10 working days notice

☐ Intentional Burn – 10 working days notice

☐ Ordered Demolition

**LARA (MIOSHA) [Will not accept annual notifications]**

☐ Demo, Reno, Encap. (>10 ln. ft./15 sq. ft.) 10 calendar days notice

☐ Emergency Renovation/Encapsulation

### 2. PROJECT SCHEDULE:

	START DATE	END DATE
* Renovation	_____	_____
+Asb. Removal	_____	_____
+Demolition:	_____	_____
Encapsulation:	_____	_____

**Work Schedule:** Please indicate the anticipated days of the week and work hours for the purpose of scheduling a compliance inspection.

**Days of the Week**

**Work Hours**

Asb. Removal: \_\_\_\_\_

Demolition: \_\_\_\_\_

Encapsulation: \_\_\_\_\_

\* Includes setup, build enclosure, asbestos removal, demobilizing, etc.

+Include only those dates you are conducting asbestos removal/demo.

☐ Check here if this is a multi-phased project, attach a schedule showing the start/end date of each phase.

### 3. ABATEMENT CONTRACTOR:

Internal Project #: \_\_\_\_\_

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

E-mail: \_\_\_\_\_

Contact: \_\_\_\_\_ Phone: \_\_\_\_\_

### 4. DEMOLITION CONTRACTOR:

Internal Project #: \_\_\_\_\_

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

E-mail: \_\_\_\_\_

Contact: \_\_\_\_\_ Phone: \_\_\_\_\_

### 5. FACILITY OWNER: ("Facility" includes Bridges)

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

E-mail: \_\_\_\_\_

Contact: \_\_\_\_\_ Phone: \_\_\_\_\_

### 6. FACILITY DESCRIPTION:

Facility Name: \_\_\_\_\_

Location Address/Description: \_\_\_\_\_

\_\_\_\_\_ If Apt. # of units: \_\_\_\_\_

City/Twp. \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

County: \_\_\_\_\_ Nearest Crossroad: \_\_\_\_\_

Size: (sq. ft.) \_\_\_\_\_ No. of Floors: \_\_\_\_\_ Floor No.: \_\_\_\_\_

Age: \_\_\_\_\_ Present Use: \_\_\_\_\_ Prior Use: \_\_\_\_\_

Specific Location(s) in Facility: \_\_\_\_\_

### 7. DISPOSAL SITE:

Name: \_\_\_\_\_

Location Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

### 8. WASTE TRANSPORTER 1:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

### WASTE TRANSPORTER 2:

### 9. ORDERED DEMOLITIONS: (See NESHAP regulations for definition of "Ordered Demolition.") A copy of the official Order must accompany this notification.

Gov't Agency Ordering Demo: \_\_\_\_\_

Name/Title of Person Signing Order: \_\_\_\_\_

\_\_\_\_\_

Date of Order: \_\_\_\_\_ Date Ordered to Begin: \_\_\_\_\_

### 10. IS ASBESTOS PRESENT?

☐ Yes ☐ No

☐ To be removed prior to demolition

**Estimate the amount of asbestos:** Include RACM (Regulated Asbestos Containing Material) to be removed, encapsulated, etc. Also include the amount and type (floor tile, roofing, etc.) of non-friable Category I and/or Category II ACM that will not be removed prior to demolition. (**NOTE:** In a demolition, cementitious ACM cannot remain in a structure, as it is likely to become regulated in the demolition/handling process. It must be removed prior to demolition.)

RACM to be  
Removed

RACM to be  
Encapsulated

Non-friable ACM not  
removed prior to demo.

Category I

Category II

Units of Measure

				<input type="checkbox"/> Ln. Ft.	<input type="checkbox"/> Ln. M.
				<input type="checkbox"/> Sq. Ft.	<input type="checkbox"/> Sq. M.
				<input type="checkbox"/> Cu. Ft.*	<input type="checkbox"/> Cu. M.*

\*Volume (cubic ft./meters) should be used only if unable to measure by linear/square measure (example: asbestos has fallen off of surface).

(continued on reverse side)

**NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH (continued)**

**11. PROJECT DESCRIPTION:** Complete **A) for Renovation** (asbestos removal/encapsulation) and/or **B) for Demolition**:

**A) RENOVATION:** Mark all surfaces/types of RACM to be removed:

☐ Piping    ☐ Fittings    ☐ Boiler(s)    ☐ Tanks(s)  
☐ Beam(s)    ☐ Duct(s)    ☐ Tunnel(s)    ☐ Ceiling Tile(s)  
☐ Mag Block    ☐ Other (describe) \_\_\_\_\_

**Encapsulation (for LARA):** Mark surfaces/types to be encapsulated:

☐ Piping    ☐ Fittings    ☐ Boiler(s)    ☐ Tank(s)  
☐ Beam(s)    ☐ Duct(s)    ☐ Tunnel(s)    ☐ Ceiling Tile(s)  
☐ 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, etc., and indicate if complete or partial. If partial, describe which part of facility bridge, etc., will be demolished: \_\_\_\_\_  
 \_\_\_\_\_

**12. ENGINEERING CONTROLS:** Describe work practices and engineering controls used to prevent visible emissions before, during, and after removal, and until proper disposal: \_\_\_\_\_  
 \_\_\_\_\_

**13. UNEXPECTED ASBESTOS:** Describe the steps you intend to follow in the event that unexpected RACM is found or previously non-friable asbestos becomes friable (crumbled, pulverized, reduced to powder, etc.) and therefore regulated: \_\_\_\_\_  
 \_\_\_\_\_

**14. 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.): \_\_\_\_\_  
 \_\_\_\_\_

**B)** Name, address, and phone number of company performing asbestos 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 equipment damage and/or an unreasonable financial burden: \_\_\_\_\_  
 \_\_\_\_\_

**16.** I certify that an individual trained in the provisions of 40 CFR Part 61, Subpart M, will be on-site during the renovation and during demolition involving RACM above the threshold and/or during an ordered demolition. Evidence that this person has completed the required training will be available for inspection at the renovation or demolition site.

\_\_\_\_\_  
*Signature of Owner or Abatement Contractor      Date*

\_\_\_\_\_  
*Signature of Owner or Demolition Contractor      Date*

**17. Signature Requirements for Projects with Negative Pressure Enclosures: (required by LARA)**  
**Per Section 221(1)(2) of P.A. 135 of 1986, as amended, clearance air monitoring is required for any asbestos abatement project involving 10 linear feet/15 square feet or more of friable material which is performed within a negative pressure enclosure. I (the building owner or lessee) have been advised by the contractor of my responsibility under Act 135 to have clearance air monitoring performed on this project.**

\_\_\_\_\_  
*Signature of Building Owner or Lessee      Date*

\_\_\_\_\_  
*Signature of Asbestos Abatement Contractor Representative      Date*

**NOTE:** **It is not mandatory that a signed copy be sent to LARA unless requested.** For affected projects, this section of the notification form must be completed, signed, and made part of your records before the project begins.

**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.)

For **Public Act 135 of 1986, as amended, Section 220 (1-4) or (8)**, mail to address below. For more info visit:  
<http://www.michigan.gov/asbestos>

MIOSHA Asbestos Program  
 LARA, CSHD  
 P.O. Box 30671  
 Lansing, MI 48909-8171

517.636.4551 (office), 517.322.1713 (fax)

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.

NESHAP Asbestos Program  
 DEQ, AQD  
 P.O. Box 30260  
 Lansing, MI 48909-7760

517.284.6777 (Office)